
APPENDIX C

Nunes Dairy Emissions Calculations

VOC

Emission Source	Existing VOC/ ROG Emissions (tons/yr)	Proposed VOC/ROG Emissions (tons/yr)	Increment of Increase with Proposed Expansion
Traffic and Area Sources	0.895	1.084	0.19
Feed and Manure Management	14.40	21.68	7.28
	15.30	22.77	7.47

VOC emissions from traffic and area sources were estimated using CalEEMod Version 2016.3.2. VOC emissions from feed and manure management (including cow housing, liquid manure, and solid manure) were estimated using the SJVAPCD dairy emissions calculator. See HRA Appendix A for calculator emissions.

PM 10 Emissions from Animal Mvmt

Type of Cow	Existing Total Emissions (lbs/yr)	Proposed Total Emissions (lbs/yr)	
Animal Movement	3,422	2,079	
Tons/Year	1.71	1.04	-0.67

See HRA Appendix A for calculator emissions.

Greenhouse Gas Emission Rates for Electricity Use		
eGrid State	Average Output Emission Rate (lb CO ₂ e/MWh)	Average Output Emission Rate (lb CO ₂ e/kWh)
California	422.029	0.422029
<i>Source: eGRID2018. Released 1/28/2020. Accessed at: <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-eGRID></i>		

GHG Emissions from Energy Consumption

	Herd Count	Average Electricity Use (kWh/yr)	GHG Emission Rate (lbs CO ₂ e/kWh)	GHG Emissions (lbs CO ₂ e/yr)	GHG Emissions (metric tons CO ₂ e/yr)
PG&E Electricity Use	1,276	395,303	0.4220	166,829	75.67
Expansion Projection	2,100	650,577	0.4220	274,562	124.54
Increment of Increase	824	255,274	-	107,733	48.87

Electricity use provided by the project applicant. The Expansion Projection conservatively assumes the same electricity use per cow.

Source: eGRID2018. Released 1/28/2020. Accessed at: <<https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid>>

Total Greenhouse Gas Emissions

	Increased Herd (metric tons CO ₂ e/yr)	Increased Mobile Source (metric tons CO ₂ e/yr)	Increased Electricity (metric tons CO ₂ e/yr)	GHG Emissions (metric tons CO ₂ /yr)
Nunes Dairy Expansion	5,505	6	49	5,560

GHG emissions from traffic were estimated using CalEEMod Version 2016.3.2.

GHG emissions from the herd were estimated using the SJVAPCD dairy emissions calculator. See HRA Appendix A for calculator emissions.

Conversion Factors	
1 megawatt-hour (MWh)	1,000 kilowatt-hour (kWh)
1 short ton	2,000 pounds (lb)
1.10231 short ton	1 metric ton
2.2046 lb	1 kilogram (kg)

“Remarks” for the Nunes Dairy Expansion Project CalEEMod (v.2016.3.2) Model Runs

“Remarks” are typically used in California Emissions Estimator Model (CalEEMod) to explain non-default inputs. For the current modeling, this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Nunes Dairy Model Run – Existing Operations (2020)

Land Use

- The General Light Industrial land use subtype was used to represent the dairy project, an industrial agriculture project. According to the existing conditions Waste Management Plan, the existing dairy facilities are located on approximately 18 acres with approximately 177,410 square feet of roofed structures and 156,414 square feet of concrete operational areas. There are six existing residences.

Construction Phase

- This is an operational model only. Construction phases were deleted.

Vehicle Trips

- Because the residences are employee or owner residences on a working dairy, trip rate was modified to two trips per residence, with no Home-Work trips. Dairies operate 7 days a week. The existing operations generate approximately 9.2 average daily trips (ADTs) (or 0.052 trips per 1,000 square feet) in addition to 12 residential trips.

Nunes Dairy Model Run – Construction (2021)

Land Use

- The proposed dairy expansion would include the removal of some existing animal shelter structures and construction of one 85,800 square-foot freestall barn. All construction would occur in the existing footprint of the dairy.

Construction Phase

- Construction would begin in early 2021. To calculate the worst-case scenario, all project components were constructed in one phase.
- Off-road Equipment - While there would likely be a small construction crew, default equipment was used since construction details are unknown at this time.
- Trips and VMT – Demolition just involves animal shelters and would require fewer trips than a comparable building.

Vehicle Trips

- This is a construction model only. Operational data can be disregarded.

Nunes Dairy Model Run – Proposed Operations (2021)

Land Use

- The General Light Industrial land use subtype was used to represent the dairy project, an industrial agriculture project. According to the proposed conditions Waste Management Plan, the proposed dairy facilities would be located on approximately 18 acres with approximately 225,505 square feet of roofed structures and 144,820 square feet of concrete operational areas. There would continue to be six residences with implementation of the proposed project.

Construction Phase

- This is an operational model only. Most construction phases were deleted.

Vehicle Trips

- Because the residences are employee or owner residences on a working dairy, trip rate was modified to two trips per residence, with no Home-Work trips. Dairies operate 7 days a week. The proposed operations would generate approximately 18.9 ADTs (or 0.084 trips per 1,000 square feet) in addition to 12 residential trips.

Nunes Dairy Existing - Merced County, Annual

**Nunes Dairy Existing
Merced County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	177.41	1000sqft	12.00	177,410.00	0
Other Non-Asphalt Surfaces	156.41	1000sqft	3.59	156,414.00	0
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	49
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	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 - See notes
- Construction Phase - Operations only
- Off-road Equipment -
- Vehicle Trips - See remarks
- Area Coating -

Nunes Dairy Existing - Merced County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	156,410.00	156,414.00
tblLandUse	LotAcreage	4.07	12.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.32	0.05
tblVehicleTrips	ST_TR	9.91	2.00
tblVehicleTrips	SU_TR	0.68	0.05
tblVehicleTrips	SU_TR	8.62	2.00
tblVehicleTrips	WD_TR	6.97	0.05
tblVehicleTrips	WD_TR	9.52	2.00
tblWoodstoves	NumberCatalytic	1.95	0.00
tblWoodstoves	NumberNoncatalytic	1.95	0.00

2.0 Emissions Summary

Nunes Dairy Existing - Merced County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	0.8838	2.7900e-003	0.0487	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6780	2.6780	1.4000e-004	5.0000e-005	2.6956
Energy	0.0208	0.1887	0.1555	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	676.4504	676.4504	0.0252	8.1800e-003	679.5178
Mobile	0.0114	0.1387	0.1259	5.7000e-004	0.0309	6.5000e-004	0.0315	8.3200e-003	6.2000e-004	8.9300e-003	0.0000	53.0818	53.0818	4.0700e-003	0.0000	53.1835
Waste						0.0000	0.0000		0.0000	0.0000	45.8983	0.0000	45.8983	2.7125	0.0000	113.7111
Water						0.0000	0.0000		0.0000	0.0000	13.1397	65.4463	78.5860	1.3525	0.0325	122.0780
Total	0.9160	0.3302	0.3302	1.7300e-003	0.0309	0.0155	0.0463	8.3200e-003	0.0154	0.0238	59.0380	797.6564	856.6944	4.0945	0.0407	971.1859

Nunes Dairy Existing - Merced County, 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	0.8838	2.7900e-003	0.0487	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6780	2.6780	1.4000e-004	5.0000e-005	2.6956
Energy	0.0208	0.1887	0.1555	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	676.4504	676.4504	0.0252	8.1800e-003	679.5178
Mobile	0.0114	0.1387	0.1259	5.7000e-004	0.0309	6.5000e-004	0.0315	8.3200e-003	6.2000e-004	8.9300e-003	0.0000	53.0818	53.0818	4.0700e-003	0.0000	53.1835
Waste						0.0000	0.0000		0.0000	0.0000	45.8983	0.0000	45.8983	2.7125	0.0000	113.7111
Water						0.0000	0.0000		0.0000	0.0000	13.1397	65.4463	78.5860	1.3525	0.0325	122.0780
Total	0.9160	0.3302	0.3302	1.7300e-003	0.0309	0.0155	0.0463	8.3200e-003	0.0154	0.0238	59.0380	797.6564	856.6944	4.0945	0.0407	971.1859

	ROG	NOx	CO	SO2	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	6/5/2020	6/4/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 3.59

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
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Nunes Dairy Existing - Merced County, Annual

3.2 Site Preparation - 2020

Mitigated Construction On-Site

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

4.0 Operational Detail - Mobile

Nunes Dairy Existing - Merced County, Annual

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	0.0114	0.1387	0.1259	5.7000e-004	0.0309	6.5000e-004	0.0315	8.3200e-003	6.2000e-004	8.9300e-003	0.0000	53.0818	53.0818	4.0700e-003	0.0000	53.1835
Unmitigated	0.0114	0.1387	0.1259	5.7000e-004	0.0309	6.5000e-004	0.0315	8.3200e-003	6.2000e-004	8.9300e-003	0.0000	53.0818	53.0818	4.0700e-003	0.0000	53.1835

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	8.87	8.87	8.87	34,271	34,271
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	12.00	12.00	12.00	46,280	46,280
Total	20.87	20.87	20.87	80,551	80,551

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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	46.90	17.40	35.70	86	11	3

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.484945	0.031816	0.154973	0.120992	0.021332	0.005119	0.015709	0.151573	0.002377	0.002347	0.006486	0.001616	0.000714
Other Non-Asphalt Surfaces	0.484945	0.031816	0.154973	0.120992	0.021332	0.005119	0.015709	0.151573	0.002377	0.002347	0.006486	0.001616	0.000714
Single Family Housing	0.484945	0.031816	0.154973	0.120992	0.021332	0.005119	0.015709	0.151573	0.002377	0.002347	0.006486	0.001616	0.000714

5.0 Energy Detail

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	470.4971	470.4971	0.0213	4.4000e-003	472.3407
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	470.4971	470.4971	0.0213	4.4000e-003	472.3407
NaturalGas Mitigated	0.0208	0.1887	0.1555	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	205.9533	205.9533	3.9500e-003	3.7800e-003	207.1771
NaturalGas Unmitigated	0.0208	0.1887	0.1555	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	205.9533	205.9533	3.9500e-003	3.7800e-003	207.1771

Nunes Dairy Existing - Merced County, Annual

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 Light Industry	3.70255e+006	0.0200	0.1815	0.1525	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	197.5820	197.5820	3.7900e-003	3.6200e-003	198.7561
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	156871	8.5000e-004	7.2300e-003	3.0800e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3713	8.3713	1.6000e-004	1.5000e-004	8.4210
Total		0.0208	0.1887	0.1555	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	205.9533	205.9533	3.9500e-003	3.7700e-003	207.1771

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					
General Light Industry	3.70255e+006	0.0200	0.1815	0.1525	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	197.5820	197.5820	3.7900e-003	3.6200e-003	198.7561
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	156871	8.5000e-004	7.2300e-003	3.0800e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3713	8.3713	1.6000e-004	1.5000e-004	8.4210
Total		0.0208	0.1887	0.1555	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	205.9533	205.9533	3.9500e-003	3.7700e-003	207.1771

Nunes Dairy Existing - Merced County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.56476e+006	455.2055	0.0206	4.2600e-003	456.9892
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	52564.4	15.2916	6.9000e-004	1.4000e-004	15.3515
Total		470.4971	0.0213	4.4000e-003	472.3407

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.56476e+006	455.2055	0.0206	4.2600e-003	456.9892
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	52564.4	15.2916	6.9000e-004	1.4000e-004	15.3515
Total		470.4971	0.0213	4.4000e-003	472.3407

6.0 Area Detail

Nunes Dairy Existing - Merced County, Annual

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	0.8838	2.7900e-003	0.0487	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6780	2.6780	1.4000e-004	5.0000e-005	2.6956
Unmitigated	0.8838	2.7900e-003	0.0487	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6780	2.6780	1.4000e-004	5.0000e-005	2.6956

Nunes Dairy Existing - Merced County, Annual

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	0.1367					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7452					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6000e-004	2.2400e-003	9.6000e-004	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5992	2.5992	5.0000e-005	5.0000e-005	2.6147
Landscaping	1.6500e-003	5.5000e-004	0.0478	0.0000		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	0.0787	0.0787	9.0000e-005	0.0000	0.0809
Total	0.8838	2.7900e-003	0.0488	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6780	2.6780	1.4000e-004	5.0000e-005	2.6956

Nunes Dairy Existing - Merced County, Annual

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	0.1367					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7452					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6000e-004	2.2400e-003	9.6000e-004	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5992	2.5992	5.0000e-005	5.0000e-005	2.6147
Landscaping	1.6500e-003	5.5000e-004	0.0478	0.0000		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	0.0787	0.0787	9.0000e-005	0.0000	0.0809
Total	0.8838	2.7900e-003	0.0488	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6780	2.6780	1.4000e-004	5.0000e-005	2.6956

7.0 Water Detail

7.1 Mitigation Measures Water

Nunes Dairy Existing - Merced County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	78.5860	1.3525	0.0325	122.0780
Unmitigated	78.5860	1.3525	0.0325	122.0780

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	41.0261 / 0	77.5957	1.3398	0.0322	120.6762
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.390924 / 0.246452	0.9903	0.0128	3.1000e-004	1.4018
Total		78.5860	1.3525	0.0325	122.0780

Nunes Dairy Existing - Merced County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	41.0261 / 0	77.5957	1.3398	0.0322	120.6762
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.390924 / 0.246452	0.9903	0.0128	3.1000e-004	1.4018
Total		78.5860	1.3525	0.0325	122.0780

8.0 Waste Detail

8.1 Mitigation Measures Waste

Nunes Dairy Existing - Merced County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	45.8983	2.7125	0.0000	113.7111
Unmitigated	45.8983	2.7125	0.0000	113.7111

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	219.99	44.6560	2.6391	0.0000	110.6333
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.12	1.2423	0.0734	0.0000	3.0778
Total		45.8983	2.7125	0.0000	113.7111

Nunes Dairy Existing - Merced County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	219.99	44.6560	2.6391	0.0000	110.6333
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.12	1.2423	0.0734	0.0000	3.0778
Total		45.8983	2.7125	0.0000	113.7111

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

User Defined Equipment

Equipment Type	Number
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Nunes Dairy Existing - Merced County, Annual

11.0 Vegetation

Nunes Dairy Construction - Merced County, Annual

**Nunes Dairy Construction
Merced County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	85.80	1000sqft	1.97	85,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	49
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	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 -

Construction Phase -

Trips and VMT - See remarks

Vehicle Trips -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	13.00	2.00

Nunes Dairy Construction - Merced County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.8331	1.8181	1.7044	3.3900e-003	0.0704	0.0842	0.1546	0.0228	0.0808	0.1036	0.0000	289.3920	289.3920	0.0459	0.0000	290.5386
Maximum	0.8331	1.8181	1.7044	3.3900e-003	0.0704	0.0842	0.1546	0.0228	0.0808	0.1036	0.0000	289.3920	289.3920	0.0459	0.0000	290.5386

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					
2021	0.8331	1.8181	1.7044	3.3900e-003	0.0704	0.0842	0.1546	0.0228	0.0808	0.1036	0.0000	289.3917	289.3917	0.0459	0.0000	290.5384
Maximum	0.8331	1.8181	1.7044	3.3900e-003	0.0704	0.0842	0.1546	0.0228	0.0808	0.1036	0.0000	289.3917	289.3917	0.0459	0.0000	290.5384

Nunes Dairy Construction - Merced County, Annual

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-4-2021	4-3-2021	0.5976	0.5976
2	4-4-2021	7-3-2021	0.5636	0.5636
3	7-4-2021	9-30-2021	0.5512	0.5512
		Highest	0.5976	0.5976

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	0.3948	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003
Energy	9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	315.7047	315.7047	0.0118	3.8100e-003	317.1351
Mobile	0.2273	2.7930	2.4937	0.0121	0.6685	0.0119	0.6804	0.1802	0.0113	0.1914	0.0000	1,130.1265	1,130.1265	0.0855	0.0000	1,132.2629
Waste						0.0000	0.0000		0.0000	0.0000	21.5962	0.0000	21.5962	1.2763	0.0000	53.5037
Water						0.0000	0.0000		0.0000	0.0000	6.2947	31.2326	37.5273	0.6479	0.0156	58.3621
Total	0.6317	2.8807	2.5682	0.0127	0.6685	0.0186	0.6871	0.1802	0.0180	0.1981	27.8909	1,477.0653	1,504.9562	2.0215	0.0194	1,561.2654

Nunes Dairy Construction - Merced County, 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	0.3948	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003
Energy	9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	315.7047	315.7047	0.0118	3.8100e-003	317.1351
Mobile	0.2273	2.7930	2.4937	0.0121	0.6685	0.0119	0.6804	0.1802	0.0113	0.1914	0.0000	1,130.1265	1,130.1265	0.0855	0.0000	1,132.2629
Waste						0.0000	0.0000		0.0000	0.0000	21.5962	0.0000	21.5962	1.2763	0.0000	53.5037
Water						0.0000	0.0000		0.0000	0.0000	6.2947	31.2326	37.5273	0.6479	0.0156	58.3621
Total	0.6317	2.8807	2.5682	0.0127	0.6685	0.0186	0.6871	0.1802	0.0180	0.1981	27.8909	1,477.0653	1,504.9562	2.0215	0.0194	1,561.2654

	ROG	NOx	CO	SO2	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

Nunes Dairy Construction - Merced County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	1/29/2021	5	20	
2	Site Preparation	Site Preparation	1/30/2021	2/2/2021	5	2	
3	Grading	Grading	2/3/2021	2/8/2021	5	4	
4	Building Construction	Building Construction	2/9/2021	11/15/2021	5	200	
5	Paving	Paving	11/16/2021	11/29/2021	5	10	
6	Architectural Coating	Architectural Coating	11/30/2021	12/13/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 128,700; Non-Residential Outdoor: 42,900; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Nunes Dairy Construction - Merced County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Nunes Dairy Construction - Merced County, Annual

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
Architectural Coating	1	7.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	36.00	14.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060

Nunes Dairy Construction - Merced County, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	8.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2169	0.2169	1.0000e-005	0.0000	0.2171
Total	1.2000e-004	9.0000e-005	8.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2169	0.2169	1.0000e-005	0.0000	0.2171

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	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060

Nunes Dairy Construction - Merced County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	8.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2169	0.2169	1.0000e-005	0.0000	0.2171
Total	1.2000e-004	9.0000e-005	8.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2169	0.2169	1.0000e-005	0.0000	0.2171

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	1.5600e-003	0.0174	7.5600e-003	2.0000e-005	5.8000e-003	7.7000e-004	6.5700e-003	2.9500e-003	7.0000e-004	3.6500e-003	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241

Nunes Dairy Construction - Merced County, Annual

3.3 Site Preparation - 2021

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	5.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0868	0.0868	0.0000	0.0000	0.0868
Total	5.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0868	0.0868	0.0000	0.0000	0.0868

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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	1.5600e-003	0.0174	7.5600e-003	2.0000e-005	5.8000e-003	7.7000e-004	6.5700e-003	2.9500e-003	7.0000e-004	3.6500e-003	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241

Nunes Dairy Construction - Merced County, Annual

3.3 Site Preparation - 2021

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	5.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0868	0.0868	0.0000	0.0000	0.0868
Total	5.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0868	0.0868	0.0000	0.0000	0.0868

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	2.5800e-003	0.0287	0.0127	3.0000e-005	9.8300e-003	1.2800e-003	0.0111	5.0500e-003	1.1700e-003	6.2200e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968

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3.4 Grading - 2021

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	9.0000e-005	7.0000e-005	7.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1735	0.1735	1.0000e-005	0.0000	0.1737
Total	9.0000e-005	7.0000e-005	7.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1735	0.1735	1.0000e-005	0.0000	0.1737

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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	2.5800e-003	0.0287	0.0127	3.0000e-005	9.8300e-003	1.2800e-003	0.0111	5.0500e-003	1.1700e-003	6.2200e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968

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3.4 Grading - 2021

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	9.0000e-005	7.0000e-005	7.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1735	0.1735	1.0000e-005	0.0000	0.1737
Total	9.0000e-005	7.0000e-005	7.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1735	0.1735	1.0000e-005	0.0000	0.1737

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1813	1.3636	1.2899	2.2000e-003		0.0684	0.0684		0.0661	0.0661	0.0000	181.5476	181.5476	0.0324	0.0000	182.3579
Total	0.1813	1.3636	1.2899	2.2000e-003		0.0684	0.0684		0.0661	0.0661	0.0000	181.5476	181.5476	0.0324	0.0000	182.3579

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3.5 Building Construction - 2021

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	4.6500e-003	0.1492	0.0309	3.7000e-004	8.3800e-003	4.4000e-004	8.8200e-003	2.4200e-003	4.2000e-004	2.8400e-003	0.0000	35.0175	35.0175	3.6300e-003	0.0000	35.1082
Worker	0.0209	0.0153	0.1587	4.3000e-004	0.0446	3.3000e-004	0.0450	0.0119	3.0000e-004	0.0122	0.0000	39.0460	39.0460	1.1500e-003	0.0000	39.0748
Total	0.0255	0.1645	0.1896	8.0000e-004	0.0530	7.7000e-004	0.0538	0.0143	7.2000e-004	0.0150	0.0000	74.0635	74.0635	4.7800e-003	0.0000	74.1830

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	0.1813	1.3636	1.2899	2.2000e-003		0.0684	0.0684		0.0661	0.0661	0.0000	181.5474	181.5474	0.0324	0.0000	182.3577
Total	0.1813	1.3636	1.2899	2.2000e-003		0.0684	0.0684		0.0661	0.0661	0.0000	181.5474	181.5474	0.0324	0.0000	182.3577

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3.5 Building Construction - 2021

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	4.6500e-003	0.1492	0.0309	3.7000e-004	8.3800e-003	4.4000e-004	8.8200e-003	2.4200e-003	4.2000e-004	2.8400e-003	0.0000	35.0175	35.0175	3.6300e-003	0.0000	35.1082
Worker	0.0209	0.0153	0.1587	4.3000e-004	0.0446	3.3000e-004	0.0450	0.0119	3.0000e-004	0.0122	0.0000	39.0460	39.0460	1.1500e-003	0.0000	39.0748
Total	0.0255	0.1645	0.1896	8.0000e-004	0.0530	7.7000e-004	0.0538	0.0143	7.2000e-004	0.0150	0.0000	74.0635	74.0635	4.7800e-003	0.0000	74.1830

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291

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3.6 Paving - 2021

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	3.8000e-004	2.8000e-004	2.8600e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7050	0.7050	2.0000e-005	0.0000	0.7055
Total	3.8000e-004	2.8000e-004	2.8600e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7050	0.7050	2.0000e-005	0.0000	0.7055

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	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291

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3.6 Paving - 2021

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	3.8000e-004	2.8000e-004	2.8600e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7050	0.7050	2.0000e-005	0.0000	0.7055
Total	3.8000e-004	2.8000e-004	2.8600e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7050	0.7050	2.0000e-005	0.0000	0.7055

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5965					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	0.5976	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788

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3.7 Architectural Coating - 2021

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	2.0000e-004	1.5000e-004	1.5400e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3796	0.3796	1.0000e-005	0.0000	0.3799
Total	2.0000e-004	1.5000e-004	1.5400e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3796	0.3796	1.0000e-005	0.0000	0.3799

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5965					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	0.5976	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788

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3.7 Architectural Coating - 2021

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	2.0000e-004	1.5000e-004	1.5400e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3796	0.3796	1.0000e-005	0.0000	0.3799
Total	2.0000e-004	1.5000e-004	1.5400e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3796	0.3796	1.0000e-005	0.0000	0.3799

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	0.2273	2.7930	2.4937	0.0121	0.6685	0.0119	0.6804	0.1802	0.0113	0.1914	0.0000	1,130.1265	1,130.1265	0.0855	0.0000	1,132.2629
Unmitigated	0.2273	2.7930	2.4937	0.0121	0.6685	0.0119	0.6804	0.1802	0.0113	0.1914	0.0000	1,130.1265	1,130.1265	0.0855	0.0000	1,132.2629

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	598.03	113.26	58.34	1,745,034	1,745,034
Total	598.03	113.26	58.34	1,745,034	1,745,034

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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.492060	0.030872	0.155167	0.115051	0.019669	0.004846	0.015607	0.153483	0.002388	0.002252	0.006351	0.001584	0.000670

5.0 Energy Detail

Historical Energy Use: N

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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	220.1490	220.1490	9.9500e-003	2.0600e-003	221.0116
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	220.1490	220.1490	9.9500e-003	2.0600e-003	221.0116
NaturalGas Mitigated	9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	95.5557	95.5557	1.8300e-003	1.7500e-003	96.1235
NaturalGas Unmitigated	9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	95.5557	95.5557	1.8300e-003	1.7500e-003	96.1235

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 Light Industry	1.79065e+006	9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	95.5557	95.5557	1.8300e-003	1.7500e-003	96.1235
Total		9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	95.5557	95.5557	1.8300e-003	1.7500e-003	96.1235

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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	tons/yr										MT/yr					
General Light Industry	1.79065e+006	9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	95.5557	95.5557	1.8300e-003	1.7500e-003	96.1235
Total		9.6600e-003	0.0878	0.0737	5.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	95.5557	95.5557	1.8300e-003	1.7500e-003	96.1235

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	756756	220.1490	9.9500e-003	2.0600e-003	221.0116
Total		220.1490	9.9500e-003	2.0600e-003	221.0116

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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			
General Light Industry	756756	220.1490	9.9500e-003	2.0600e-003	221.0116
Total		220.1490	9.9500e-003	2.0600e-003	221.0116

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	0.3948	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003
Unmitigated	0.3948	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003

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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	0.0597					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003
Total	0.3948	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003

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	0.0597					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003
Total	0.3948	1.0000e-005	7.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5300e-003	1.5300e-003	0.0000	0.0000	1.6300e-003

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.5273	0.6479	0.0156	58.3621
Unmitigated	37.5273	0.6479	0.0156	58.3621

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	19.8412 / 0	37.5273	0.6479	0.0156	58.3621
Total		37.5273	0.6479	0.0156	58.3621

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	19.8412 / 0	37.5273	0.6479	0.0156	58.3621
Total		37.5273	0.6479	0.0156	58.3621

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	21.5962	1.2763	0.0000	53.5037
Unmitigated	21.5962	1.2763	0.0000	53.5037

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	106.39	21.5962	1.2763	0.0000	53.5037
Total		21.5962	1.2763	0.0000	53.5037

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	106.39	21.5962	1.2763	0.0000	53.5037
Total		21.5962	1.2763	0.0000	53.5037

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

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	225.51	1000sqft	5.18	225,505.00	0
Other Non-Asphalt Surfaces	144.82	1000sqft	3.32	144,820.00	0
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	49
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See notes

Construction Phase - Operations only

Off-road Equipment -

Vehicle Trips - See remarks

Area Coating -

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Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.32	0.05
tblVehicleTrips	ST_TR	9.91	2.00
tblVehicleTrips	SU_TR	0.68	0.05
tblVehicleTrips	SU_TR	8.62	2.00
tblVehicleTrips	WD_TR	6.97	0.05
tblVehicleTrips	WD_TR	9.52	2.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-8-2020	8-7-2020	0.2335	0.2335
		Highest	0.2335	0.2335

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	1.0709	2.7900e-003	0.0491	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6786	2.6786	1.4000e-004	5.0000e-005	2.6963
Energy	0.0262	0.2379	0.1969	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	853.4179	853.4179	0.0318	0.0103	857.2872
Mobile	0.0127	0.1547	0.1404	6.4000e-004	0.0344	7.2000e-004	0.0352	9.2800e-003	6.9000e-004	9.9700e-003	0.0000	59.2033	59.2033	4.5400e-003	0.0000	59.3167
Waste						0.0000	0.0000		0.0000	0.0000	45.8983	0.0000	45.8983	2.7125	0.0000	113.7111
Water						0.0000	0.0000		0.0000	0.0000	13.1397	65.4463	78.5860	1.3525	0.0325	122.0780
Total	1.1099	0.3954	0.3864	2.0900e-003	0.0344	0.0193	0.0537	9.2800e-003	0.0193	0.0285	59.0380	980.7462	1,039.7842	4.1016	0.0428	1,155.0892

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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	1.0709	2.7900e-003	0.0491	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6786	2.6786	1.4000e-004	5.0000e-005	2.6963
Energy	0.0262	0.2379	0.1969	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	853.4179	853.4179	0.0318	0.0103	857.2872
Mobile	0.0127	0.1547	0.1404	6.4000e-004	0.0344	7.2000e-004	0.0352	9.2800e-003	6.9000e-004	9.9700e-003	0.0000	59.2033	59.2033	4.5400e-003	0.0000	59.3167
Waste						0.0000	0.0000		0.0000	0.0000	45.8983	0.0000	45.8983	2.7125	0.0000	113.7111
Water						0.0000	0.0000		0.0000	0.0000	13.1397	65.4463	78.5860	1.3525	0.0325	122.0780
Total	1.1099	0.3954	0.3864	2.0900e-003	0.0344	0.0193	0.0537	9.2800e-003	0.0193	0.0285	59.0380	980.7462	1,039.7842	4.1016	0.0428	1,155.0892

	ROG	NOx	CO	SO2	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	5/8/2020	5/21/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 3.32

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
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0000	0.0110	0.0110	0.0000	0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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	5.7000e-004	4.3000e-004	4.3500e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0054	1.0054	3.0000e-005	0.0000	1.0062
Total	5.7000e-004	4.3000e-004	4.3500e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0054	1.0054	3.0000e-005	0.0000	1.0062

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3.2 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e-004	0.0000	0.0110	0.0110	0.0000	0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

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	5.7000e-004	4.3000e-004	4.3500e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0054	1.0054	3.0000e-005	0.0000	1.0062
Total	5.7000e-004	4.3000e-004	4.3500e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0054	1.0054	3.0000e-005	0.0000	1.0062

4.0 Operational Detail - Mobile

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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	0.0127	0.1547	0.1404	6.4000e-004	0.0344	7.2000e-004	0.0352	9.2800e-003	6.9000e-004	9.9700e-003	0.0000	59.2033	59.2033	4.5400e-003	0.0000	59.3167
Unmitigated	0.0127	0.1547	0.1404	6.4000e-004	0.0344	7.2000e-004	0.0352	9.2800e-003	6.9000e-004	9.9700e-003	0.0000	59.2033	59.2033	4.5400e-003	0.0000	59.3167

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	11.28	11.28	11.28	43,562	43,562
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	12.00	12.00	12.00	46,280	46,280
Total	23.28	23.28	23.28	89,841	89,841

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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	46.90	17.40	35.70	86	11	3

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.484945	0.031816	0.154973	0.120992	0.021332	0.005119	0.015709	0.151573	0.002377	0.002347	0.006486	0.001616	0.000714
Other Non-Asphalt Surfaces	0.484945	0.031816	0.154973	0.120992	0.021332	0.005119	0.015709	0.151573	0.002377	0.002347	0.006486	0.001616	0.000714
Single Family Housing	0.484945	0.031816	0.154973	0.120992	0.021332	0.005119	0.015709	0.151573	0.002377	0.002347	0.006486	0.001616	0.000714

5.0 Energy Detail

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	593.9012	593.9012	0.0269	5.5600e-003	596.2282
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	593.9012	593.9012	0.0269	5.5600e-003	596.2282
NaturalGas Mitigated	0.0262	0.2379	0.1969	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.5168	259.5168	4.9700e-003	4.7600e-003	261.0590
NaturalGas Unmitigated	0.0262	0.2379	0.1969	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.5168	259.5168	4.9700e-003	4.7600e-003	261.0590

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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 Light Industry	4.70629e+006	0.0254	0.2307	0.1938	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	251.1455	251.1455	4.8100e-003	4.6000e-003	252.6380
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	156871	8.5000e-004	7.2300e-003	3.0800e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3713	8.3713	1.6000e-004	1.5000e-004	8.4210
Total		0.0262	0.2379	0.1969	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.5168	259.5168	4.9700e-003	4.7500e-003	261.0590

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					
General Light Industry	4.70629e+006	0.0254	0.2307	0.1938	1.3800e-003		0.0175	0.0175		0.0175	0.0175	0.0000	251.1455	251.1455	4.8100e-003	4.6000e-003	252.6380
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	156871	8.5000e-004	7.2300e-003	3.0800e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3713	8.3713	1.6000e-004	1.5000e-004	8.4210
Total		0.0262	0.2379	0.1969	1.4300e-003		0.0181	0.0181		0.0181	0.0181	0.0000	259.5168	259.5168	4.9700e-003	4.7500e-003	261.0590

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.98895e+006	578.6096	0.0262	5.4100e-003	580.8767
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	52564.4	15.2916	6.9000e-004	1.4000e-004	15.3515
Total		593.9012	0.0269	5.5500e-003	596.2282

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.98895e+006	578.6096	0.0262	5.4100e-003	580.8767
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	52564.4	15.2916	6.9000e-004	1.4000e-004	15.3515
Total		593.9012	0.0269	5.5500e-003	596.2282

6.0 Area Detail

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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	1.0709	2.7900e-003	0.0491	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6786	2.6786	1.4000e-004	5.0000e-005	2.6963
Unmitigated	1.0709	2.7900e-003	0.0491	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6786	2.6786	1.4000e-004	5.0000e-005	2.6963

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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	0.1367					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9323					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6000e-004	2.2400e-003	9.6000e-004	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5992	2.5992	5.0000e-005	5.0000e-005	2.6147
Landscaping	1.6800e-003	5.5000e-004	0.0481	0.0000		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	0.0794	0.0794	9.0000e-005	0.0000	0.0816
Total	1.0709	2.7900e-003	0.0491	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6786	2.6786	1.4000e-004	5.0000e-005	2.6963

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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	0.1367					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9323					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.6000e-004	2.2400e-003	9.6000e-004	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5992	2.5992	5.0000e-005	5.0000e-005	2.6147
Landscaping	1.6800e-003	5.5000e-004	0.0481	0.0000		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	0.0794	0.0794	9.0000e-005	0.0000	0.0816
Total	1.0709	2.7900e-003	0.0491	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	2.6786	2.6786	1.4000e-004	5.0000e-005	2.6963

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	78.5860	1.3525	0.0325	122.0780
Unmitigated	78.5860	1.3525	0.0325	122.0780

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	41.0261 / 0	77.5957	1.3398	0.0322	120.6762
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.390924 / 0.246452	0.9903	0.0128	3.1000e-004	1.4018
Total		78.5860	1.3525	0.0325	122.0780

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	41.0261 / 0	77.5957	1.3398	0.0322	120.6762
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.390924 / 0.246452	0.9903	0.0128	3.1000e-004	1.4018
Total		78.5860	1.3525	0.0325	122.0780

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	45.8983	2.7125	0.0000	113.7111
Unmitigated	45.8983	2.7125	0.0000	113.7111

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	219.99	44.6560	2.6391	0.0000	110.6333
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.12	1.2423	0.0734	0.0000	3.0778
Total		45.8983	2.7125	0.0000	113.7111

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	219.99	44.6560	2.6391	0.0000	110.6333
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.12	1.2423	0.0734	0.0000	3.0778
Total		45.8983	2.7125	0.0000	113.7111

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
