

Long Beach MUST Project - South Coast Air Basin, Winter

Long Beach MUST Project
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	11.50	User Defined Unit	11.50	500,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per Site Plan.
- Construction Phase - Anticipated construction schedule.
- Off-road Equipment -
- Demolition -
- Grading - Total site acreages 11.5
- Construction Off-road Equipment Mitigation - Per SCAQMD rules.
- Area Mitigation -
- Energy Mitigation - Current code is 30% more efficient than CalEEMod baseline per CEC.
- Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	520.00
tblConstructionPhase	NumDays	30.00	520.00
tblConstructionPhase	PhaseStartDate	12/28/2019	1/1/2020
tblGrading	AcresOfGrading	1,300.00	11.50
tblGrading	MaterialExported	0.00	1,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	500,940.00
tblLandUse	LandUseSquareFeet	0.00	500,940.00
tblLandUse	LotAcreage	0.00	11.50
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.8154	38.6773	23.0478	0.0413	0.3931	1.9410	2.3342	0.0817	1.8072	1.8888	0.0000	4,120.6240	4,120.6240	1.0785	0.0000	4,147.5856
2019	3.6014	36.1147	22.7289	0.0412	0.3933	1.7973	2.1906	0.0817	1.6719	1.7536	0.0000	4,059.3941	4,059.3941	1.0728	0.0000	4,086.2149
2020	4.5503	50.3179	32.7092	0.0643	6.2749	2.1758	8.4507	3.3736	2.0017	5.3753	0.0000	6,236.1996	6,236.1996	1.9498	0.0000	6,284.9439

2021	4.2849	46.5098	31.5698	0.0642	6.2750	1.9872	8.2622	3.3736	1.8282	5.2018	0.0000	6,230.2653	6,230.2653	1.9495	0.0000	6,279.0039
Maximum	4.5503	50.3179	32.7092	0.0643	6.2750	2.1758	8.4507	3.3736	2.0017	5.3753	0.0000	6,236.1996	6,236.1996	1.9498	0.0000	6,284.9439

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.8154	38.6773	23.0478	0.0413	0.2800	1.9410	2.2211	0.0646	1.8072	1.8717	0.0000	4,120.6240	4,120.6240	1.0785	0.0000	4,147.5856
2019	3.6014	36.1147	22.7289	0.0412	0.2802	1.7973	2.0775	0.0646	1.6719	1.7365	0.0000	4,059.3941	4,059.3941	1.0728	0.0000	4,086.2149
2020	4.5503	50.3179	32.7092	0.0643	2.8138	2.1758	4.9896	1.4770	2.0017	3.4787	0.0000	6,236.1996	6,236.1996	1.9498	0.0000	6,284.9439
2021	4.2849	46.5098	31.5698	0.0642	2.8139	1.9872	4.8011	1.4770	1.8282	3.3052	0.0000	6,230.2653	6,230.2653	1.9495	0.0000	6,279.0039
Maximum	4.5503	50.3179	32.7092	0.0643	2.8139	2.1758	4.9896	1.4770	2.0017	3.4787	0.0000	6,236.1996	6,236.1996	1.9498	0.0000	6,284.9439

	ROG	NOx	CO	SO2	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	53.60	0.00	33.66	55.38	0.00	26.92	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003

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
Mobile	0.0000	0.0000	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	11.1910	1.0000e-005	1.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
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
Mobile	0.0000	0.0000	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	11.1910	1.0000e-005	1.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

	ROG	NOx	CO	SO2	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	Demolition	Demolition	1/1/2018	12/27/2019	5	520	
2	Grading	Grading	1/1/2020	12/24/2021	5	520	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11.5

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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
Demolition	6	15.00	0.00	475.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	99.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1975	0.0000	0.1975	0.0299	0.0000	0.0299			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388	0.1975	1.9386	2.1361	0.0299	1.8048	1.8347		3,871.7665	3,871.7665	1.0667		3,898.4344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.5300e-003	0.2913	0.0599	7.2000e-004	0.0279	1.1300e-003	0.0291	7.3100e-003	1.0800e-003	8.4000e-003		77.3696	77.3696	5.8800e-003		77.5165
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6839	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		171.4879	171.4879	5.8700e-003		171.6347
Total	0.0964	0.3548	0.7437	2.4400e-003	0.1956	2.4700e-003	0.1981	0.0518	2.3200e-003	0.0541		248.8575	248.8575	0.0118		249.1512

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0844	0.0000	0.0844	0.0128	0.0000	0.0128			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388	0.0844	1.9386	2.0230	0.0128	1.8048	1.8176	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.5300e-003	0.2913	0.0599	7.2000e-004	0.0279	1.1300e-003	0.0291	7.3100e-003	1.0800e-003	8.4000e-003		77.3696	77.3696	5.8800e-003		77.5165
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6839	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		171.4879	171.4879	5.8700e-003		171.6347
Total	0.0964	0.3548	0.7437	2.4400e-003	0.1956	2.4700e-003	0.1981	0.0518	2.3200e-003	0.0541		248.8575	248.8575	0.0118		249.1512

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					0.1975	0.0000	0.1975	0.0299	0.0000	0.0299			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.1975	1.7949	1.9924	0.0299	1.6697	1.6996		3,816.8994	3,816.8994	1.0618		3,843.4451

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.0800e-003	0.2757	0.0584	7.1000e-004	0.0281	1.0400e-003	0.0292	7.3600e-003	9.9000e-004	8.3500e-003		76.4196	76.4196	5.8000e-003		76.5646
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	0.0881	0.3317	0.6689	2.3800e-003	0.1958	2.3500e-003	0.1981	0.0518	2.2000e-003	0.0540		242.4947	242.4947	0.0110		242.7698

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0844	0.0000	0.0844	0.0128	0.0000	0.0128			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.0844	1.7949	1.8793	0.0128	1.6697	1.6825	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.0800e-003	0.2757	0.0584	7.1000e-004	0.0281	1.0400e-003	0.0292	7.3600e-003	9.9000e-004	8.3500e-003		76.4196	76.4196	5.8000e-003		76.5646
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	0.0881	0.3317	0.6689	2.3800e-003	0.1958	2.3500e-003	0.1981	0.0518	2.2000e-003	0.0540		242.4947	242.4947	0.0110		242.7698

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0455	0.0000	6.0455	3.3128	0.0000	3.3128			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	6.0455	2.1739	8.2194	3.3128	2.0000	5.3128		6,005.8653	6,005.8653	1.9424		6,054.4257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5500e-003	0.0537	0.0118	1.5000e-004	5.8000e-003	1.7000e-004	5.9800e-003	1.5200e-003	1.7000e-004	1.6900e-003		15.7641	15.7641	1.1800e-003		15.7935

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7392	2.1500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		214.5703	214.5703	6.1800e-003		214.7247
Total	0.1002	0.1204	0.7509	2.3000e-003	0.2294	1.8800e-003	0.2312	0.0608	1.7400e-003	0.0626		230.3344	230.3344	7.3600e-003		230.5182

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5845	0.0000	2.5845	1.4162	0.0000	1.4162			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	2.5845	2.1739	4.7584	1.4162	2.0000	3.4162	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5500e-003	0.0537	0.0118	1.5000e-004	5.8000e-003	1.7000e-004	5.9800e-003	1.5200e-003	1.7000e-004	1.6900e-003		15.7641	15.7641	1.1800e-003		15.7935
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7392	2.1500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		214.5703	214.5703	6.1800e-003		214.7247
Total	0.1002	0.1204	0.7509	2.3000e-003	0.2294	1.8800e-003	0.2312	0.0608	1.7400e-003	0.0626		230.3344	230.3344	7.3600e-003		230.5182

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.0455	0.0000	6.0455	3.3128	0.0000	3.3128			0.0000				0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428			6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	6.0455	1.9853	8.0309	3.3128	1.8265	5.1393		6,007.0434	6,007.0434	1.9428			6,055.6134

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.4800e-003	0.0500	0.0116	1.4000e-004	5.9200e-003	1.6000e-004	6.0800e-003	1.5500e-003	1.5000e-004	1.7000e-003		15.5917	15.5917	1.1600e-003			15.6207
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0922	0.0600	0.6797	2.0800e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		207.6302	207.6302	5.5800e-003			207.7698
Total	0.0937	0.1099	0.6914	2.2200e-003	0.2295	1.8100e-003	0.2313	0.0608	1.6700e-003	0.0625		223.2219	223.2219	6.7400e-003			223.3905

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.5845	0.0000	2.5845	1.4162	0.0000	1.4162			0.0000				0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428			6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	2.5845	1.9853	4.5698	1.4162	1.8265	3.2427	0.0000	6,007.0434	6,007.0434	1.9428			6,055.6134

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.4800e-003	0.0500	0.0116	1.4000e-004	5.9200e-003	1.6000e-004	6.0800e-003	1.5500e-003	1.5000e-004	1.7000e-003		15.5917	15.5917	1.1600e-003			15.6207
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0922	0.0600	0.6797	2.0800e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		207.6302	207.6302	5.5800e-003			207.7698
Total	0.0937	0.1099	0.6914	2.2200e-003	0.2295	1.8100e-003	0.2313	0.0608	1.6700e-003	0.0625		223.2219	223.2219	6.7400e-003			223.3905

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-***	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					

User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
Unmitigated	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.9186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
Total	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-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	lb/day										lb/day					
Architectural Coating	1.2723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.9186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
Total	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Long Beach MUST Project - South Coast Air Basin, Summer

Long Beach MUST Project
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	11.50	User Defined Unit	11.50	500,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per Site Plan.
- Construction Phase - Anticipated construction schedule.
- Off-road Equipment -
- Demolition -
- Grading - Total site acreages 11.5
- Construction Off-road Equipment Mitigation - Per SCAQMD rules.
- Area Mitigation -
- Energy Mitigation - Current code is 30% more efficient than CalEEMod baseline per CEC.
- Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	520.00
tblConstructionPhase	NumDays	30.00	520.00
tblConstructionPhase	PhaseStartDate	12/28/2019	1/1/2020
tblGrading	AcresOfGrading	1,300.00	11.50
tblGrading	MaterialExported	0.00	1,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	500,940.00
tblLandUse	LandUseSquareFeet	0.00	500,940.00
tblLandUse	LotAcreage	0.00	11.50
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.8074	38.6676	23.1101	0.0414	0.3931	1.9410	2.3341	0.0817	1.8071	1.8888	0.0000	4,133.2505	4,133.2505	1.0786	0.0000	4,160.2157
2019	3.5941	36.1059	22.7863	0.0413	0.3933	1.7972	2.1906	0.0817	1.6719	1.7536	0.0000	4,071.6800	4,071.6800	1.0730	0.0000	4,098.5038
2020	4.5413	50.3112	32.7845	0.0645	6.2749	2.1758	8.4507	3.3736	2.0017	5.3753	0.0000	6,250.6705	6,250.6705	1.9501	0.0000	6,299.4242

2021	4.2763	46.5038	31.6403	0.0644	6.2750	1.9871	8.2622	3.3736	1.8282	5.2018	0.0000	6,244.2872	6,244.2872	1.9499	0.0000	6,293.0343
Maximum	4.5413	50.3112	32.7845	0.0645	6.2750	2.1758	8.4507	3.3736	2.0017	5.3753	0.0000	6,250.6705	6,250.6705	1.9501	0.0000	6,299.4242

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.8074	38.6676	23.1101	0.0414	0.2800	1.9410	2.2211	0.0646	1.8071	1.8717	0.0000	4,133.2505	4,133.2505	1.0786	0.0000	4,160.2157
2019	3.5941	36.1059	22.7863	0.0413	0.2802	1.7972	2.0775	0.0646	1.6719	1.7365	0.0000	4,071.6800	4,071.6800	1.0730	0.0000	4,098.5038
2020	4.5413	50.3112	32.7845	0.0645	2.8138	2.1758	4.9896	1.4770	2.0017	3.4787	0.0000	6,250.6705	6,250.6705	1.9501	0.0000	6,299.4242
2021	4.2763	46.5038	31.6403	0.0644	2.8139	1.9871	4.8011	1.4770	1.8282	3.3052	0.0000	6,244.2872	6,244.2872	1.9499	0.0000	6,293.0343
Maximum	4.5413	50.3112	32.7845	0.0645	2.8139	2.1758	4.9896	1.4770	2.0017	3.4787	0.0000	6,250.6705	6,250.6705	1.9501	0.0000	6,299.4242

	ROG	NOx	CO	SO2	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	53.60	0.00	33.66	55.38	0.00	26.92	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003

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
Mobile	0.0000	0.0000	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	11.1910	1.0000e-005	1.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
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
Mobile	0.0000	0.0000	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	11.1910	1.0000e-005	1.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

	ROG	NOx	CO	SO2	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	Demolition	Demolition	1/1/2018	12/27/2019	5	520	
2	Grading	Grading	1/1/2020	12/24/2021	5	520	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11.5

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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
Demolition	6	15.00	0.00	475.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	99.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1975	0.0000	0.1975	0.0299	0.0000	0.0299			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388	0.1975	1.9386	2.1361	0.0299	1.8048	1.8347		3,871.7665	3,871.7665	1.0667		3,898.4344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.3000e-003	0.2873	0.0557	7.3000e-004	0.0279	1.1100e-003	0.0291	7.3100e-003	1.0600e-003	8.3800e-003		78.6759	78.6759	5.6500e-003		78.8171
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.0578	0.7505	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		182.8080	182.8080	6.2500e-003		182.9642
Total	0.0884	0.3451	0.8061	2.5700e-003	0.1956	2.4500e-003	0.1981	0.0518	2.3000e-003	0.0541		261.4840	261.4840	0.0119		261.7813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0844	0.0000	0.0844	0.0128	0.0000	0.0128			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388	0.0844	1.9386	2.0230	0.0128	1.8048	1.8176	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.3000e-003	0.2873	0.0557	7.3000e-004	0.0279	1.1100e-003	0.0291	7.3100e-003	1.0600e-003	8.3800e-003		78.6759	78.6759	5.6500e-003		78.8171
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.0578	0.7505	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		182.8080	182.8080	6.2500e-003		182.9642
Total	0.0884	0.3451	0.8061	2.5700e-003	0.1956	2.4500e-003	0.1981	0.0518	2.3000e-003	0.0541		261.4840	261.4840	0.0119		261.7813

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					0.1975	0.0000	0.1975	0.0299	0.0000	0.0299			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.1975	1.7949	1.9924	0.0299	1.6697	1.6996		3,816.8994	3,816.8994	1.0618		3,843.4451

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.8700e-003	0.2720	0.0544	7.2000e-004	0.0281	1.0200e-003	0.0291	7.3600e-003	9.7000e-004	8.3300e-003		77.7264	77.7264	5.5700e-003		77.8658
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.0807	0.3230	0.7263	2.5000e-003	0.1958	2.3300e-003	0.1981	0.0518	2.1800e-003	0.0540		254.7806	254.7806	0.0111		255.0587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0844	0.0000	0.0844	0.0128	0.0000	0.0128			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.0844	1.7949	1.8793	0.0128	1.6697	1.6825	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.8700e-003	0.2720	0.0544	7.2000e-004	0.0281	1.0200e-003	0.0291	7.3600e-003	9.7000e-004	8.3300e-003		77.7264	77.7264	5.5700e-003		77.8658
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.0807	0.3230	0.7263	2.5000e-003	0.1958	2.3300e-003	0.1981	0.0518	2.1800e-003	0.0540		254.7806	254.7806	0.0111		255.0587

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0455	0.0000	6.0455	3.3128	0.0000	3.3128			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	6.0455	2.1739	8.2194	3.3128	2.0000	5.3128		6,005.8653	6,005.8653	1.9424		6,054.4257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5200e-003	0.0530	0.0110	1.5000e-004	5.8000e-003	1.7000e-004	5.9800e-003	1.5200e-003	1.6000e-004	1.6800e-003		16.0380	16.0380	1.1300e-003		16.0664

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0897	0.0607	0.8152	2.3000e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		228.7673	228.7673	6.5900e-003		228.9321
Total	0.0912	0.1137	0.8262	2.4500e-003	0.2294	1.8800e-003	0.2312	0.0608	1.7300e-003	0.0625		244.8053	244.8053	7.7200e-003		244.9984

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5845	0.0000	2.5845	1.4162	0.0000	1.4162			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	2.5845	2.1739	4.7584	1.4162	2.0000	3.4162	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5200e-003	0.0530	0.0110	1.5000e-004	5.8000e-003	1.7000e-004	5.9800e-003	1.5200e-003	1.6000e-004	1.6800e-003		16.0380	16.0380	1.1300e-003		16.0664
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0897	0.0607	0.8152	2.3000e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		228.7673	228.7673	6.5900e-003		228.9321
Total	0.0912	0.1137	0.8262	2.4500e-003	0.2294	1.8800e-003	0.2312	0.0608	1.7300e-003	0.0625		244.8053	244.8053	7.7200e-003		244.9984

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.0455	0.0000	6.0455	3.3128	0.0000	3.3128			0.0000				0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428			6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	6.0455	1.9853	8.0309	3.3128	1.8265	5.1393		6,007.0434	6,007.0434	1.9428			6,055.6134

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.4500e-003	0.0494	0.0109	1.5000e-004	5.9200e-003	1.5000e-004	6.0700e-003	1.5500e-003	1.5000e-004	1.7000e-003		15.8641	15.8641	1.1200e-003			15.8920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0837	0.0546	0.7509	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.3797	221.3797	5.9700e-003			221.5288
Total	0.0852	0.1040	0.7618	2.3700e-003	0.2295	1.8000e-003	0.2313	0.0608	1.6700e-003	0.0625		237.2437	237.2437	7.0900e-003			237.4208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5845	0.0000	2.5845	1.4162	0.0000	1.4162			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	2.5845	1.9853	4.5698	1.4162	1.8265	3.2427	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4500e-003	0.0494	0.0109	1.5000e-004	5.9200e-003	1.5000e-004	6.0700e-003	1.5500e-003	1.5000e-004	1.7000e-003		15.8641	15.8641	1.1200e-003		15.8920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0837	0.0546	0.7509	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.3797	221.3797	5.9700e-003		221.5288
Total	0.0852	0.1040	0.7618	2.3700e-003	0.2295	1.8000e-003	0.2313	0.0608	1.6700e-003	0.0625		237.2437	237.2437	7.0900e-003		237.4208

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-***	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					

User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
Unmitigated	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.9186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
Total	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-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	lb/day										lb/day					
Architectural Coating	1.2723					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.9186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003
Total	11.1910	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5200e-003	2.5200e-003	1.0000e-005		2.6900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Long Beach MUST Project - South Coast Air Basin, Annual

Long Beach MUST Project
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	11.50	User Defined Unit	11.50	500,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per Site Plan.
- Construction Phase - Anticipated construction schedule.
- Off-road Equipment -
- Demolition -
- Grading - Total site acreages 11.5
- Construction Off-road Equipment Mitigation - Per SCAQMD rules.
- Area Mitigation -
- Energy Mitigation - Current code is 30% more efficient than CalEEMod baseline per CEC.
- Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	520.00
tblConstructionPhase	NumDays	30.00	520.00
tblConstructionPhase	PhaseStartDate	12/28/2019	1/1/2020
tblGrading	AcresOfGrading	1,300.00	11.50
tblGrading	MaterialExported	0.00	1,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	500,940.00
tblLandUse	LandUseSquareFeet	0.00	500,940.00
tblLandUse	LotAcreage	0.00	11.50
tblProjectCharacteristics	OperationalYear	2018	2020

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					
2018	0.4968	5.0484	3.0097	5.3900e-003	0.0508	0.2533	0.3041	0.0105	0.2358	0.2464	0.0000	488.2405	488.2405	0.1277	0.0000	491.4323
2019	0.4654	4.6777	2.9452	5.3400e-003	0.0505	0.2327	0.2832	0.0105	0.2165	0.2270	0.0000	477.2962	477.2962	0.1260	0.0000	480.4470
2020	0.5948	6.5920	4.2874	8.4300e-003	1.5953	0.2850	1.8803	0.8658	0.2622	1.1281	0.0000	741.5386	741.5386	0.2317	0.0000	747.3317

2021	0.5473	5.9536	4.0432	8.2300e-003	1.5946	0.2544	1.8490	0.8657	0.2340	1.0997	0.0000	723.8549	723.8549	0.2264	0.0000	729.5146
Maximum	0.5948	6.5920	4.2874	8.4300e-003	1.5953	0.2850	1.8803	0.8658	0.2622	1.1281	0.0000	741.5386	741.5386	0.2317	0.0000	747.3317

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					
2018	0.4968	5.0484	3.0097	5.3900e-003	0.0361	0.2533	0.2894	8.3100e-003	0.2358	0.2441	0.0000	488.2400	488.2400	0.1277	0.0000	491.4318
2019	0.4654	4.6777	2.9452	5.3400e-003	0.0358	0.2327	0.2686	8.2500e-003	0.2165	0.2248	0.0000	477.2956	477.2956	0.1260	0.0000	480.4464
2020	0.5948	6.5920	4.2874	8.4300e-003	0.6989	0.2850	0.9839	0.3746	0.2622	0.6369	0.0000	741.5378	741.5378	0.2317	0.0000	747.3308
2021	0.5473	5.9536	4.0432	8.2300e-003	0.6982	0.2544	0.9526	0.3745	0.2340	0.6085	0.0000	723.8541	723.8541	0.2264	0.0000	729.5138
Maximum	0.5948	6.5920	4.2874	8.4300e-003	0.6989	0.2850	0.9839	0.3746	0.2622	0.6369	0.0000	741.5378	741.5378	0.2317	0.0000	747.3308

	ROG	NOx	CO	SO2	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	55.37	0.00	42.21	56.31	0.00	36.54	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	1-1-2018	3-31-2018	1.3658	1.3658
2	4-1-2018	6-30-2018	1.3804	1.3804
3	7-1-2018	9-30-2018	1.3956	1.3956
4	10-1-2018	12-31-2018	1.3962	1.3962
5	1-1-2019	3-31-2019	1.2766	1.2766
6	4-1-2019	6-30-2019	1.2902	1.2902
7	7-1-2019	9-30-2019	1.3044	1.3044
8	10-1-2019	12-31-2019	1.2482	1.2482

9	1-1-2020	3-31-2020	1.7832	1.7832
10	4-1-2020	6-30-2020	1.7827	1.7827
11	7-1-2020	9-30-2020	1.8023	1.8023
12	10-1-2020	12-31-2020	1.8028	1.8028
13	1-1-2021	3-31-2021	1.6327	1.6327
14	4-1-2021	6-30-2021	1.6504	1.6504
15	7-1-2021	9-30-2021	1.6685	1.6685
		Highest	1.8028	1.8028

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	2.0424	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	2.0424	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004

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
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Category	tons/yr										MT/yr					
	Area	2.0424	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	2.0424	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004

	ROG	NOx	CO	SO2	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	Demolition	Demolition	1/1/2018	12/27/2019	5	520	
2	Grading	Grading	1/1/2020	12/24/2021	5	520	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11.5

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38

Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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
Demolition	6	15.00	0.00	475.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	99.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

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					0.0258	0.0000	0.0258	3.9000e-003	0.0000	3.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4853	5.0011	2.9107	5.0700e-003		0.2530	0.2530		0.2355	0.2355	0.0000	458.3692	458.3692	0.1263	0.0000	461.5263

Total	0.4853	5.0011	2.9107	5.0700e-003	0.0258	0.2530	0.2788	3.9000e-003	0.2355	0.2394	0.0000	458.3692	458.3692	0.1263	0.0000	461.5263
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1000e-003	0.0388	7.5000e-003	9.0000e-005	3.5800e-003	1.5000e-004	3.7300e-003	9.4000e-004	1.4000e-004	1.0800e-003	0.0000	9.2493	9.2493	6.8000e-004	0.0000	9.2663
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	0.0104	8.5200e-003	0.0915	2.3000e-004	0.0215	1.8000e-004	0.0217	5.7000e-003	1.6000e-004	5.8700e-003	0.0000	20.6221	20.6221	7.1000e-004	0.0000	20.6397
Total	0.0115	0.0473	0.0990	3.2000e-004	0.0251	3.3000e-004	0.0254	6.6400e-003	3.0000e-004	6.9500e-003	0.0000	29.8714	29.8714	1.3900e-003	0.0000	29.9060

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					0.0110	0.0000	0.0110	1.6700e-003	0.0000	1.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4853	5.0011	2.9107	5.0700e-003		0.2530	0.2530		0.2355	0.2355	0.0000	458.3686	458.3686	0.1263	0.0000	461.5258
Total	0.4853	5.0011	2.9107	5.0700e-003	0.0110	0.2530	0.2640	1.6700e-003	0.2355	0.2372	0.0000	458.3686	458.3686	0.1263	0.0000	461.5258

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1000e-003	0.0388	7.5000e-003	9.0000e-005	3.5800e-003	1.5000e-004	3.7300e-003	9.4000e-004	1.4000e-004	1.0800e-003	0.0000	9.2493	9.2493	6.8000e-004	0.0000	9.2663
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	0.0104	8.5200e-003	0.0915	2.3000e-004	0.0215	1.8000e-004	0.0217	5.7000e-003	1.6000e-004	5.8700e-003	0.0000	20.6221	20.6221	7.1000e-004	0.0000	20.6397
Total	0.0115	0.0473	0.0990	3.2000e-004	0.0251	3.3000e-004	0.0254	6.6400e-003	3.0000e-004	6.9500e-003	0.0000	29.8714	29.8714	1.3900e-003	0.0000	29.9060

3.2 Demolition - 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					0.0256	0.0000	0.0256	3.8700e-003	0.0000	3.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4550	4.6339	2.8568	5.0200e-003		0.2324	0.2324		0.2162	0.2162	0.0000	448.4110	448.4110	0.1247	0.0000	451.5296
Total	0.4550	4.6339	2.8568	5.0200e-003	0.0256	0.2324	0.2580	3.8700e-003	0.2162	0.2201	0.0000	448.4110	448.4110	0.1247	0.0000	451.5296

Unmitigated Construction Off-Site

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

Hauling	1.0300e-003	0.0364	7.2700e-003	9.0000e-005	3.5800e-003	1.3000e-004	3.7100e-003	9.4000e-004	1.3000e-004	1.0600e-003	0.0000	9.0669	9.0669	6.7000e-004	0.0000	9.0835
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	9.3500e-003	7.4600e-003	0.0811	2.2000e-004	0.0213	1.7000e-004	0.0215	5.6600e-003	1.6000e-004	5.8200e-003	0.0000	19.8183	19.8183	6.2000e-004	0.0000	19.8339
Total	0.0104	0.0438	0.0884	3.1000e-004	0.0249	3.0000e-004	0.0252	6.6000e-003	2.9000e-004	6.8800e-003	0.0000	28.8852	28.8852	1.2900e-003	0.0000	28.9174

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					0.0109	0.0000	0.0109	1.6600e-003	0.0000	1.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4550	4.6339	2.8568	5.0200e-003		0.2324	0.2324		0.2162	0.2162	0.0000	448.4104	448.4104	0.1247	0.0000	451.5290
Total	0.4550	4.6339	2.8568	5.0200e-003	0.0109	0.2324	0.2434	1.6600e-003	0.2162	0.2179	0.0000	448.4104	448.4104	0.1247	0.0000	451.5290

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0300e-003	0.0364	7.2700e-003	9.0000e-005	3.5800e-003	1.3000e-004	3.7100e-003	9.4000e-004	1.3000e-004	1.0600e-003	0.0000	9.0669	9.0669	6.7000e-004	0.0000	9.0835
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	9.3500e-003	7.4600e-003	0.0811	2.2000e-004	0.0213	1.7000e-004	0.0215	5.6600e-003	1.6000e-004	5.8200e-003	0.0000	19.8183	19.8183	6.2000e-004	0.0000	19.8339

Total	0.0104	0.0438	0.0884	3.1000e-004	0.0249	3.0000e-004	0.0252	6.6000e-003	2.9000e-004	6.8800e-003	0.0000	28.8852	28.8852	1.2900e-003	0.0000	28.9174
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3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5658	0.0000	1.5658	0.8580	0.0000	0.8580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5830	6.5759	4.1865	8.1200e-003		0.2848	0.2848		0.2620	0.2620	0.0000	713.7442	713.7442	0.2308	0.0000	719.5152
Total	0.5830	6.5759	4.1865	8.1200e-003	1.5658	0.2848	1.8506	0.8580	0.2620	1.1200	0.0000	713.7442	713.7442	0.2308	0.0000	719.5152

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	2.0000e-004	7.1700e-003	1.4900e-003	2.0000e-005	7.5000e-004	2.0000e-005	7.7000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	1.8923	1.8923	1.4000e-004	0.0000	1.8957
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	0.0117	8.9800e-003	0.0994	2.9000e-004	0.0287	2.2000e-004	0.0290	7.6300e-003	2.1000e-004	7.8400e-003	0.0000	25.9021	25.9021	7.5000e-004	0.0000	25.9207
Total	0.0119	0.0162	0.1009	3.1000e-004	0.0295	2.4000e-004	0.0297	7.8300e-003	2.3000e-004	8.0600e-003	0.0000	27.7944	27.7944	8.9000e-004	0.0000	27.8165

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					0.6694	0.0000	0.6694	0.3668	0.0000	0.3668	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5830	6.5759	4.1865	8.1200e-003		0.2848	0.2848		0.2620	0.2620	0.0000	713.7434	713.7434	0.2308	0.0000	719.5144
Total	0.5830	6.5759	4.1865	8.1200e-003	0.6694	0.2848	0.9542	0.3668	0.2620	0.6288	0.0000	713.7434	713.7434	0.2308	0.0000	719.5144

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	2.0000e-004	7.1700e-003	1.4900e-003	2.0000e-005	7.5000e-004	2.0000e-005	7.7000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	1.8923	1.8923	1.4000e-004	0.0000	1.8957
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	0.0117	8.9800e-003	0.0994	2.9000e-004	0.0287	2.2000e-004	0.0290	7.6300e-003	2.1000e-004	7.8400e-003	0.0000	25.9021	25.9021	7.5000e-004	0.0000	25.9207
Total	0.0119	0.0162	0.1009	3.1000e-004	0.0295	2.4000e-004	0.0297	7.8300e-003	2.3000e-004	8.0600e-003	0.0000	27.7944	27.7944	8.9000e-004	0.0000	27.8165

3.3 Grading - 2021

Unmitigated Construction On-Site

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

Fugitive Dust					1.5658	0.0000	1.5658	0.8580	0.0000	0.8580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5365	5.9392	3.9524	7.9400e-003		0.2541	0.2541		0.2338	0.2338	0.0000	697.5358	697.5358	0.2256	0.0000	703.1757
Total	0.5365	5.9392	3.9524	7.9400e-003	1.5658	0.2541	1.8199	0.8580	0.2338	1.0918	0.0000	697.5358	697.5358	0.2256	0.0000	703.1757

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5200e-003	1.4400e-003	2.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	1.8288	1.8288	1.3000e-004	0.0000	1.8321
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	0.0106	7.9000e-003	0.0893	2.7000e-004	0.0281	2.1000e-004	0.0283	7.4600e-003	2.0000e-004	7.6500e-003	0.0000	24.4903	24.4903	6.6000e-004	0.0000	24.5068
Total	0.0108	0.0144	0.0908	2.9000e-004	0.0288	2.3000e-004	0.0291	7.6500e-003	2.2000e-004	7.8600e-003	0.0000	26.3191	26.3191	7.9000e-004	0.0000	26.3389

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					0.6694	0.0000	0.6694	0.3668	0.0000	0.3668	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5365	5.9392	3.9524	7.9400e-003		0.2541	0.2541		0.2338	0.2338	0.0000	697.5349	697.5349	0.2256	0.0000	703.1749
Total	0.5365	5.9392	3.9524	7.9400e-003	0.6694	0.2541	0.9235	0.3668	0.2338	0.6006	0.0000	697.5349	697.5349	0.2256	0.0000	703.1749

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5200e-003	1.4400e-003	2.0000e-005	7.4000e-004	2.0000e-005	7.6000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	1.8288	1.8288	1.3000e-004	0.0000	1.8321
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	0.0106	7.9000e-003	0.0893	2.7000e-004	0.0281	2.1000e-004	0.0283	7.4600e-003	2.0000e-004	7.6500e-003	0.0000	24.4903	24.4903	6.6000e-004	0.0000	24.5068
Total	0.0108	0.0144	0.0908	2.9000e-004	0.0288	2.3000e-004	0.0291	7.6500e-003	2.2000e-004	7.8600e-003	0.0000	26.3191	26.3191	7.9000e-004	0.0000	26.3389

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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					
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

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					
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

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

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive 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	2.0424	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004
Unmitigated	2.0424	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004

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	0.2322					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8102					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004
Total	2.0424	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-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
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SubCategory	tons/yr										MT/yr					
	Architectural Coating	0.2322					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8102					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004
Total	2.0424	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	0.0000	3.0000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	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

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

Institute Recycling and Composting Services

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

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
