APPENDIX B

AQ/GHG Modeling Data

9601 Kaiser Irwindale MOB Project

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	90.00	1000sqft	0.68	90,814.00	0
Enclosed Parking with Elevator	339.00	Space	0.47	115,339.00	0
Other Non-Asphalt Surfaces	1.85	Acre	1.85	80,586.00	0
Parking Lot	111.00	Space	1.00	44,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Irwindale MOB Project. Los Angeles County (South Coast Air Basin).

Land Use - Development of a 90,814 SF medical office building and a 115,339 SF parking garage on a 4-acre site.

Construction Phase - Construction would begin June 2016 and would finish in October 2018. Demolition estimated to begin May 2017.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Updated equipment per client.

Trips and VMT - Updated worker trips (rounded to even amount). Estimated 500 vendor trips (from client).

Demolition - Demolition of existing 82,500 sf warehouse.

Grading - Updated disturbed acreage.

Architectural Coating - Adjusted NonRes Interior and Exterior SF. Comply with SCAQMD Rule 1113.

Vehicle Trips - Default trip rate assumed, same rate used in Traffic Study.

Area Coating - Adjusted NonRes Interior and Exterior SF. Comply with SCAQMD Rule 1113.

Energy Use - Updated electricity and natural gas demand based on information from client. Project is net zero, natural gas was converted to kWh and distributed into electricity.

Water And Wastewater - Updated water demand based on information from client.

Construction Off-road Equipment Mitigation - Water exposed area three times per day.

Mobile Land Use Mitigation - The project is in a suburban setting.

Energy Mitigation - Project will be net zero for energy use and would produce 100% onsite renewable energy (based on page 9 of Energy Performance Summary). Installation of efficient lighting. Compliance with Title 24.

Water Mitigation -

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	144,036.00	59,827.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	432,107.00	136,221.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_Nonresidential_Exterior	144036	59827
tblAreaCoating	Area_Nonresidential_Interior	432107	136221
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblConstructionPhase	NumDays	18.00	82.00
tblConstructionPhase	NumDays	230.00	342.00
tblConstructionPhase	NumDays	8.00	5.00
tblConstructionPhase	NumDays	18.00	78.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	PhaseEndDate	1/25/2019	3/15/2018
tblConstructionPhase	PhaseEndDate	7/3/2018	9/14/2018

tblConstructionPhase	PhaseStartDate	10/4/2018	11/22/2017
tblConstructionPhase	PhaseStartDate	3/16/2018	5/30/2018
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	4.29	5.40
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	4.62	5.95
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	5.62	10.80
tblEnergyUse	T24NG	10.54	0.00
tblLandUse	LandUseSquareFeet	90,000.00	90,814.00
tblLandUse	LandUseSquareFeet	135,600.00	115,339.00
tblLandUse	LotAcreage	2.07	0.68
tblLandUse	LotAcreage	3.05	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	375.00	376.00
tblTripsAndVMT	VendorTripNumber	54.00	500.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	5.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	26.00
tblWater	IndoorWaterUseRate	11,293,248.38	27.98
tblWater	OutdoorWaterUseRate	2,151,094.93	23.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.7208	5.6794	6.4485	0.0120	0.3900	0.2054	0.5954	0.1074	0.1919	0.2992	0.0000	1,055.4187	1,055.4187	0.0706	0.0000	1,056.9022
2018	0.9550	6.8651	8.3624	0.0164	0.4636	0.2405	0.7041	0.1291	0.2246	0.3537	0.0000	1,415.1561	1,415.1561	0.0958	0.0000	1,417.1686
Total	**1.6758**	**12.5444**	**14.8109**	**0.0285**	**0.8536**	**0.4459**	**1.2995**	**0.2365**	**0.4164**	**0.6529**	**0.0000**	**2,470.5749**	**2,470.5749**	**0.1665**	**0.0000**	**2,474.0708**

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					
2017	0.7208	5.6794	6.4485	0.0120	0.3552	0.2054	0.5606	0.0985	0.1919	0.2903	0.0000	1,055.4185	1,055.4185	0.0706	0.0000	1,056.9019
2018	0.9550	6.8651	8.3624	0.0164	0.4636	0.2405	0.7041	0.1291	0.2246	0.3537	0.0000	1,415.1557	1,415.1557	0.0958	0.0000	1,417.1682
Total	**1.6758**	**12.5444**	**14.8109**	**0.0285**	**0.8188**	**0.4459**	**1.2647**	**0.2276**	**0.4164**	**0.6440**	**0.0000**	**2,470.5742**	**2,470.5742**	**0.1665**	**0.0000**	**2,474.0702**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**4.07**	**0.00**	**2.67**	**3.76**	**0.00**	**1.36**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2269	6.0000e-005	6.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0142
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	575.6333	575.6333	0.0265	5.4700e-003	577.8861
Mobile	1.2796	3.5568	13.7595	0.0366	2.4170	0.0526	2.4696	0.6474	0.0485	0.6959	0.0000	2,669.9295	2,669.9295	0.1025	0.0000	2,672.0824
Waste						0.0000	0.0000		0.0000	0.0000	197.3072	0.0000	197.3072	11.6605	0.0000	442.1782
Water						0.0000	0.0000		0.0000	0.0000	1.0000e-005	1.8000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
Total	**2.5065**	**3.5569**	**13.7665**	**0.0366**	**2.4170**	**0.0527**	**2.4696**	**0.6474**	**0.0486**	**0.6960**	**197.3072**	**3,245.5764**	**3,442.8837**	**11.7895**	**5.4700e-003**	**3,692.1611**

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	1.2269	6.0000e-005	6.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0142
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.2796	3.5568	13.7595	0.0366	2.4170	0.0526	2.4696	0.6474	0.0485	0.6959	0.0000	2,669.9295	2,669.9295	0.1025	0.0000	2,672.0824
Waste						0.0000	0.0000		0.0000	0.0000	49.3268	0.0000	49.3268	2.9151	0.0000	110.5446
Water						0.0000	0.0000		0.0000	0.0000	1.0000e-005	1.8000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
Total	**2.5065**	**3.5569**	**13.7665**	**0.0366**	**2.4170**	**0.0527**	**2.4696**	**0.6474**	**0.0486**	**0.6960**	**49.3268**	**2,669.9431**	**2,719.2699**	**3.0177**	**0.0000**	**2,782.6414**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**75.00**	**17.74**	**21.02**	**74.40**	**100.00**	**24.63**

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	5/5/2017	6/1/2017	5	20	
2	Site Preparation	Site Preparation	6/2/2017	6/5/2017	5	2	
3	Grading	Grading	6/6/2017	6/12/2017	5	5	
4	Building Construction	Building Construction	6/13/2017	10/3/2018	5	342	
5	Architectural Coating	Architectural Coating	11/22/2017	3/15/2018	5	82	
6	Paving	Paving	5/30/2018	9/14/2018	5	78	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 136,221; Non-Residential Outdoor: 59,827 (Architectural Coating

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	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Crawler Tractors	1	7.00	208	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Architectural Coating	Aerial Lifts	1	6.00	62	0.31
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Forklifts	1	6.00	89	0.20
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Plate Compactors	2	6.00	8	0.43
Paving	Rollers	2	6.00	80	0.38

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	16.00	0.00	376.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	130.00	500.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

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					0.0406	0.0000	0.0406	6.1500e-003	0.0000	6.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0406**	**0.0213**	**0.0619**	**6.1500e-003**	**0.0198**	**0.0260**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

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	3.2500e-003	0.0510	0.0405	1.4000e-004	3.2200e-003	7.1000e-004	3.9300e-003	8.8000e-004	6.6000e-004	1.5400e-003	0.0000	12.6162	12.6162	9.0000e-005	0.0000	12.6182
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	9.2000e-004	9.6100e-003	2.0000e-005	1.7500e-003	2.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.6467	1.6467	9.0000e-005	0.0000	1.6486
Total	**3.8800e-003**	**0.0519**	**0.0502**	**1.6000e-004**	**4.9700e-003**	**7.3000e-004**	**5.7000e-003**	**1.3500e-003**	**6.7000e-004**	**2.0200e-003**	**0.0000**	**14.2629**	**14.2629**	**1.8000e-004**	**0.0000**	**14.2668**

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					0.0158	0.0000	0.0158	2.4000e-003	0.0000	2.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0158**	**0.0213**	**0.0371**	**2.4000e-003**	**0.0198**	**0.0222**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

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	3.2500e-003	0.0510	0.0405	1.4000e-004	3.2200e-003	7.1000e-004	3.9300e-003	8.8000e-004	6.6000e-004	1.5400e-003	0.0000	12.6162	12.6162	9.0000e-005	0.0000	12.6182
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	9.2000e-004	9.6100e-003	2.0000e-005	1.7500e-003	2.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.6467	1.6467	9.0000e-005	0.0000	1.6486
Total	**3.8800e-003**	**0.0519**	**0.0502**	**1.6000e-004**	**4.9700e-003**	**7.3000e-004**	**5.7000e-003**	**1.3500e-003**	**6.7000e-004**	**2.0200e-003**	**0.0000**	**14.2629**	**14.2629**	**1.8000e-004**	**0.0000**	**14.2668**

3.3 Site Preparation - 2017

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	6.3000e-004	6.0900e-003	4.7900e-003	1.0000e-005		4.6000e-004	4.6000e-004		4.2000e-004	4.2000e-004	0.0000	0.5775	0.5775	1.8000e-004	0.0000	0.5812
Total	**6.3000e-004**	**6.0900e-003**	**4.7900e-003**	**1.0000e-005**	**0.0000**	**4.6000e-004**	**4.6000e-004**	**0.0000**	**4.2000e-004**	**4.2000e-004**	**0.0000**	**0.5775**	**0.5775**	**1.8000e-004**	**0.0000**	**0.5812**

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	8.0000e-005	8.4000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1441	0.1441	1.0000e-005	0.0000	0.1443
Total	**5.0000e-005**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1441**	**0.1441**	**1.0000e-005**	**0.0000**	**0.1443**

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	6.3000e-004	6.0900e-003	4.7900e-003	1.0000e-005		4.6000e-004	4.6000e-004		4.2000e-004	4.2000e-004	0.0000	0.5775	0.5775	1.8000e-004	0.0000	0.5812
Total	**6.3000e-004**	**6.0900e-003**	**4.7900e-003**	**1.0000e-005**	**0.0000**	**4.6000e-004**	**4.6000e-004**	**0.0000**	**4.2000e-004**	**4.2000e-004**	**0.0000**	**0.5775**	**0.5775**	**1.8000e-004**	**0.0000**	**0.5812**

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	8.0000e-005	8.4000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1441	0.1441	1.0000e-005	0.0000	0.1443
Total	**5.0000e-005**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1441**	**0.1441**	**1.0000e-005**	**0.0000**	**0.1443**

3.4 Grading - 2017

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					0.0164	0.0000	0.0164	8.4200e-003	0.0000	8.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6400e-003	0.0900	0.0635	7.0000e-005		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	6.9029	6.9029	2.1200e-003	0.0000	6.9473
Total	**8.6400e-003**	**0.0900**	**0.0635**	**7.0000e-005**	**0.0164**	**5.1000e-003**	**0.0215**	**8.4200e-003**	**4.6900e-003**	**0.0131**	**0.0000**	**6.9029**	**6.9029**	**2.1200e-003**	**0.0000**	**6.9473**

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	1.6000e-004	2.3000e-004	2.4000e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4117	0.4117	2.0000e-005	0.0000	0.4122
Total	**1.6000e-004**	**2.3000e-004**	**2.4000e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4117**	**0.4117**	**2.0000e-005**	**0.0000**	**0.4122**

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					6.3900e-003	0.0000	6.3900e-003	3.2800e-003	0.0000	3.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6400e-003	0.0900	0.0635	7.0000e-005		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	6.9029	6.9029	2.1200e-003	0.0000	6.9473
Total	**8.6400e-003**	**0.0900**	**0.0635**	**7.0000e-005**	**6.3900e-003**	**5.1000e-003**	**0.0115**	**3.2800e-003**	**4.6900e-003**	**7.9700e-003**	**0.0000**	**6.9029**	**6.9029**	**2.1200e-003**	**0.0000**	**6.9473**

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	1.6000e-004	2.3000e-004	2.4000e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4117	0.4117	2.0000e-005	0.0000	0.4122
Total	**1.6000e-004**	**2.3000e-004**	**2.4000e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.4117**	**0.4117**	**2.0000e-005**	**0.0000**	**0.4122**

3.5 Building Construction - 2017

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	0.2252	1.9889	1.3048	2.0600e-003		0.1285	0.1285		0.1207	0.1207	0.0000	184.4969	184.4969	0.0461	0.0000	185.4657
Total	**0.2252**	**1.9889**	**1.3048**	**2.0600e-003**		**0.1285**	**0.1285**		**0.1207**	**0.1207**	**0.0000**	**184.4969**	**184.4969**	**0.0461**	**0.0000**	**185.4657**

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	0.2951	3.0009	4.0484	7.8800e-003	0.2209	0.0441	0.2650	0.0630	0.0405	0.1035	0.0000	705.2523	705.2523	5.1700e-003	0.0000	705.3609
Worker	0.0366	0.0540	0.5623	1.3000e-003	0.1026	9.5000e-004	0.1035	0.0272	8.7000e-004	0.0281	0.0000	96.3339	96.3339	5.2500e-003	0.0000	96.4442
Total	**0.3317**	**3.0549**	**4.6107**	**9.1800e-003**	**0.3235**	**0.0450**	**0.3685**	**0.0902**	**0.0414**	**0.1317**	**0.0000**	**801.5862**	**801.5862**	**0.0104**	**0.0000**	**801.8051**

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	0.2252	1.9889	1.3048	2.0600e-003		0.1285	0.1285		0.1207	0.1207	0.0000	184.4967	184.4967	0.0461	0.0000	185.4655
Total	**0.2252**	**1.9889**	**1.3048**	**2.0600e-003**		**0.1285**	**0.1285**		**0.1207**	**0.1207**	**0.0000**	**184.4967**	**184.4967**	**0.0461**	**0.0000**	**185.4655**

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	0.2951	3.0009	4.0484	7.8800e-003	0.2209	0.0441	0.2650	0.0630	0.0405	0.1035	0.0000	705.2523	705.2523	5.1700e-003	0.0000	705.3609
Worker	0.0366	0.0540	0.5623	1.3000e-003	0.1026	9.5000e-004	0.1035	0.0272	8.7000e-004	0.0281	0.0000	96.3339	96.3339	5.2500e-003	0.0000	96.4442
Total	**0.3317**	**3.0549**	**4.6107**	**9.1800e-003**	**0.3235**	**0.0450**	**0.3685**	**0.0902**	**0.0414**	**0.1317**	**0.0000**	**801.5862**	**801.5862**	**0.0104**	**0.0000**	**801.8051**

3.5 Building Construction - 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					
Off-Road	0.2703	2.4476	1.7480	2.8300e-003		0.1503	0.1503		0.1412	0.1412	0.0000	250.7047	250.7047	0.0624	0.0000	252.0159
Total	**0.2703**	**2.4476**	**1.7480**	**2.8300e-003**		**0.1503**	**0.1503**		**0.1412**	**0.1412**	**0.0000**	**250.7047**	**250.7047**	**0.0624**	**0.0000**	**252.0159**

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	0.3812	3.7918	5.3431	0.0108	0.3038	0.0571	0.3608	0.0866	0.0525	0.1391	0.0000	953.6990	953.6990	7.0800e-003	0.0000	953.8476
Worker	0.0452	0.0674	0.7003	1.7900e-003	0.1410	1.2600e-003	0.1423	0.0375	1.1700e-003	0.0386	0.0000	127.6046	127.6046	6.7100e-003	0.0000	127.7454
Total	**0.4263**	**3.8593**	**6.0434**	**0.0126**	**0.4448**	**0.0583**	**0.5031**	**0.1241**	**0.0537**	**0.1778**	**0.0000**	**1,081.3036**	**1,081.3036**	**0.0138**	**0.0000**	**1,081.5931**

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	0.2703	2.4476	1.7480	2.8300e-003		0.1503	0.1503		0.1412	0.1412	0.0000	250.7044	250.7044	0.0624	0.0000	252.0156
Total	**0.2703**	**2.4476**	**1.7480**	**2.8300e-003**		**0.1503**	**0.1503**		**0.1412**	**0.1412**	**0.0000**	**250.7044**	**250.7044**	**0.0624**	**0.0000**	**252.0156**

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	0.3812	3.7918	5.3431	0.0108	0.3038	0.0571	0.3608	0.0866	0.0525	0.1391	0.0000	953.6990	953.6990	7.0800e-003	0.0000	953.8476
Worker	0.0452	0.0674	0.7003	1.7900e-003	0.1410	1.2600e-003	0.1423	0.0375	1.1700e-003	0.0386	0.0000	127.6046	127.6046	6.7100e-003	0.0000	127.7454
Total	**0.4263**	**3.8593**	**6.0434**	**0.0126**	**0.4448**	**0.0583**	**0.5031**	**0.1241**	**0.0537**	**0.1778**	**0.0000**	**1,081.3036**	**1,081.3036**	**0.0138**	**0.0000**	**1,081.5931**

3.6 Architectural Coating - 2017

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	0.1012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3800e-003	0.0582	0.0506	7.0000e-005		4.3100e-003	4.3100e-003		4.1600e-003	4.1600e-003	0.0000	6.6721	6.6721	1.3300e-003	0.0000	6.6999
Total	**0.1086**	**0.0582**	**0.0506**	**7.0000e-005**		**4.3100e-003**	**4.3100e-003**		**4.1600e-003**	**4.1600e-003**	**0.0000**	**6.6721**	**6.6721**	**1.3300e-003**	**0.0000**	**6.6999**

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	1.4200e-003	2.1000e-003	0.0219	5.0000e-005	3.9900e-003	4.0000e-005	4.0300e-003	1.0600e-003	3.0000e-005	1.0900e-003	0.0000	3.7463	3.7463	2.0000e-004	0.0000	3.7506
Total	**1.4200e-003**	**2.1000e-003**	**0.0219**	**5.0000e-005**	**3.9900e-003**	**4.0000e-005**	**4.0300e-003**	**1.0600e-003**	**3.0000e-005**	**1.0900e-003**	**0.0000**	**3.7463**	**3.7463**	**2.0000e-004**	**0.0000**	**3.7506**

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	0.1012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3800e-003	0.0582	0.0506	7.0000e-005		4.3100e-003	4.3100e-003		4.1600e-003	4.1600e-003	0.0000	6.6721	6.6721	1.3300e-003	0.0000	6.6999
Total	**0.1086**	**0.0582**	**0.0506**	**7.0000e-005**		**4.3100e-003**	**4.3100e-003**		**4.1600e-003**	**4.1600e-003**	**0.0000**	**6.6721**	**6.6721**	**1.3300e-003**	**0.0000**	**6.6999**

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	1.4200e-003	2.1000e-003	0.0219	5.0000e-005	3.9900e-003	4.0000e-005	4.0300e-003	1.0600e-003	3.0000e-005	1.0900e-003	0.0000	3.7463	3.7463	2.0000e-004	0.0000	3.7506
Total	**1.4200e-003**	**2.1000e-003**	**0.0219**	**5.0000e-005**	**3.9900e-003**	**4.0000e-005**	**4.0300e-003**	**1.0600e-003**	**3.0000e-005**	**1.0900e-003**	**0.0000**	**3.7463**	**3.7463**	**2.0000e-004**	**0.0000**	**3.7506**

3.6 Architectural Coating - 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					
Archit. Coating	0.1953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0125	0.1002	0.0963	1.4000e-004		7.0000e-003	7.0000e-003		6.7700e-003	6.7700e-003	0.0000	12.7733	12.7733	2.4900e-003	0.0000	12.8255
Total	**0.2078**	**0.1002**	**0.0963**	**1.4000e-004**		**7.0000e-003**	**7.0000e-003**		**6.7700e-003**	**6.7700e-003**	**0.0000**	**12.7733**	**12.7733**	**2.4900e-003**	**0.0000**	**12.8255**

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	2.4600e-003	3.6800e-003	0.0382	1.0000e-004	7.6900e-003	7.0000e-005	7.7600e-003	2.0400e-003	6.0000e-005	2.1100e-003	0.0000	6.9603	6.9603	3.7000e-004	0.0000	6.9679
Total	**2.4600e-003**	**3.6800e-003**	**0.0382**	**1.0000e-004**	**7.6900e-003**	**7.0000e-005**	**7.7600e-003**	**2.0400e-003**	**6.0000e-005**	**2.1100e-003**	**0.0000**	**6.9603**	**6.9603**	**3.7000e-004**	**0.0000**	**6.9679**

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	0.1953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0125	0.1002	0.0963	1.4000e-004		7.0000e-003	7.0000e-003		6.7700e-003	6.7700e-003	0.0000	12.7733	12.7733	2.4900e-003	0.0000	12.8255
Total	**0.2078**	**0.1002**	**0.0963**	**1.4000e-004**		**7.0000e-003**	**7.0000e-003**		**6.7700e-003**	**6.7700e-003**	**0.0000**	**12.7733**	**12.7733**	**2.4900e-003**	**0.0000**	**12.8255**

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	2.4600e-003	3.6800e-003	0.0382	1.0000e-004	7.6900e-003	7.0000e-005	7.7600e-003	2.0400e-003	6.0000e-005	2.1100e-003	0.0000	6.9603	6.9603	3.7000e-004	0.0000	6.9679
Total	**2.4600e-003**	**3.6800e-003**	**0.0382**	**1.0000e-004**	**7.6900e-003**	**7.0000e-005**	**7.7600e-003**	**2.0400e-003**	**6.0000e-005**	**2.1100e-003**	**0.0000**	**6.9603**	**6.9603**	**3.7000e-004**	**0.0000**	**6.9679**

3.7 Paving - 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					
Off-Road	0.0434	0.4491	0.3814	5.9000e-004		0.0247	0.0247		0.0228	0.0228	0.0000	53.3606	53.3606	0.0162	0.0000	53.7014
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0447**	**0.4491**	**0.3814**	**5.9000e-004**		**0.0247**	**0.0247**		**0.0228**	**0.0228**	**0.0000**	**53.3606**	**53.3606**	**0.0162**	**0.0000**	**53.7014**

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	3.5600e-003	5.3100e-003	0.0552	1.4000e-004	0.0111	1.0000e-004	0.0112	2.9500e-003	9.0000e-005	3.0400e-003	0.0000	10.0537	10.0537	5.3000e-004	0.0000	10.0648
Total	**3.5600e-003**	**5.3100e-003**	**0.0552**	**1.4000e-004**	**0.0111**	**1.0000e-004**	**0.0112**	**2.9500e-003**	**9.0000e-005**	**3.0400e-003**	**0.0000**	**10.0537**	**10.0537**	**5.3000e-004**	**0.0000**	**10.0648**

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	0.0434	0.4491	0.3814	5.9000e-004		0.0247	0.0247		0.0228	0.0228	0.0000	53.3605	53.3605	0.0162	0.0000	53.7014
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0447**	**0.4491**	**0.3814**	**5.9000e-004**		**0.0247**	**0.0247**		**0.0228**	**0.0228**	**0.0000**	**53.3605**	**53.3605**	**0.0162**	**0.0000**	**53.7014**

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	3.5600e-003	5.3100e-003	0.0552	1.4000e-004	0.0111	1.0000e-004	0.0112	2.9500e-003	9.0000e-005	3.0400e-003	0.0000	10.0537	10.0537	5.3000e-004	0.0000	10.0648
Total	**3.5600e-003**	**5.3100e-003**	**0.0552**	**1.4000e-004**	**0.0111**	**1.0000e-004**	**0.0112**	**2.9500e-003**	**9.0000e-005**	**3.0400e-003**	**0.0000**	**10.0537**	**10.0537**	**5.3000e-004**	**0.0000**	**10.0648**

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					
Unmitigated	1.2796	3.5568	13.7595	0.0366	2.4170	0.0526	2.4696	0.6474	0.0485	0.6959	0.0000	2,669.9295	2,669.9295	0.1025	0.0000	2,672.0824

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Medical Office Building	3,251.70	806.40	139.50	6,375,111	6,375,111
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,251.70	806.40	139.50	6,375,111	6,375,111

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.530902	0.057841	0.178699	0.124790	0.039063	0.006298	0.016951	0.033908	0.002496	0.003149	0.003689	0.000536	0.001678

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	575.6333	575.6333	0.0265	5.4700e-003	577.8861

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	2.01153e+006	575.6333	0.0265	5.4700e-003	577.8861
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**575.6333**	**0.0265**	**5.4700e-003**	**577.8861**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	1.2269	6.0000e-005	6.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0142

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	0.0297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.6000e-004	6.0000e-005	6.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0142
Total	**1.2269**	**6.0000e-005**	**6.9800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0135**	**0.0135**	**4.0000e-005**	**0.0000**	**0.0142**

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	0.0297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.6000e-004	6.0000e-005	6.9800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0135	0.0135	4.0000e-005	0.0000	0.0142
Total	**1.2269**	**6.0000e-005**	**6.9800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0135**	**0.0135**	**4.0000e-005**	**0.0000**	**0.0142**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	1.9000e-004	0.0000	0.0000	2.1000e-004

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	2.798e-005 / 2.3e-005	1.9000e-004	0.0000	0.0000	2.1000e-004
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.9000e-004**	**0.0000**	**0.0000**	**2.1000e-004**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	49.3268	2.9151	0.0000	110.5446
Unmitigated	197.3072	11.6605	0.0000	442.1782

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	972	197.3072	11.6605	0.0000	442.1782
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**197.3072**	**11.6605**	**0.0000**	**442.1782**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	243	49.3268	2.9151	0.0000	110.5446
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**49.3268**	**2.9151**	**0.0000**	**110.5446**

9601 Kaiser Irwindale MOB Project

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	90.00	1000sqft	0.68	90,814.00	0
Enclosed Parking with Elevator	339.00	Space	0.47	115,339.00	0
Other Non-Asphalt Surfaces	1.85	Acre	1.85	80,586.00	0
Parking Lot	111.00	Space	1.00	44,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Irwindale MOB Project. Los Angeles County (South Coast Air Basin).

Land Use - Development of a 90,814 SF medical office building and a 115,339 SF parking garage on a 4-acre site.

Construction Phase - Construction would begin June 2016 and would finish in October 2018. Demolition estimated to begin May 2017.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Updated equipment per client.

Trips and VMT - Updated worker trips (rounded to even amount). Estimated 500 vendor trips (from client).

Demolition - Demolition of existing 82,500 sf warehouse.

Grading - Updated disturbed acreage.

Architectural Coating - Adjusted NonRes Interior and Exterior SF. Comply with SCAQMD Rule 1113.

Vehicle Trips - Default trip rate assumed, same rate used in Traffic Study.

Area Coating - Adjusted NonRes Interior and Exterior SF. Comply with SCAQMD Rule 1113.

Energy Use - Updated electricity and natural gas demand based on information from client. Project is net zero, natural gas was converted to kWh and distributed into electricity.

Water And Wastewater - Updated water demand based on information from client.

Construction Off-road Equipment Mitigation - Water exposed area three times per day.

Mobile Land Use Mitigation - The project is in a suburban setting.

Energy Mitigation - Project will be net zero for energy use and would produce 100% onsite renewable energy (based on page 9 of Energy Performance Summary). Installation of efficient lighting. Compliance with Title 24.

Water Mitigation -

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	144,036.00	59,827.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	432,107.00	136,221.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_Nonresidential_Exterior	144036	59827
tblAreaCoating	Area_Nonresidential_Interior	432107	136221
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblConstructionPhase	NumDays	18.00	82.00
tblConstructionPhase	NumDays	230.00	342.00
tblConstructionPhase	NumDays	8.00	5.00
tblConstructionPhase	NumDays	18.00	78.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	PhaseEndDate	1/25/2019	3/15/2018
tblConstructionPhase	PhaseEndDate	7/3/2018	9/14/2018

tblConstructionPhase	PhaseStartDate	10/4/2018	11/22/2017
tblConstructionPhase	PhaseStartDate	3/16/2018	5/30/2018
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	4.29	5.40
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	4.62	5.95
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	5.62	10.80
tblEnergyUse	T24NG	10.54	0.00
tblLandUse	LandUseSquareFeet	90,000.00	90,814.00
tblLandUse	LandUseSquareFeet	135,600.00	115,339.00
tblLandUse	LotAcreage	2.07	0.68
tblLandUse	LotAcreage	3.05	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	375.00	376.00
tblTripsAndVMT	VendorTripNumber	54.00	500.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	5.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	26.00
tblWater	IndoorWaterUseRate	11,293,248.38	27.98
tblWater	OutdoorWaterUseRate	2,151,094.93	23.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.3632	72.4584	79.2676	0.1664	6.7312	2.7173	8.7716	3.4149	2.5479	5.2921	0.0000	16,030.6810	16,030.6810	1.1275	0.0000	16,054.3579
2018	14.6156	73.6279	81.9349	0.1761	4.8636	2.7410	7.6046	1.3503	2.5529	3.9032	0.0000	16,733.8866	16,733.8866	1.3214	0.0000	16,761.6357
Total	**29.9787**	**146.0863**	**161.2024**	**0.3425**	**11.5948**	**5.4583**	**16.3762**	**4.7652**	**5.1009**	**9.1953**	**0.0000**	**32,764.5676**	**32,764.5676**	**2.4489**	**0.0000**	**32,815.9936**

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					
2017	15.3632	72.4584	79.2676	0.1664	4.8632	2.7173	7.5805	1.3608	2.5479	3.8981	0.0000	16,030.6810	16,030.6810	1.1275	0.0000	16,054.3579
2018	14.6156	73.6279	81.9349	0.1761	4.8636	2.7410	7.6046	1.3503	2.5529	3.9032	0.0000	16,733.8866	16,733.8866	1.3214	0.0000	16,761.6357
Total	**29.9787**	**146.0863**	**161.2024**	**0.3425**	**9.7268**	**5.4583**	**15.1852**	**2.7110**	**5.1009**	**7.8013**	**0.0000**	**32,764.5676**	**32,764.5676**	**2.4489**	**0.0000**	**32,815.9936**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.11**	**0.00**	**7.27**	**43.11**	**0.00**	**15.16**	**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	6.7243	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253
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	9.3536	24.1496	98.1045	0.2751	17.9160	0.3824	18.2983	4.7912	0.3526	5.1437		22,103.8199	22,103.8199	0.8221		22,121.0830
Total	**16.0779**	**24.1501**	**98.1604**	**0.2751**	**17.9160**	**0.3826**	**18.2985**	**4.7912**	**0.3528**	**5.1439**		**22,103.9384**	**22,103.9384**	**0.8224**	**0.0000**	**22,121.2083**

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	6.7243	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253
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	9.3536	24.1496	98.1045	0.2751	17.9160	0.3824	18.2983	4.7912	0.3526	5.1437		22,103.8199	22,103.8199	0.8221		22,121.0830
Total	**16.0779**	**24.1501**	**98.1604**	**0.2751**	**17.9160**	**0.3826**	**18.2985**	**4.7912**	**0.3528**	**5.1439**		**22,103.9384**	**22,103.9384**	**0.8224**	**0.0000**	**22,121.2083**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/5/2017	6/1/2017	5	20	
2	Site Preparation	Site Preparation	6/2/2017	6/5/2017	5	2	
3	Grading	Grading	6/6/2017	6/12/2017	5	5	
4	Building Construction	Building Construction	6/13/2017	10/3/2018	5	342	
5	Architectural Coating	Architectural Coating	11/22/2017	3/15/2018	5	82	
6	Paving	Paving	5/30/2018	9/14/2018	5	78	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 136,221; Non-Residential Outdoor: 59,827 (Architectural Coating

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	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Crawler Tractors	1	7.00	208	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Architectural Coating	Aerial Lifts	1	6.00	62	0.31
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Forklifts	1	6.00	89	0.20
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Plate Compactors	2	6.00	8	0.43
Paving	Rollers	2	6.00	80	0.38

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	16.00	0.00	376.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	130.00	500.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0605	0.0000	4.0605	0.6148	0.0000	0.6148			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**4.0605**	**2.1252**	**6.1857**	**0.6148**	**1.9797**	**2.5945**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3131	4.8405	3.5835	0.0140	0.3275	0.0713	0.3987	0.0897	0.0656	0.1552		1,392.0694	1,392.0694	0.0103		1,392.2848
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	0.0640	0.0811	1.0056	2.3300e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		189.2844	189.2844	9.8900e-003		189.4922
Total	**0.3772**	**4.9216**	**4.5891**	**0.0164**	**0.5063**	**0.0729**	**0.5792**	**0.1371**	**0.0671**	**0.2042**		**1,581.3538**	**1,581.3538**	**0.0202**		**1,581.7770**

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					1.5836	0.0000	1.5836	0.2398	0.0000	0.2398			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.5836**	**2.1252**	**3.7088**	**0.2398**	**1.9797**	**2.2195**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3131	4.8405	3.5835	0.0140	0.3275	0.0713	0.3987	0.0897	0.0656	0.1552		1,392.0694	1,392.0694	0.0103		1,392.2848
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	0.0640	0.0811	1.0056	2.3300e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		189.2844	189.2844	9.8900e-003		189.4922
Total	**0.3772**	**4.9216**	**4.5891**	**0.0164**	**0.5063**	**0.0729**	**0.5792**	**0.1371**	**0.0671**	**0.2042**		**1,581.3538**	**1,581.3538**	**0.0202**		**1,581.7770**

3.3 Site Preparation - 2017

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6336	6.0877	4.7877	6.2200e-003		0.4578	0.4578		0.4212	0.4212		636.5299	636.5299	0.1950		640.6256
Total	**0.6336**	**6.0877**	**4.7877**	**6.2200e-003**	**0.0000**	**0.4578**	**0.4578**	**0.0000**	**0.4212**	**0.4212**		**636.5299**	**636.5299**	**0.1950**		**640.6256**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0560	0.0710	0.8799	2.0300e-003	0.1565	1.4200e-003	0.1579	0.0415	1.3100e-003	0.0428		165.6239	165.6239	8.6600e-003		165.8057
Total	**0.0560**	**0.0710**	**0.8799**	**2.0300e-003**	**0.1565**	**1.4200e-003**	**0.1579**	**0.0415**	**1.3100e-003**	**0.0428**		**165.6239**	**165.6239**	**8.6600e-003**		**165.8057**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6336	6.0877	4.7877	6.2200e-003		0.4578	0.4578		0.4212	0.4212	0.0000	636.5299	636.5299	0.1950		640.6256
Total	**0.6336**	**6.0877**	**4.7877**	**6.2200e-003**	**0.0000**	**0.4578**	**0.4578**	**0.0000**	**0.4212**	**0.4212**	**0.0000**	**636.5299**	**636.5299**	**0.1950**		**640.6256**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0560	0.0710	0.8799	2.0300e-003	0.1565	1.4200e-003	0.1579	0.0415	1.3100e-003	0.0428		165.6239	165.6239	8.6600e-003		165.8057
Total	**0.0560**	**0.0710**	**0.8799**	**2.0300e-003**	**0.1565**	**1.4200e-003**	**0.1579**	**0.0415**	**1.3100e-003**	**0.0428**		**165.6239**	**165.6239**	**8.6600e-003**		**165.8057**

3.4 Grading - 2017

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0811	1.0056	2.3300e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		189.2844	189.2844	9.8900e-003		189.4922
Total	**0.0640**	**0.0811**	**1.0056**	**2.3300e-003**	**0.1788**	**1.6200e-003**	**0.1805**	**0.0474**	**1.4900e-003**	**0.0489**		**189.2844**	**189.2844**	**9.8900e-003**		**189.4922**

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.5554**	**2.0388**	**4.5942**	**1.3133**	**1.8757**	**3.1890**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0811	1.0056	2.3300e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		189.2844	189.2844	9.8900e-003		189.4922
Total	**0.0640**	**0.0811**	**1.0056**	**2.3300e-003**	**0.1788**	**1.6200e-003**	**0.1805**	**0.0474**	**1.4900e-003**	**0.0489**		**189.2844**	**189.2844**	**9.8900e-003**		**189.4922**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1282	27.6242	18.1215	0.0286		1.7846	1.7846		1.6761	1.6761		2,824.6252	2,824.6252	0.7063		2,839.4581
Total	**3.1282**	**27.6242**	**18.1215**	**0.0286**		**1.7846**	**1.7846**		**1.6761**	**1.6761**		**2,824.6252**	**2,824.6252**	**0.7063**		**2,839.4581**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.8522	39.8875	47.7268	0.1098	3.1195	0.6094	3.7289	0.8877	0.5605	1.4482		10,835.1965	10,835.1965	0.0782		10,836.8390
Worker	0.5203	0.6591	8.1707	0.0189	1.4531	0.0132	1.4663	0.3854	0.0121	0.3975		1,537.9358	1,537.9358	0.0804		1,539.6239
Total	**4.3725**	**40.5466**	**55.8975**	**0.1286**	**4.5726**	**0.6225**	**5.1951**	**1.2731**	**0.5726**	**1.8457**		**12,373.1323**	**12,373.1323**	**0.1586**		**12,376.4629**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1282	27.6242	18.1215	0.0286		1.7846	1.7846		1.6761	1.6761	0.0000	2,824.6252	2,824.6252	0.7063		2,839.4581
Total	**3.1282**	**27.6242**	**18.1215**	**0.0286**		**1.7846**	**1.7846**		**1.6761**	**1.6761**	**0.0000**	**2,824.6252**	**2,824.6252**	**0.7063**		**2,839.4581**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.8522	39.8875	47.7268	0.1098	3.1195	0.6094	3.7289	0.8877	0.5605	1.4482		10,835.1965	10,835.1965	0.0782		10,836.8390
Worker	0.5203	0.6591	8.1707	0.0189	1.4531	0.0132	1.4663	0.3854	0.0121	0.3975		1,537.9358	1,537.9358	0.0804		1,539.6239
Total	**4.3725**	**40.5466**	**55.8975**	**0.1286**	**4.5726**	**0.6225**	**5.1951**	**1.2731**	**0.5726**	**1.8457**		**12,373.1323**	**12,373.1323**	**0.1586**		**12,376.4629**

3.5 Building Construction - 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					
Off-Road	2.7298	24.7229	17.6561	0.0286		1.5178	1.5178		1.4264	1.4264		2,791.4611	2,791.4611	0.6952		2,806.0605
Total	**2.7298**	**24.7229**	**17.6561**	**0.0286**		**1.5178**	**1.5178**		**1.4264**	**1.4264**		**2,791.4611**	**2,791.4611**	**0.6952**		**2,806.0605**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.6288	36.6730	45.5899	0.1096	3.1199	0.5741	3.6940	0.8878	0.5281	1.4159		10,656.2342	10,656.2342	0.0778		10,657.8676
Worker	0.4684	0.5982	7.4244	0.0189	1.4531	0.0128	1.4658	0.3854	0.0118	0.3972		1,481.6565	1,481.6565	0.0747		1,483.2245
Total	**4.0972**	**37.2712**	**53.0143**	**0.1285**	**4.5730**	**0.5868**	**5.1598**	**1.2732**	**0.5398**	**1.8131**		**12,137.8907**	**12,137.8907**	**0.1524**		**12,141.0921**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7298	24.7229	17.6561	0.0286		1.5178	1.5178		1.4264	1.4264	0.0000	2,791.4611	2,791.4611	0.6952		2,806.0605
Total	**2.7298**	**24.7229**	**17.6561**	**0.0286**		**1.5178**	**1.5178**		**1.4264**	**1.4264**	**0.0000**	**2,791.4611**	**2,791.4611**	**0.6952**		**2,806.0605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.6288	36.6730	45.5899	0.1096	3.1199	0.5741	3.6940	0.8878	0.5281	1.4159		10,656.2342	10,656.2342	0.0778		10,657.8676
Worker	0.4684	0.5982	7.4244	0.0189	1.4531	0.0128	1.4658	0.3854	0.0118	0.3972		1,481.6565	1,481.6565	0.0747		1,483.2245
Total	**4.0972**	**37.2712**	**53.0143**	**0.1285**	**4.5730**	**0.5868**	**5.1598**	**1.2732**	**0.5398**	**1.8131**		**12,137.8907**	**12,137.8907**	**0.1524**		**12,141.0921**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5268	4.1558	3.6145	5.3600e-003		0.3076	0.3076		0.2968	0.2968		525.3363	525.3363	0.1044		527.5296
Total	**7.7584**	**4.1558**	**3.6145**	**5.3600e-003**		**0.3076**	**0.3076**		**0.2968**	**0.2968**		**525.3363**	**525.3363**	**0.1044**		**527.5296**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1041	0.1318	1.6341	3.7800e-003	0.2906	2.6300e-003	0.2933	0.0771	2.4300e-003	0.0795		307.5872	307.5872	0.0161		307.9248
Total	**0.1041**	**0.1318**	**1.6341**	**3.7800e-003**	**0.2906**	**2.6300e-003**	**0.2933**	**0.0771**	**2.4300e-003**	**0.0795**		**307.5872**	**307.5872**	**0.0161**		**307.9248**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5268	4.1558	3.6145	5.3600e-003		0.3076	0.3076		0.2968	0.2968	0.0000	525.3363	525.3363	0.1044		527.5296
Total	**7.7584**	**4.1558**	**3.6145**	**5.3600e-003**		**0.3076**	**0.3076**		**0.2968**	**0.2968**	**0.0000**	**525.3363**	**525.3363**	**0.1044**		**527.5296**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1041	0.1318	1.6341	3.7800e-003	0.2906	2.6300e-003	0.2933	0.0771	2.4300e-003	0.0795		307.5872	307.5872	0.0161		307.9248
Total	**0.1041**	**0.1318**	**1.6341**	**3.7800e-003**	**0.2906**	**2.6300e-003**	**0.2933**	**0.0771**	**2.4300e-003**	**0.0795**		**307.5872**	**307.5872**	**0.0161**		**307.9248**

3.6 Architectural Coating - 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					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4632	3.7113	3.5678	5.3600e-003		0.2593	0.2593		0.2506	0.2506		521.4860	521.4860	0.1015		523.6168
Total	**7.6948**	**3.7113**	**3.5678**	**5.3600e-003**		**0.2593**	**0.2593**		**0.2506**	**0.2506**		**521.4860**	**521.4860**	**0.1015**		**523.6168**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0937	0.1196	1.4849	3.7800e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		296.3313	296.3313	0.0149		296.6449
Total	**0.0937**	**0.1196**	**1.4849**	**3.7800e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**296.3313**	**296.3313**	**0.0149**		**296.6449**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4632	3.7113	3.5678	5.3600e-003		0.2593	0.2593		0.2506	0.2506	0.0000	521.4860	521.4860	0.1015		523.6168
Total	**7.6948**	**3.7113**	**3.5678**	**5.3600e-003**		**0.2593**	**0.2593**		**0.2506**	**0.2506**	**0.0000**	**521.4860**	**521.4860**	**0.1015**		**523.6168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0937	0.1196	1.4849	3.7800e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		296.3313	296.3313	0.0149		296.6449
Total	**0.0937**	**0.1196**	**1.4849**	**3.7800e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**296.3313**	**296.3313**	**0.0149**		**296.6449**

3.7 Paving - 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					
Off-Road	1.1119	11.5142	9.7796	0.0152		0.6339	0.6339		0.5843	0.5843		1,508.2036	1,508.2036	0.4588		1,517.8382
Paving	0.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1455**	**11.5142**	**9.7796**	**0.0152**		**0.6339**	**0.6339**		**0.5843**	**0.5843**		**1,508.2036**	**1,508.2036**	**0.4588**		**1,517.8382**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0937	0.1196	1.4849	3.7800e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		296.3313	296.3313	0.0149		296.6449
Total	**0.0937**	**0.1196**	**1.4849**	**3.7800e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**296.3313**	**296.3313**	**0.0149**		**296.6449**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1119	11.5142	9.7796	0.0152		0.6339	0.6339		0.5843	0.5843	0.0000	1,508.2036	1,508.2036	0.4588		1,517.8382
Paving	0.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1455**	**11.5142**	**9.7796**	**0.0152**		**0.6339**	**0.6339**		**0.5843**	**0.5843**	**0.0000**	**1,508.2036**	**1,508.2036**	**0.4588**		**1,517.8382**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0937	0.1196	1.4849	3.7800e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		296.3313	296.3313	0.0149		296.6449
Total	**0.0937**	**0.1196**	**1.4849**	**3.7800e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**296.3313**	**296.3313**	**0.0149**		**296.6449**

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					
Unmitigated	9.3536	24.1496	98.1045	0.2751	17.9160	0.3824	18.2983	4.7912	0.3526	5.1437		22,103.8199	22,103.8199	0.8221		22,121.0830

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Medical Office Building	3,251.70	806.40	139.50	6,375,111	6,375,111
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,251.70	806.40	139.50	6,375,111	6,375,111

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.530902	0.057841	0.178699	0.124790	0.039063	0.006298	0.016951	0.033908	0.002496	0.003149	0.003689	0.000536	0.001678

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.7243	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.5566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2900e-003	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253
Total	**6.7243**	**5.2000e-004**	**0.0559**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**		**0.1186**	**0.1186**	**3.2000e-004**		**0.1253**

9601 Kaiser Irwindale MOB Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	90.00	1000sqft	0.68	90,814.00	0
Enclosed Parking with Elevator	339.00	Space	0.47	115,339.00	0
Other Non-Asphalt Surfaces	1.85	Acre	1.85	80,586.00	0
Parking Lot	111.00	Space	1.00	44,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Irwindale MOB Project. Los Angeles County (South Coast Air Basin).

Land Use - Development of a 90,814 SF medical office building and a 115,339 SF parking garage on a 4-acre site.

Construction Phase - Construction would begin June 2016 and would finish in October 2018. Demolition estimated to begin May 2017.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Updated equipment per client.

Off-road Equipment - Updated equipment per client.

Trips and VMT - Updated worker trips (rounded to even amount). Estimated 500 vendor trips (from client).

Demolition - Demolition of existing 82,500 sf warehouse.

Grading - Updated disturbed acreage.

Architectural Coating - Adjusted NonRes Interior and Exterior SF. Comply with SCAQMD Rule 1113.

Vehicle Trips - Default trip rate assumed, same rate used in Traffic Study.

Area Coating - Adjusted NonRes Interior and Exterior SF. Comply with SCAQMD Rule 1113.

Energy Use - Updated electricity and natural gas demand based on information from client. Project is net zero, natural gas was converted to kWh and distributed into electricity.

Water And Wastewater - Updated water demand based on information from client.

Construction Off-road Equipment Mitigation - Water exposed area three times per day.

Mobile Land Use Mitigation - The project is in a suburban setting.

Energy Mitigation - Project will be net zero for energy use and would produce 100% onsite renewable energy (based on page 9 of Energy Performance Summary). Installation of efficient lighting. Compliance with Title 24.

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	144,036.00	59,827.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	432,107.00	136,221.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_Nonresidential_Exterior	144036	59827
tblAreaCoating	Area_Nonresidential_Interior	432107	136221
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblConstructionPhase	NumDays	18.00	82.00
tblConstructionPhase	NumDays	230.00	342.00
tblConstructionPhase	NumDays	8.00	5.00
tblConstructionPhase	NumDays	18.00	78.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	PhaseEndDate	1/25/2019	3/15/2018
tblConstructionPhase	PhaseEndDate	7/3/2018	9/14/2018
tblConstructionPhase	PhaseStartDate	10/4/2018	11/22/2017

tblConstructionPhase	PhaseStartDate	3/16/2018	5/30/2018
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	4.29	5.40
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	4.62	5.95
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	5.62	10.80
tblEnergyUse	T24NG	10.54	0.00
tblLandUse	LandUseSquareFeet	90,000.00	90,814.00
tblLandUse	LandUseSquareFeet	135,600.00	115,339.00
tblLandUse	LotAcreage	2.07	0.68
tblLandUse	LotAcreage	3.05	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	375.00	376.00
tblTripsAndVMT	VendorTripNumber	54.00	500.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	5.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	26.00
tblWater	IndoorWaterUseRate	11,293,248.38	27.98
tblWater	OutdoorWaterUseRate	2,151,094.93	23.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.7656	73.5242	89.6088	0.1644	6.7312	2.7235	8.7716	3.4149	2.5536	5.2921	0.0000	15,836.7888	15,836.7888	1.1276	0.0000	15,860.4686
2018	14.9765	74.5892	92.1806	0.1741	4.8636	2.7466	7.6102	1.3503	2.5581	3.9084	0.0000	16,544.9814	16,544.9814	1.3238	0.0000	16,572.7814
Total	**30.7421**	**148.1134**	**181.7895**	**0.3384**	**11.5948**	**5.4701**	**16.3818**	**4.7652**	**5.1117**	**9.2005**	**0.0000**	**32,381.7703**	**32,381.7703**	**2.4514**	**0.0000**	**32,433.2499**

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					
2017	15.7656	73.5242	89.6088	0.1644	4.8632	2.7235	7.5867	1.3608	2.5536	3.9038	0.0000	15,836.7888	15,836.7888	1.1276	0.0000	15,860.4686
2018	14.9765	74.5892	92.1806	0.1741	4.8636	2.7466	7.6102	1.3503	2.5581	3.9084	0.0000	16,544.9814	16,544.9814	1.3238	0.0000	16,572.7814
Total	**30.7421**	**148.1134**	**181.7895**	**0.3384**	**9.7268**	**5.4701**	**15.1970**	**2.7110**	**5.1117**	**7.8121**	**0.0000**	**32,381.7703**	**32,381.7703**	**2.4514**	**0.0000**	**32,433.2499**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.11**	**0.00**	**7.23**	**43.11**	**0.00**	**15.09**	**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	6.7243	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253
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	9.8357	25.3814	100.0475	0.2627	17.9160	0.3840	18.3000	4.7912	0.3541	5.1453		21,153.8352	21,153.8352	0.8231		21,171.1196
Total	**16.5600**	**25.3819**	**100.1033**	**0.2627**	**17.9160**	**0.3842**	**18.3002**	**4.7912**	**0.3543**	**5.1455**		**21,153.9538**	**21,153.9538**	**0.8234**	**0.0000**	**21,171.2450**

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	6.7243	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253
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	9.8357	25.3814	100.0475	0.2627	17.9160	0.3840	18.3000	4.7912	0.3541	5.1453		21,153.8352	21,153.8352	0.8231		21,171.1196
Total	**16.5600**	**25.3819**	**100.1033**	**0.2627**	**17.9160**	**0.3842**	**18.3002**	**4.7912**	**0.3543**	**5.1455**		**21,153.9538**	**21,153.9538**	**0.8234**	**0.0000**	**21,171.2450**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/5/2017	6/1/2017	5	20	
2	Site Preparation	Site Preparation	6/2/2017	6/5/2017	5	2	
3	Grading	Grading	6/6/2017	6/12/2017	5	5	
4	Building Construction	Building Construction	6/13/2017	10/3/2018	5	342	
5	Architectural Coating	Architectural Coating	11/22/2017	3/15/2018	5	82	
6	Paving	Paving	5/30/2018	9/14/2018	5	78	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 136,221; Non-Residential Outdoor: 59,827 (Architectural Coating

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	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Crawler Tractors	1	7.00	208	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Architectural Coating	Aerial Lifts	1	6.00	62	0.31
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Forklifts	1	6.00	89	0.20
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Plate Compactors	2	6.00	8	0.43
Paving	Rollers	2	6.00	80	0.38

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	16.00	0.00	376.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	130.00	500.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0605	0.0000	4.0605	0.6148	0.0000	0.6148			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**4.0605**	**2.1252**	**6.1857**	**0.6148**	**1.9797**	**2.5945**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3300	5.0104	4.1821	0.0140	0.3275	0.0715	0.3989	0.0897	0.0657	0.1554		1,388.7991	1,388.7991	0.0104		1,389.0174
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	0.0665	0.0900	0.9404	2.1900e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		178.6457	178.6457	9.8900e-003		178.8534
Total	**0.3965**	**5.1004**	**5.1225**	**0.0162**	**0.5063**	**0.0731**	**0.5794**	**0.1371**	**0.0672**	**0.2043**		**1,567.4448**	**1,567.4448**	**0.0203**		**1,567.8709**

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					1.5836	0.0000	1.5836	0.2398	0.0000	0.2398			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**1.5836**	**2.1252**	**3.7088**	**0.2398**	**1.9797**	**2.2195**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3300	5.0104	4.1821	0.0140	0.3275	0.0715	0.3989	0.0897	0.0657	0.1554		1,388.7991	1,388.7991	0.0104		1,389.0174
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	0.0665	0.0900	0.9404	2.1900e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		178.6457	178.6457	9.8900e-003		178.8534
Total	**0.3965**	**5.1004**	**5.1225**	**0.0162**	**0.5063**	**0.0731**	**0.5794**	**0.1371**	**0.0672**	**0.2043**		**1,567.4448**	**1,567.4448**	**0.0203**		**1,567.8709**

3.3 Site Preparation - 2017

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6336	6.0877	4.7877	6.2200e-003		0.4578	0.4578		0.4212	0.4212		636.5299	636.5299	0.1950		640.6256
Total	**0.6336**	**6.0877**	**4.7877**	**6.2200e-003**	**0.0000**	**0.4578**	**0.4578**	**0.0000**	**0.4212**	**0.4212**		**636.5299**	**636.5299**	**0.1950**		**640.6256**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0787	0.8229	1.9200e-003	0.1565	1.4200e-003	0.1579	0.0415	1.3100e-003	0.0428		156.3150	156.3150	8.6600e-003		156.4968
Total	**0.0582**	**0.0787**	**0.8229**	**1.9200e-003**	**0.1565**	**1.4200e-003**	**0.1579**	**0.0415**	**1.3100e-003**	**0.0428**		**156.3150**	**156.3150**	**8.6600e-003**		**156.4968**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6336	6.0877	4.7877	6.2200e-003		0.4578	0.4578		0.4212	0.4212	0.0000	636.5299	636.5299	0.1950		640.6256
Total	**0.6336**	**6.0877**	**4.7877**	**6.2200e-003**	**0.0000**	**0.4578**	**0.4578**	**0.0000**	**0.4212**	**0.4212**	**0.0000**	**636.5299**	**636.5299**	**0.1950**		**640.6256**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0787	0.8229	1.9200e-003	0.1565	1.4200e-003	0.1579	0.0415	1.3100e-003	0.0428		156.3150	156.3150	8.6600e-003		156.4968
Total	**0.0582**	**0.0787**	**0.8229**	**1.9200e-003**	**0.1565**	**1.4200e-003**	**0.1579**	**0.0415**	**1.3100e-003**	**0.0428**		**156.3150**	**156.3150**	**8.6600e-003**		**156.4968**

3.4 Grading - 2017

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0900	0.9404	2.1900e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		178.6457	178.6457	9.8900e-003		178.8534
Total	**0.0665**	**0.0900**	**0.9404**	**2.1900e-003**	**0.1788**	**1.6200e-003**	**0.1805**	**0.0474**	**1.4900e-003**	**0.0489**		**178.6457**	**178.6457**	**9.8900e-003**		**178.8534**

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.5554**	**2.0388**	**4.5942**	**1.3133**	**1.8757**	**3.1890**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0900	0.9404	2.1900e-003	0.1788	1.6200e-003	0.1805	0.0474	1.4900e-003	0.0489		178.6457	178.6457	9.8900e-003		178.8534
Total	**0.0665**	**0.0900**	**0.9404**	**2.1900e-003**	**0.1788**	**1.6200e-003**	**0.1805**	**0.0474**	**1.4900e-003**	**0.0489**		**178.6457**	**178.6457**	**9.8900e-003**		**178.8534**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1282	27.6242	18.1215	0.0286		1.7846	1.7846		1.6761	1.6761		2,824.6252	2,824.6252	0.7063		2,839.4581
Total	**3.1282**	**27.6242**	**18.1215**	**0.0286**		**1.7846**	**1.7846**		**1.6761**	**1.6761**		**2,824.6252**	**2,824.6252**	**0.7063**		**2,839.4581**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.2309	40.8672	58.7037	0.1090	3.1195	0.6156	3.7351	0.8877	0.5662	1.4538		10,745.0320	10,745.0320	0.0806		10,746.7240
Worker	0.5401	0.7308	7.6410	0.0178	1.4531	0.0132	1.4663	0.3854	0.0121	0.3975		1,451.4960	1,451.4960	0.0804		1,453.1841
Total	**4.7710**	**41.5981**	**66.3447**	**0.1268**	**4.5726**	**0.6287**	**5.2013**	**1.2731**	**0.5783**	**1.8514**		**12,196.5281**	**12,196.5281**	**0.1610**		**12,199.9082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1282	27.6242	18.1215	0.0286		1.7846	1.7846		1.6761	1.6761	0.0000	2,824.6252	2,824.6252	0.7063		2,839.4581
Total	**3.1282**	**27.6242**	**18.1215**	**0.0286**		**1.7846**	**1.7846**		**1.6761**	**1.6761**	**0.0000**	**2,824.6252**	**2,824.6252**	**0.7063**		**2,839.4581**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.2309	40.8672	58.7037	0.1090	3.1195	0.6156	3.7351	0.8877	0.5662	1.4538		10,745.0320	10,745.0320	0.0806		10,746.7240
Worker	0.5401	0.7308	7.6410	0.0178	1.4531	0.0132	1.4663	0.3854	0.0121	0.3975		1,451.4960	1,451.4960	0.0804		1,453.1841
Total	**4.7710**	**41.5981**	**66.3447**	**0.1268**	**4.5726**	**0.6287**	**5.2013**	**1.2731**	**0.5783**	**1.8514**		**12,196.5281**	**12,196.5281**	**0.1610**		**12,199.9082**

3.5 Building Construction - 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					
Off-Road	2.7298	24.7229	17.6561	0.0286		1.5178	1.5178		1.4264	1.4264		2,791.4611	2,791.4611	0.6952		2,806.0605
Total	**2.7298**	**24.7229**	**17.6561**	**0.0286**		**1.5178**	**1.5178**		**1.4264**	**1.4264**		**2,791.4611**	**2,791.4611**	**0.6952**		**2,806.0605**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.9697	37.5561	56.4495	0.1089	3.1199	0.5797	3.6996	0.8878	0.5332	1.4211		10,567.3937	10,567.3937	0.0802		10,569.0780
Worker	0.4852	0.6633	6.9128	0.0178	1.4531	0.0128	1.4658	0.3854	0.0118	0.3972		1,398.2692	1,398.2692	0.0747		1,399.8372
Total	**4.4549**	**38.2194**	**63.3623**	**0.1267**	**4.5730**	**0.5924**	**5.1654**	**1.2732**	**0.5450**	**1.8182**		**11,965.6630**	**11,965.6630**	**0.1549**		**11,968.9152**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7298	24.7229	17.6561	0.0286		1.5178	1.5178		1.4264	1.4264	0.0000	2,791.4611	2,791.4611	0.6952		2,806.0605
Total	**2.7298**	**24.7229**	**17.6561**	**0.0286**		**1.5178**	**1.5178**		**1.4264**	**1.4264**	**0.0000**	**2,791.4611**	**2,791.4611**	**0.6952**		**2,806.0605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.9697	37.5561	56.4495	0.1089	3.1199	0.5797	3.6996	0.8878	0.5332	1.4211		10,567.3937	10,567.3937	0.0802		10,569.0780
Worker	0.4852	0.6633	6.9128	0.0178	1.4531	0.0128	1.4658	0.3854	0.0118	0.3972		1,398.2692	1,398.2692	0.0747		1,399.8372
Total	**4.4549**	**38.2194**	**63.3623**	**0.1267**	**4.5730**	**0.5924**	**5.1654**	**1.2732**	**0.5450**	**1.8182**		**11,965.6630**	**11,965.6630**	**0.1549**		**11,968.9152**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5268	4.1558	3.6145	5.3600e-003		0.3076	0.3076		0.2968	0.2968		525.3363	525.3363	0.1044		527.5296
Total	**7.7584**	**4.1558**	**3.6145**	**5.3600e-003**		**0.3076**	**0.3076**		**0.2968**	**0.2968**		**525.3363**	**525.3363**	**0.1044**		**527.5296**

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1080	0.1462	1.5282	3.5600e-003	0.2906	2.6300e-003	0.2933	0.0771	2.4300e-003	0.0795		290.2992	290.2992	0.0161		290.6368
Total	**0.1080**	**0.1462**	**1.5282**	**3.5600e-003**	**0.2906**	**2.6300e-003**	**0.2933**	**0.0771**	**2.4300e-003**	**0.0795**		**290.2992**	**290.2992**	**0.0161**		**290.6368**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5268	4.1558	3.6145	5.3600e-003		0.3076	0.3076		0.2968	0.2968	0.0000	525.3363	525.3363	0.1044		527.5296
Total	**7.7584**	**4.1558**	**3.6145**	**5.3600e-003**		**0.3076**	**0.3076**		**0.2968**	**0.2968**	**0.0000**	**525.3363**	**525.3363**	**0.1044**		**527.5296**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1080	0.1462	1.5282	3.5600e-003	0.2906	2.6300e-003	0.2933	0.0771	2.4300e-003	0.0795		290.2992	290.2992	0.0161		290.6368
Total	**0.1080**	**0.1462**	**1.5282**	**3.5600e-003**	**0.2906**	**2.6300e-003**	**0.2933**	**0.0771**	**2.4300e-003**	**0.0795**		**290.2992**	**290.2992**	**0.0161**		**290.6368**

3.6 Architectural Coating - 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					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4632	3.7113	3.5678	5.3600e-003		0.2593	0.2593		0.2506	0.2506		521.4860	521.4860	0.1015		523.6168
Total	**7.6948**	**3.7113**	**3.5678**	**5.3600e-003**		**0.2593**	**0.2593**		**0.2506**	**0.2506**		**521.4860**	**521.4860**	**0.1015**		**523.6168**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0970	0.1327	1.3826	3.5600e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		279.6539	279.6539	0.0149		279.9674
Total	**0.0970**	**0.1327**	**1.3826**	**3.5600e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**279.6539**	**279.6539**	**0.0149**		**279.9674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4632	3.7113	3.5678	5.3600e-003		0.2593	0.2593		0.2506	0.2506	0.0000	521.4860	521.4860	0.1015		523.6168
Total	**7.6948**	**3.7113**	**3.5678**	**5.3600e-003**		**0.2593**	**0.2593**		**0.2506**	**0.2506**	**0.0000**	**521.4860**	**521.4860**	**0.1015**		**523.6168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0970	0.1327	1.3826	3.5600e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		279.6539	279.6539	0.0149		279.9674
Total	**0.0970**	**0.1327**	**1.3826**	**3.5600e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**279.6539**	**279.6539**	**0.0149**		**279.9674**

3.7 Paving - 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					
Off-Road	1.1119	11.5142	9.7796	0.0152		0.6339	0.6339		0.5843	0.5843		1,508.2036	1,508.2036	0.4588		1,517.8382
Paving	0.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1455**	**11.5142**	**9.7796**	**0.0152**		**0.6339**	**0.6339**		**0.5843**	**0.5843**		**1,508.2036**	**1,508.2036**	**0.4588**		**1,517.8382**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0970	0.1327	1.3826	3.5600e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		279.6539	279.6539	0.0149		279.9674
Total	**0.0970**	**0.1327**	**1.3826**	**3.5600e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**279.6539**	**279.6539**	**0.0149**		**279.9674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1119	11.5142	9.7796	0.0152		0.6339	0.6339		0.5843	0.5843	0.0000	1,508.2036	1,508.2036	0.4588		1,517.8382
Paving	0.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1455**	**11.5142**	**9.7796**	**0.0152**		**0.6339**	**0.6339**		**0.5843**	**0.5843**	**0.0000**	**1,508.2036**	**1,508.2036**	**0.4588**		**1,517.8382**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0970	0.1327	1.3826	3.5600e-003	0.2906	2.5500e-003	0.2932	0.0771	2.3600e-003	0.0794		279.6539	279.6539	0.0149		279.9674
Total	**0.0970**	**0.1327**	**1.3826**	**3.5600e-003**	**0.2906**	**2.5500e-003**	**0.2932**	**0.0771**	**2.3600e-003**	**0.0794**		**279.6539**	**279.6539**	**0.0149**		**279.9674**

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					
Unmitigated	9.8357	25.3814	100.0475	0.2627	17.9160	0.3840	18.3000	4.7912	0.3541	5.1453		21,153.8352	21,153.8352	0.8231		21,171.1196

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Medical Office Building	3,251.70	806.40	139.50	6,375,111	6,375,111
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,251.70	806.40	139.50	6,375,111	6,375,111

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.530902	0.057841	0.178699	0.124790	0.039063	0.006298	0.016951	0.033908	0.002496	0.003149	0.003689	0.000536	0.001678

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.7243	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.5566					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2900e-003	5.2000e-004	0.0559	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1186	0.1186	3.2000e-004		0.1253
Total	**6.7243**	**5.2000e-004**	**0.0559**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**		**0.1186**	**0.1186**	**3.2000e-004**		**0.1253**

9601 Existing Land Uses

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	82.50	1000sqft	1.89	82,500.00	0
Other Asphalt Surfaces	2.11	Acre	2.11	91,911.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Irwindale MOB Project. Los Angeles County (South Coast Air Basin).

Land Use - Existing 82,500 SF food distribution warehouse.

Vehicle Trips - Trip rate updated based on Traffic Study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Energy Mitigation -

Water Mitigation - Reduce water consumption by 20% as required by the state.

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation).

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	MHD	0.02	0.06

tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleTrips	ST_TR	2.59	2.55
tblVehicleTrips	SU_TR	2.59	2.55
tblVehicleTrips	WD_TR	2.59	2.55

2.0 Emissions Summary

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	0.8324	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-003	2.1000e-003	1.0000e-005	0.0000	2.2200e-003
Energy	4.8000e-004	4.3700e-003	3.6700e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	412.2421	412.2421	0.0188	3.9600e-003	413.8657
Mobile	0.2557	2.7668	3.6871	0.0102	0.3634	0.0435	0.4069	0.0988	0.0400	0.1388	0.0000	849.2074	849.2074	0.0109	0.0000	849.4367
Waste						0.0000	0.0000		0.0000	0.0000	15.7420	0.0000	15.7420	0.9303	0.0000	35.2787
Water						0.0000	0.0000		0.0000	0.0000	6.0526	71.0885	77.1411	0.6249	0.0154	95.0246
Total	**1.0886**	**2.7711**	**3.6918**	**0.0102**	**0.3634**	**0.0438**	**0.4072**	**0.0988**	**0.0404**	**0.1391**	**21.7946**	**1,332.5401**	**1,354.3346**	**1.5850**	**0.0193**	**1,393.6080**

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	0.8324	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-003	2.1000e-003	1.0000e-005	0.0000	2.2200e-003
Energy	4.8000e-004	4.3700e-003	3.6700e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	412.2421	412.2421	0.0188	3.9600e-003	413.8657
Mobile	0.2557	2.7668	3.6871	0.0102	0.3634	0.0435	0.4069	0.0988	0.0400	0.1388	0.0000	849.2074	849.2074	0.0109	0.0000	849.4367
Waste						0.0000	0.0000		0.0000	0.0000	15.7420	0.0000	15.7420	0.9303	0.0000	35.2787
Water						0.0000	0.0000		0.0000	0.0000	4.8421	54.8969	59.7390	0.4999	0.0123	74.0381
Total	**1.0886**	**2.7711**	**3.6918**	**0.0102**	**0.3634**	**0.0438**	**0.4072**	**0.0988**	**0.0404**	**0.1391**	**20.5840**	**1,316.3485**	**1,336.9325**	**1.4599**	**0.0162**	**1,372.6215**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.55**	**1.22**	**1.28**	**7.89**	**15.95**	**1.51**

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					
Unmitigated	0.2557	2.7668	3.6871	0.0102	0.3634	0.0435	0.4069	0.0988	0.0400	0.1388	0.0000	849.2074	849.2074	0.0109	0.0000	849.4367

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	210.38	210.38	210.38	901,608	901,608
Total	210.38	210.38	210.38	901,608	901,608

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.457140	0.000000	0.000000	0.000000	0.014285	0.014285	0.057140	0.457140	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	407.4873	407.4873	0.0187	3.8800e-003	409.0821
NaturalGas Unmitigated	4.8000e-004	4.3700e-003	3.6700e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7547	4.7547	9.0000e-005	9.0000e-005	4.7837

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					
Refrigerated Warehouse-No	89100	4.8000e-004	4.3700e-003	3.6700e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7547	4.7547	9.0000e-005	9.0000e-005	4.7837
Other 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
Total		**4.8000e-004**	**4.3700e-003**	**3.6700e-003**	**3.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**4.7547**	**4.7547**	**9.0000e-005**	**9.0000e-005**	**4.7837**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.42395e+006	407.4873	0.0187	3.8800e-003	409.0821
Total		**407.4873**	**0.0187**	**3.8800e-003**	**409.0821**

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					
Unmitigated	0.8324	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-003	2.1000e-003	1.0000e-005	0.0000	2.2200e-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	tons/yr										MT/yr					
Architectural Coating	0.2021					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-003	2.1000e-003	1.0000e-005	0.0000	2.2200e-003
Total	**0.8324**	**1.0000e-005**	**1.0900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.1000e-003**	**2.1000e-003**	**1.0000e-005**	**0.0000**	**2.2200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	59.7390	0.4999	0.0123	74.0381
Unmitigated	77.1411	0.6249	0.0154	95.0246

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	19.0781 / 0	77.1411	0.6249	0.0154	95.0246
Total		**77.1411**	**0.6249**	**0.0154**	**95.0246**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	15.2625 / 0	59.7390	0.4999	0.0123	74.0381
Total		**59.7390**	**0.4999**	**0.0123**	**74.0381**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	15.7420	0.9303	0.0000	35.2787

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	77.55	15.7420	0.9303	0.0000	35.2787
Total		**15.7420**	**0.9303**	**0.0000**	**35.2787**

9601 Existing Land Uses

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	82.50	1000sqft	1.89	82,500.00	0
Other Asphalt Surfaces	2.11	Acre	2.11	91,911.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Irwindale MOB Project. Los Angeles County (South Coast Air Basin).

Land Use - Existing 82,500 SF food distribution warehouse.

Vehicle Trips - Trip rate updated based on Traffic Study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Water Mitigation - Reduce water consumption by 20% as required by the state.

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation).

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	MHD	0.02	0.06

tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleTrips	ST_TR	2.59	2.55
tblVehicleTrips	SU_TR	2.59	2.55
tblVehicleTrips	WD_TR	2.59	2.55

2.0 Emissions Summary

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	4.5616	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0185	0.0185	5.0000e-005		0.0196
Energy	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		28.7188	28.7188	5.5000e-004	5.3000e-004	28.8936
Mobile	1.3555	14.4710	17.8967	0.0565	2.0336	0.2389	2.2725	0.5518	0.2198	0.7716		5,187.3422	5,187.3422	0.0659		5,188.7262
Total	**5.9197**	**14.4950**	**17.9255**	**0.0566**	**2.0336**	**0.2407**	**2.2744**	**0.5518**	**0.2217**	**0.7734**		**5,216.0795**	**5,216.0795**	**0.0665**	**5.3000e-004**	**5,217.6393**

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					
Unmitigated	1.3555	14.4710	17.8967	0.0565	2.0336	0.2389	2.2725	0.5518	0.2198	0.7716		5,187.3422	5,187.3422	0.0659		5,188.7262

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	210.38	210.38	210.38	901,608	901,608
Total	210.38	210.38	210.38	901,608	901,608

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.457140	0.000000	0.000000	0.000000	0.014285	0.014285	0.057140	0.457140	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		28.7188	28.7188	5.5000e-004	5.3000e-004	28.8936

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					
Refrigerated Warehouse-No	244.11	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		28.7188	28.7188	5.5000e-004	5.3000e-004	28.8936
Other 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
Total		**2.6300e-003**	**0.0239**	**0.0201**	**1.4000e-004**		**1.8200e-003**	**1.8200e-003**		**1.8200e-003**	**1.8200e-003**		**28.7188**	**28.7188**	**5.5000e-004**	**5.3000e-004**	**28.8936**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	4.5616	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0185	0.0185	5.0000e-005		0.0196

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	1.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4534					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.3000e-004	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0185	0.0185	5.0000e-005		0.0196
Total	**4.5616**	**8.0000e-005**	**8.7200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0185**	**0.0185**	**5.0000e-005**		**0.0196**

9601 Existing Land Uses

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	82.50	1000sqft	1.89	82,500.00	0
Other Asphalt Surfaces	2.11	Acre	2.11	91,911.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Kaiser Irwindale MOB Project. Los Angeles County (South Coast Air Basin).

Land Use - Existing 82,500 SF food distribution warehouse.

Off-road Equipment - Updated equipment per engineer.

Vehicle Trips - Trip rate updated based on Traffic Study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Vechicle Emission Factors - Updated fleet mix based on traffic study.

Water Mitigation - Reduce water consumption by 20% as required by the state.

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation).

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	HHD	0.03	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDA	0.53	0.46
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD1	0.04	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	LHD2	6.2980e-003	0.01
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MCY	3.6890e-003	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MDV	0.12	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MH	1.6780e-003	0.00
tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	MHD	0.02	0.06

tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	OBUS	2.4960e-003	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	SBUS	5.3600e-004	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleEF	UBUS	3.1490e-003	0.00
tblVehicleTrips	ST_TR	2.59	2.55
tblVehicleTrips	SU_TR	2.59	2.55
tblVehicleTrips	WD_TR	2.59	2.55

2.0 Emissions Summary

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	4.5616	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0185	0.0185	5.0000e-005		0.0196
Energy	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		28.7188	28.7188	5.5000e-004	5.3000e-004	28.8936
Mobile	1.4388	14.9483	20.9346	0.0558	2.0336	0.2398	2.2735	0.5518	0.2207	0.7725		5,127.6605	5,127.6605	0.0667		5,129.0605
Total	**6.0030**	**14.9723**	**20.9634**	**0.0559**	**2.0336**	**0.2417**	**2.2753**	**0.5518**	**0.2225**	**0.7743**		**5,156.3978**	**5,156.3978**	**0.0673**	**5.3000e-004**	**5,157.9736**

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					
Unmitigated	1.4388	14.9483	20.9346	0.0558	2.0336	0.2398	2.2735	0.5518	0.2207	0.7725		5,127.6605	5,127.6605	0.0667		5,129.0605

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	210.38	210.38	210.38	901,608	901,608
Total	210.38	210.38	210.38	901,608	901,608

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.457140	0.000000	0.000000	0.000000	0.014285	0.014285	0.057140	0.457140	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		28.7188	28.7188	5.5000e-004	5.3000e-004	28.8936

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					
Refrigerated Warehouse-No Rail	244.11	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		28.7188	28.7188	5.5000e-004	5.3000e-004	28.8936
Other 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
Total		**2.6300e-003**	**0.0239**	**0.0201**	**1.4000e-004**		**1.8200e-003**	**1.8200e-003**		**1.8200e-003**	**1.8200e-003**		**28.7188**	**28.7188**	**5.5000e-004**	**5.3000e-004**	**28.8936**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	4.5616	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0185	0.0185	5.0000e-005		0.0196

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	1.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4534					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.3000e-004	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0185	0.0185	5.0000e-005		0.0196
Total	**4.5616**	**8.0000e-005**	**8.7200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0185**	**0.0185**	**5.0000e-005**		**0.0196**

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2016
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	CO_RUNEX
Los Angele	2016	HHDT	Aggregated	10	GAS	523.8438974	60.52545438
Los Angele	2016	HHDT	Aggregated	10	DSL	96289.4844	6.636133825
Los Angele	2016	LDA	Aggregated	10	GAS	1359521.938	1.930105302
Los Angele	2016	LDA	Aggregated	10	DSL	10208.53226	2.395940194
Los Angele	2016	LDT1	Aggregated	10	GAS	119190.2527	5.73119142
Los Angele	2016	LDT1	Aggregated	10	DSL	167.7265062	2.746442691
Los Angele	2016	LDT2	Aggregated	10	GAS	496579.4716	2.558972615
Los Angele	2016	LDT2	Aggregated	10	DSL	685.73242	1.530351861
Los Angele	2016	LHDT1	Aggregated	10	GAS	25891.03721	4.283078498
Los Angele	2016	LHDT1	Aggregated	10	DSL	9005.974447	2.012265367
Los Angele	2016	LHDT2	Aggregated	10	GAS	5510.401261	2.467821103
Los Angele	2016	LHDT2	Aggregated	10	DSL	4130.947412	1.899446179
Los Angele	2016	MCY	Aggregated	10	GAS	11479.56303	40.63416063
Los Angele	2016	MDV	Aggregated	10	GAS	321336.5992	4.133110614
Los Angele	2016	MDV	Aggregated	10	DSL	3884.0563	2.421207681
Los Angele	2016	MH	Aggregated	10	GAS	1559.483055	19.87455891
Los Angele	2016	MH	Aggregated	10	DSL	239.9070739	1.867917423
Los Angele	2016	MHDT	Aggregated	10	GAS	5351.042539	8.304656344
Los Angele	2016	MHDT	Aggregated	10	DSL	20398.41422	2.7894538
Los Angele	2016	OBUS	Aggregated	10	GAS	2015.403409	3.487333966
Los Angele	2016	OBUS	Aggregated	10	DSL	1558.344101	2.606482851
Los Angele	2016	SBUS	Aggregated	10	GAS	1384.039118	5.292534618
Los Angele	2016	SBUS	Aggregated	10	DSL	3756.658741	1.36023349
Los Angele	2016	UBUS	Aggregated	10	GAS	6500.427322	18.6583098
Los Angele	2016	UBUS	Aggregated	10	DSL	23151.45558	33.85089487
						Composite	**3.276366788**

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2019
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	CO_RUNEX
Los Angele	2019	HHDT	Aggregated	10	GAS	568.747865	52.07063
Los Angele	2019	HHDT	Aggregated	10	DSL	108247.515	7.513791
Los Angele	2019	LDA	Aggregated	10	GAS	1403405.96	1.327163
Los Angele	2019	LDA	Aggregated	10	DSL	13083.6901	2.498312
Los Angele	2019	LDT1	Aggregated	10	GAS	120420.498	3.737953
Los Angele	2019	LDT1	Aggregated	10	DSL	143.331298	2.631218
Los Angele	2019	LDT2	Aggregated	10	GAS	527274.103	1.695583
Los Angele	2019	LDT2	Aggregated	10	DSL	924.651553	1.664884
Los Angele	2019	LHDT1	Aggregated	10	GAS	20892.284	3.31096
Los Angele	2019	LHDT1	Aggregated	10	DSL	10146.6285	2.083376
Los Angele	2019	LHDT2	Aggregated	10	GAS	5124.07195	1.416765
Los Angele	2019	LHDT2	Aggregated	10	DSL	4900.17944	1.980886
Los Angele	2019	MCY	Aggregated	10	GAS	12984.0551	36.87055
Los Angele	2019	MDV	Aggregated	10	GAS	321915.457	3.237666
Los Angele	2019	MDV	Aggregated	10	DSL	5496.18477	2.614827
Los Angele	2019	MH	Aggregated	10	GAS	1479.30685	10.53555
Los Angele	2019	MH	Aggregated	10	DSL	255.9958	1.772643
Los Angele	2019	MHDT	Aggregated	10	GAS	5332.56164	4.609688
Los Angele	2019	MHDT	Aggregated	10	DSL	23302.1616	2.027873
Los Angele	2019	OBUS	Aggregated	10	GAS	2129.87291	2.145021
Los Angele	2019	OBUS	Aggregated	10	DSL	1787.19188	2.004814
Los Angele	2019	SBUS	Aggregated	10	GAS	1674.31618	3.009046
Los Angele	2019	SBUS	Aggregated	10	DSL	3888.44193	1.099731
Los Angele	2019	UBUS	Aggregated	10	GAS	7140.48647	11.88256
Los Angele	2019	UBUS	Aggregated	10	DSL	19129.0876	33.81927
						Composite	**2.503782**

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 2016 I-605 NB & Ramona Blvd - PM
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	99.7 (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	0.0 PPM		
SIGTH=	10. DEGREES	TEMP=	11.8 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. WBTA	500	12	0	12	AG	732	3.3	0.0	33.0
B. WBRA	500	24	12	24	AG	185	3.3	0.0	33.0
C. WBD	0	12	-500	12	AG	991	3.3	0.0	33.0
D. EBLA	-500	0	12	0	AG	125	3.3	0.0	33.0
E. EBTA	-500	-12	0	-12	AG	1266	3.3	0.0	33.0
F. EBD	0	-12	500	-12	AG	2043	3.3	0.0	33.0
G. NBLA	0	-500	12	0	AG	259	3.3	0.0	33.0
H. NBTA	12	-500	12	0	AG	2	3.3	0.0	33.0
I. NBRA	24	-500	24	-12	AG	777	3.3	0.0	33.0
J. NBD	12	0	12	500	AG	312	3.3	0.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. SR1	-60	60	5.9
2. SR2	60	60	5.9
3. SR3	-60	-60	5.9
4. SR4	60	-60	5.9

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: 2016 I-605 NB & Ramona Blvd - PM
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SR1	107.	0.3	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0
2. SR2	192.	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3. SR3	73.	0.4	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0
4. SR4	288.	0.4	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) I	J
1. SR1	0.0	0.0
2. SR2	0.1	0.0
3. SR3	0.0	0.0
4. SR4	0.1	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 2019 I-605 NB & Ramona Blvd - PM
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	99.7 (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	0.0 PPM		
SIGTH=	10. DEGREES	TEMP=	11.8 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. WBTA	500	12	0	12	AG	800	2.5	0.0	33.0
B. WBRA	500	24	12	24	AG	194	2.5	0.0	33.0
C. WBD	0	12	-500	12	AG	1085	2.5	0.0	33.0
D. EBLA	-500	0	12	0	AG	139	2.5	0.0	33.0
E. EBTA	-500	-12	0	-12	AG	1349	2.5	0.0	33.0
F. EBD	0	-12	500	-12	AG	2162	2.5	0.0	33.0
G. NBLA	0	-500	12	0	AG	285	2.5	0.0	33.0
H. NBTA	12	-500	12	0	AG	2	2.5	0.0	33.0
I. NBRA	24	-500	24	-12	AG	813	2.5	0.0	33.0
J. NBD	12	0	12	500	AG	335	2.5	0.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. SR1	-60	60	5.9
2. SR2	60	60	5.9
3. SR3	-60	-60	5.9
4. SR4	60	-60	5.9

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: 2019 I-605 NB & Ramona Blvd - PM
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SR1	107.	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2. SR2	192.	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3. SR3	73.	0.3	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0
4. SR4	288.	0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) I	J
1. SR1	0.0	0.0
2. SR2	0.1	0.0
3. SR3	0.0	0.0
4. SR4	0.1	0.0