APPENDIX B

Air Quality and Greenhouse Gas Modeling Data

Globemaster Corridor Specific Plan Construction

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	88.53	1000sqft	4.66	88,527.00	0
Medical Office Building	6.40	1000sqft	0.34	6,400.00	0
Research & Development	11.73	1000sqft	0.62	11,733.00	0
Manufacturing	52.35	1000sqft	2.76	52,348.00	0
Refrigerated Warehouse-No Rail	23.41	1000sqft	1.24	23,406.00	0
Unrefrigerated Warehouse-No Rail	132.63	1000sqft	6.98	132,632.00	0
Other Asphalt Surfaces	4.83	Acre	4.83	210,394.80	0
Fast Food Restaurant w/o Drive Thru	1.68	1000sqft	0.09	1,676.00	0
Fast Food Restaurant with Drive Thru	0.56	1000sqft	0.02	559.00	0
High Turnover (Sit Down Restaurant)	1.85	1000sqft	0.09	1,851.00	0
Hotel	16.60	Room	1.26	8,147.00	0
Quality Restaurant	0.38	1000sqft	0.02	382.00	0
Regional Shopping Center	22.90	1000sqft	1.24	22,901.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	636.97	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Construction emissions only.

Land Use - See 1.1 Land Usage. Assumes 5% of maximum development potential in one year. Acreage adjusted based on default acreage to total 24.15 acres. Assumes 20% of the site to be asphalt surface.

Construction Phase - See 3.0 Construction Detail. Adjusted to construct 5% of GCSP buildout over 1 year.

Off-road Equipment - Architectural Coating - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Building Construction - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Demolition - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Grading - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Paving - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Site Preparation - Default CalEEMod values x2. See 3.0 Construction Detail.

Trips and VMT - See 3.0 Construction Detail. CalEEMod equations applied. Assumes even number trips.

On-road Fugitive Dust - Assumed 100% worker paved, 98% vendor paved (0.14 miles/one-way trip unpaved), and 99% hauling paved (0.20 miles/one-way trip unpaved).

Demolition - Assumes 175,181 square feet of buildings demolished ine one year of construction.

Grading - See 3.0 Construction Detail. Default CalEEMod values for acres graded. Assumes 10,000 CY of export during grading phase.

Architectural Coating - Default CalEEMod values for VOC coating (g/L) and square footage.

Vehicle Trips - Operational emissions not estimated.

Woodstoves - Operational emissions not estimated.

Consumer Products - Operational emissions not estimated.

Area Coating - Operational emissions not estimated.

Landscape Equipment - Operational emissions not estimated.

Energy Use - Operational emissions not estimated.

Water And Wastewater - Operational emissions not estimated.

Solid Waste - Operational emissions not estimated.

Construction Off-road Equipment Mitigation - Water Exposed Area, Frequency: 2 times per day.

Vehicle Emission Factors -

Vehicle Emission Factors -
Vehicle Emission Factors -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	175281	0
tblAreaCoating	Area_Nonresidential_Interior	525843	0
tblAreaCoating	Area_Parking	12624	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	203.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	11.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	LightingElect	3.10	0.00
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tblEnergyUse	LightingElect	2.73	0.00
tblEnergyUse	LightingElect	6.26	0.00

tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1.91	0.00
tblEnergyUse	NT24E	28.16	0.00
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tblEnergyUse	NT24E	3.23	0.00
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tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	4.06	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	0.09	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	8.11	0.00

tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	2.55	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
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tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	0.84	0.00
tblGrading	MaterialExported	0.00	10,000.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	88,530.00	88,527.00
tblLandUse	LandUseSquareFeet	11,730.00	11,733.00

tblLandUse	LandUseSquareFeet	52,350.00	52,348.00
tblLandUse	LandUseSquareFeet	23,410.00	23,406.00
tblLandUse	LandUseSquareFeet	132,630.00	132,632.00
tblLandUse	LandUseSquareFeet	1,680.00	1,676.00
tblLandUse	LandUseSquareFeet	560.00	559.00
tblLandUse	LandUseSquareFeet	1,850.00	1,851.00
tblLandUse	LandUseSquareFeet	24,103.20	8,147.00
tblLandUse	LandUseSquareFeet	380.00	382.00
tblLandUse	LandUseSquareFeet	22,900.00	22,901.00
tblLandUse	LotAcreage	2.03	4.66
tblLandUse	LotAcreage	0.15	0.34
tblLandUse	LotAcreage	0.27	0.62
tblLandUse	LotAcreage	1.20	2.76
tblLandUse	LotAcreage	0.54	1.24
tblLandUse	LotAcreage	3.04	6.98
tblLandUse	LotAcreage	0.04	0.09
tblLandUse	LotAcreage	0.01	0.02
tblLandUse	LotAcreage	0.04	0.09
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tblLandUse	LotAcreage	0.01	0.02
tblLandUse	LotAcreage	0.53	1.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOnRoadDust	HaulingPercentPave	100.00	99.00
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tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	636.97
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tblSolidWaste	SolidWasteGenerationRate	6.45	0.00
tblSolidWaste	SolidWasteGenerationRate	82.33	0.00
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tblSolidWaste	SolidWasteGenerationRate	24.04	0.00
tblSolidWaste	SolidWasteGenerationRate	0.89	0.00
tblSolidWaste	SolidWasteGenerationRate	124.67	0.00
tblTripsAndVMT	HaulingTripNumber	797.00	798.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	223.00	446.00
tblTripsAndVMT	WorkerTripNumber	45.00	90.00
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	ST_TR	722.03	0.00
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tblVehicleTrips	ST_TR	1.68	0.00

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tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	716.00	0.00
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tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	509,936.64	0.00
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tblWater	IndoorWaterUseRate	561,537.37	0.00
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tblWater	IndoorWaterUseRate	30,670,687.50	0.00
tblWater	OutdoorWaterUseRate	32,549.15	0.00
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tblWater	OutdoorWaterUseRate	152,966.75	0.00
tblWater	OutdoorWaterUseRate	7,362.31	0.00
tblWater	OutdoorWaterUseRate	1,039,643.68	0.00

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					
2020	301.6759	118.6622	69.2239	0.1784	38.6225	4.4098	42.7682	19.9681	4.0592	24.0141	0.0000	17,853.6794	17,853.6794	4.2833	0.0000	17,960.7617
Maximum	**301.6759**	**118.6622**	**69.2239**	**0.1784**	**38.6225**	**4.4098**	**42.7682**	**19.9681**	**4.0592**	**24.0141**	**0.0000**	**17,853.6794**	**17,853.6794**	**4.2833**	**0.0000**	**17,960.7617**

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					
2020	301.6759	118.6622	69.2239	0.1784	30.0005	4.4098	33.3850	9.0443	4.0592	13.0904	0.0000	17,853.6794	17,853.6794	4.2833	0.0000	17,960.7616
Maximum	**301.6759**	**118.6622**	**69.2239**	**0.1784**	**30.0005**	**4.4098**	**33.3850**	**9.0443**	**4.0592**	**13.0904**	**0.0000**	**17,853.6794**	**17,853.6794**	**4.2833**	**0.0000**	**17,960.7616**

	ROG	**NOx**	**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**	**22.32**	**0.00**	**21.94**	**54.71**	**0.00**	**45.49**	**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	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**	**0.0000**	**0.0848**

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	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**	**0.0000**	**0.0848**

	ROG	NOx	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	1/1/2020	1/15/2020	5	11	
2	Site Preparation	Site Preparation	1/16/2020	1/22/2020	5	5	
3	Grading	Grading	1/23/2020	2/18/2020	5	19	
4	Building Construction	Building Construction	2/19/2020	11/27/2020	5	203	
5	Paving	Paving	11/28/2020	12/14/2020	5	11	
6	Architectural Coating	Architectural Coating	12/15/2020	12/29/2020	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 95

Acres of Paving: 4.83

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 525,843; Non-Residential Outdoor: 175,281; Striped Parking Area: 12,624 (Architectural Coating – sqft)

OffRoad Equipment

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	6	8.00	158	0.38
Demolition	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

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	12	30.00	0.00	798.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	14	36.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	1,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	446.00	92.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	90.00	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 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.6764	0.0000	15.6764	2.3735	0.0000	2.3735			0.0000			0.0000
Off-Road	6.6242	66.4020	43.5064	0.0776		3.3174	3.3174		3.0837	3.0837		7,495.4098	7,495.4098	2.1159		7,548.3072
Total	**6.6242**	**66.4020**	**43.5064**	**0.0776**	**15.6764**	**3.3174**	**18.9938**	**2.3735**	**3.0837**	**5.4573**		**7,495.4098**	**7,495.4098**	**2.1159**		**7,548.3072**

3.2 Demolition - 2020

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	0.5668	19.9961	4.2288	0.0552	22.6108	0.0646	22.6754	2.4758	0.0618	2.5376		5,969.7512	5,969.7512	0.4258		5,980.3970
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	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.7149**	**20.0960**	**5.3331**	**0.0584**	**22.9461**	**0.0672**	**23.0133**	**2.5647**	**0.0642**	**2.6289**		**6,290.8607**	**6,290.8607**	**0.4350**		**6,301.7367**

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					7.0544	0.0000	7.0544	1.0681	0.0000	1.0681			0.0000			0.0000
Off-Road	6.6242	66.4020	43.5064	0.0776		3.3174	3.3174		3.0837	3.0837	0.0000	7,495.4098	7,495.4098	2.1159		7,548.3072
Total	**6.6242**	**66.4020**	**43.5064**	**0.0776**	**7.0544**	**3.3174**	**10.3718**	**1.0681**	**3.0837**	**4.1518**	**0.0000**	**7,495.4098**	**7,495.4098**	**2.1159**		**7,548.3072**

3.2 Demolition - 2020

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	0.5668	19.9961	4.2288	0.0552	22.6108	0.0646	22.6754	2.4758	0.0618	2.5376		5,969.7512	5,969.7512	0.4258		5,980.3970
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	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.7149**	**20.0960**	**5.3331**	**0.0584**	**22.9461**	**0.0672**	**23.0133**	**2.5647**	**0.0642**	**2.6289**		**6,290.8607**	**6,290.8607**	**0.4350**		**6,301.7367**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	8.1529	84.8347	43.0272	0.0760		4.3948	4.3948		4.0432	4.0432		7,370.2031	7,370.2031	2.3837		7,429.7949
Total	**8.1529**	**84.8347**	**43.0272**	**0.0760**	**36.1325**	**4.3948**	**40.5273**	**19.8614**	**4.0432**	**23.9046**		**7,370.2031**	**7,370.2031**	**2.3837**		**7,429.7949**

3.3 Site Preparation - 2020

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	0.1777	0.1199	1.3251	3.8700e-003	0.4024	3.0500e-003	0.4055	0.1067	2.8100e-003	0.1095		385.3314	385.3314	0.0111		385.6077
Total	**0.1777**	**0.1199**	**1.3251**	**3.8700e-003**	**0.4024**	**3.0500e-003**	**0.4055**	**0.1067**	**2.8100e-003**	**0.1095**		**385.3314**	**385.3314**	**0.0111**		**385.6077**

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					16.2596	0.0000	16.2596	8.9376	0.0000	8.9376			0.0000			0.0000
Off-Road	8.1529	84.8347	43.0272	0.0760		4.3948	4.3948		4.0432	4.0432	0.0000	7,370.2031	7,370.2031	2.3837		7,429.7949
Total	**8.1529**	**84.8347**	**43.0272**	**0.0760**	**16.2596**	**4.3948**	**20.6545**	**8.9376**	**4.0432**	**12.9809**	**0.0000**	**7,370.2031**	**7,370.2031**	**2.3837**		**7,429.7949**

3.3 Site Preparation - 2020

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	0.1777	0.1199	1.3251	3.8700e-003	0.4024	3.0500e-003	0.4055	0.1067	2.8100e-003	0.1095		385.3314	385.3314	0.0111		385.6077
Total	**0.1777**	**0.1199**	**1.3251**	**3.8700e-003**	**0.4024**	**3.0500e-003**	**0.4055**	**0.1067**	**2.8100e-003**	**0.1095**		**385.3314**	**385.3314**	**0.0111**		**385.6077**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.4062	0.0000	17.4062	7.2020	0.0000	7.2020			0.0000			0.0000
Off-Road	8.9002	100.3950	63.9166	0.1240		4.3478	4.3478		4.0000	4.0000		12,011.7305	12,011.7305	3.8848		12,108.8515
Total	**8.9002**	**100.3950**	**63.9166**	**0.1240**	**17.4062**	**4.3478**	**21.7540**	**7.2020**	**4.0000**	**11.2020**		**12,011.7305**	**12,011.7305**	**3.8848**		**12,108.8515**

3.4 Grading - 2020

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	0.5140	18.1339	3.8350	0.0501	20.5051	0.0586	20.5637	2.2452	0.0561	2.3013		5,413.8029	5,413.8029	0.3862		5,423.4572
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	0.1974	0.1332	1.4724	4.3000e-003	0.4471	3.3900e-003	0.4505	0.1186	3.1200e-003	0.1217		428.1460	428.1460	0.0123		428.4530
Total	**0.7114**	**18.2671**	**5.3074**	**0.0544**	**20.9522**	**0.0620**	**21.0142**	**2.3638**	**0.0592**	**2.4230**		**5,841.9489**	**5,841.9489**	**0.3985**		**5,851.9102**

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					7.8328	0.0000	7.8328	3.2409	0.0000	3.2409			0.0000			0.0000
Off-Road	8.9002	100.3950	63.9166	0.1240		4.3478	4.3478		4.0000	4.0000	0.0000	12,011.7305	12,011.7305	3.8848		12,108.8515
Total	**8.9002**	**100.3950**	**63.9166**	**0.1240**	**7.8328**	**4.3478**	**12.1806**	**3.2409**	**4.0000**	**7.2409**	**0.0000**	**12,011.7305**	**12,011.7305**	**3.8848**		**12,108.8515**

3.4 Grading - 2020

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	0.5140	18.1339	3.8350	0.0501	20.5051	0.0586	20.5637	2.2452	0.0561	2.3013		5,413.8029	5,413.8029	0.3862		5,423.4572
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	0.1974	0.1332	1.4724	4.3000e-003	0.4471	3.3900e-003	0.4505	0.1186	3.1200e-003	0.1217		428.1460	428.1460	0.0123		428.4530
Total	**0.7114**	**18.2671**	**5.3074**	**0.0544**	**20.9522**	**0.0620**	**21.0142**	**2.3638**	**0.0592**	**2.4230**		**5,841.9489**	**5,841.9489**	**0.3985**		**5,851.9102**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2397	38.3721	33.6970	0.0538		2.2341	2.2341		2.1007	2.1007		5,106.1261	5,106.1261	1.2457		5,137.2690
Total	**4.2397**	**38.3721**	**33.6970**	**0.0538**		**2.2341**	**2.2341**		**2.1007**	**2.1007**		**5,106.1261**	**5,106.1261**	**1.2457**		**5,137.2690**

3.5 Building Construction - 2020

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	0.3165	9.6440	2.5630	0.0230	19.2649	0.0485	19.3134	2.0319	0.0464	2.0784		2,451.9178	2,451.9178	0.1703		2,456.1742
Worker	2.2008	1.4852	16.4167	0.0479	4.9852	0.0378	5.0230	1.3221	0.0348	1.3569		4,773.8277	4,773.8277	0.1369		4,777.2504
Total	**2.5173**	**11.1293**	**18.9797**	**0.0709**	**24.2501**	**0.0864**	**24.3364**	**3.3540**	**0.0813**	**3.4353**		**7,225.7455**	**7,225.7455**	**0.3072**		**7,233.4246**

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	4.2397	38.3721	33.6970	0.0538		2.2341	2.2341		2.1007	2.1007	0.0000	5,106.1261	5,106.1261	1.2457		5,137.2690
Total	**4.2397**	**38.3721**	**33.6970**	**0.0538**		**2.2341**	**2.2341**		**2.1007**	**2.1007**	**0.0000**	**5,106.1261**	**5,106.1261**	**1.2457**		**5,137.2690**

3.5 Building Construction - 2020

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	0.3165	9.6440	2.5630	0.0230	19.2649	0.0485	19.3134	2.0319	0.0464	2.0784		2,451.9178	2,451.9178	0.1703		2,456.1742
Worker	2.2008	1.4852	16.4167	0.0479	4.9852	0.0378	5.0230	1.3221	0.0348	1.3569		4,773.8277	4,773.8277	0.1369		4,777.2504
Total	**2.5173**	**11.1293**	**18.9797**	**0.0709**	**24.2501**	**0.0864**	**24.3364**	**3.3540**	**0.0813**	**3.4353**		**7,225.7455**	**7,225.7455**	**0.3072**		**7,233.4246**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851		4,415.4669	4,415.4669	1.4281		4,451.1682
Paving	1.1504					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.8635**	**28.1311**	**29.3042**	**0.0456**		**1.5056**	**1.5056**		**1.3851**	**1.3851**		**4,415.4669**	**4,415.4669**	**1.4281**		**4,451.1682**

3.6 Paving - 2020

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	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.1480**	**0.0999**	**1.1043**	**3.2200e-003**	**0.3353**	**2.5400e-003**	**0.3379**	**0.0889**	**2.3400e-003**	**0.0913**		**321.1095**	**321.1095**	**9.2100e-003**		**321.3397**

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	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851	0.0000	4,415.4669	4,415.4669	1.4281		4,451.1682
Paving	1.1504					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.8635**	**28.1311**	**29.3042**	**0.0456**		**1.5056**	**1.5056**		**1.3851**	**1.3851**	**0.0000**	**4,415.4669**	**4,415.4669**	**1.4281**		**4,451.1682**

3.6 Paving - 2020

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	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.1480**	**0.0999**	**1.1043**	**3.2200e-003**	**0.3353**	**2.5400e-003**	**0.3379**	**0.0889**	**2.3400e-003**	**0.0913**		**321.1095**	**321.1095**	**9.2100e-003**		**321.3397**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	300.7475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856
Total	**301.2318**	**3.3677**	**3.6628**	**5.9400e-003**		**0.2219**	**0.2219**		**0.2219**	**0.2219**		**562.8961**	**562.8961**	**0.0436**		**563.9856**

3.7 Architectural Coating - 2020

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	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191
Total	**0.4441**	**0.2997**	**3.3128**	**9.6700e-003**	**1.0060**	**7.6300e-003**	**1.0136**	**0.2668**	**7.0300e-003**	**0.2738**		**963.3285**	**963.3285**	**0.0276**		**964.0191**

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	300.7475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856
Total	**301.2318**	**3.3677**	**3.6628**	**5.9400e-003**		**0.2219**	**0.2219**		**0.2219**	**0.2219**	**0.0000**	**562.8961**	**562.8961**	**0.0436**		**563.9856**

3.7 Architectural Coating - 2020

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	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191
Total	**0.4441**	**0.2997**	**3.3128**	**9.6700e-003**	**1.0060**	**7.6300e-003**	**1.0136**	**0.2668**	**7.0300e-003**	**0.2738**		**963.3285**	**963.3285**	**0.0276**		**964.0191**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Fast Food Restaurant with Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
High Turnover (Sit Down Restaurant)	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Hotel	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Manufacturing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Medical Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Other Asphalt Surfaces	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Quality Restaurant	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Refrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Research & Development	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Unrefrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Winter

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	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
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Manufacturing	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
Medical Office Building	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
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
Quality Restaurant	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
Refrigerated Warehouse-No Rail	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
Regional Shopping Center	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
Research & Development	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
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	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
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Manufacturing	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
Medical Office Building	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
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
Quality Restaurant	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
Refrigerated Warehouse-No Rail	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
Regional Shopping Center	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
Research & Development	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
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Unmitigated	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**		**0.0848**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**		**0.0848**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Globemaster Corridor Specific Plan Construction

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	88.53	1000sqft	4.66	88,527.00	0
Medical Office Building	6.40	1000sqft	0.34	6,400.00	0
Research & Development	11.73	1000sqft	0.62	11,733.00	0
Manufacturing	52.35	1000sqft	2.76	52,348.00	0
Refrigerated Warehouse-No Rail	23.41	1000sqft	1.24	23,406.00	0
Unrefrigerated Warehouse-No Rail	132.63	1000sqft	6.98	132,632.00	0
Other Asphalt Surfaces	4.83	Acre	4.83	210,394.80	0
Fast Food Restaurant w/o Drive Thru	1.68	1000sqft	0.09	1,676.00	0
Fast Food Restaurant with Drive Thru	0.56	1000sqft	0.02	559.00	0
High Turnover (Sit Down Restaurant)	1.85	1000sqft	0.09	1,851.00	0
Hotel	16.60	Room	1.26	8,147.00	0
Quality Restaurant	0.38	1000sqft	0.02	382.00	0
Regional Shopping Center	22.90	1000sqft	1.24	22,901.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	636.97	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Construction emissions only.

Land Use - See 1.1 Land Usage. Assumes 5% of maximum development potential in one year. Acreage adjusted based on default acreage to total 24.15 acres. Assumes 20% of the site to be asphalt surface.

Construction Phase - See 3.0 Construction Detail. Adjusted to construct 5% of GCSP buildout over 1 year.

Off-road Equipment - Architectural Coating - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Building Construction - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Demolition - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Grading - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Paving - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Site Preparation - Default CalEEMod values x2. See 3.0 Construction Detail.

Trips and VMT - See 3.0 Construction Detail. CalEEMod equations applied. Assumes even number trips.

On-road Fugitive Dust - Assumed 100% worker paved, 98% vendor paved (0.14 miles/one-way trip unpaved), and 99% hauling paved (0.20 miles/one-way trip unpaved).

Demolition - Assumes 175,181 square feet of buildings demolished ine one year of construction.

Grading - See 3.0 Construction Detail. Default CalEEMod values for acres graded. Assumes 10,000 CY of export during grading phase.

Architectural Coating - Default CalEEMod values for VOC coating (g/L) and square footage.

Vehicle Trips - Operational emissions not estimated.

Woodstoves - Operational emissions not estimated.

Consumer Products - Operational emissions not estimated.

Area Coating - Operational emissions not estimated.

Landscape Equipment - Operational emissions not estimated.

Energy Use - Operational emissions not estimated.

Water And Wastewater - Operational emissions not estimated.

Solid Waste - Operational emissions not estimated.

Construction Off-road Equipment Mitigation - Water Exposed Area, Frequency: 2 times per day.

Vehicle Emission Factors -

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Summer

Vehicle Emission Factors -
Vehicle Emission Factors -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	175281	0
tblAreaCoating	Area_Nonresidential_Interior	525843	0
tblAreaCoating	Area_Parking	12624	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	203.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	11.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	2.73	0.00
tblEnergyUse	LightingElect	6.26	0.00

tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1.91	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	2.89	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	13.61	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	4.06	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	0.09	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	8.11	0.00

tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	2.55	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	0.42	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	0.65	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	19.92	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	0.94	0.00
tblEnergyUse	T24NG	1.15	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	0.84	0.00
tblGrading	MaterialExported	0.00	10,000.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	88,530.00	88,527.00
tblLandUse	LandUseSquareFeet	11,730.00	11,733.00

tblLandUse	LandUseSquareFeet	52,350.00	52,348.00
tblLandUse	LandUseSquareFeet	23,410.00	23,406.00
tblLandUse	LandUseSquareFeet	132,630.00	132,632.00
tblLandUse	LandUseSquareFeet	1,680.00	1,676.00
tblLandUse	LandUseSquareFeet	560.00	559.00
tblLandUse	LandUseSquareFeet	1,850.00	1,851.00
tblLandUse	LandUseSquareFeet	24,103.20	8,147.00
tblLandUse	LandUseSquareFeet	380.00	382.00
tblLandUse	LandUseSquareFeet	22,900.00	22,901.00
tblLandUse	LotAcreage	2.03	4.66
tblLandUse	LotAcreage	0.15	0.34
tblLandUse	LotAcreage	0.27	0.62
tblLandUse	LotAcreage	1.20	2.76
tblLandUse	LotAcreage	0.54	1.24
tblLandUse	LotAcreage	3.04	6.98
tblLandUse	LotAcreage	0.04	0.09
tblLandUse	LotAcreage	0.01	0.02
tblLandUse	LotAcreage	0.04	0.09
tblLandUse	LotAcreage	0.55	1.26
tblLandUse	LotAcreage	0.01	0.02
tblLandUse	LotAcreage	0.53	1.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	636.97
tblSolidWaste	SolidWasteGenerationRate	19.35	0.00

tblSolidWaste	SolidWasteGenerationRate	6.45	0.00
tblSolidWaste	SolidWasteGenerationRate	82.33	0.00
tblSolidWaste	SolidWasteGenerationRate	22.02	0.00
tblSolidWaste	SolidWasteGenerationRate	9.09	0.00
tblSolidWaste	SolidWasteGenerationRate	64.91	0.00
tblSolidWaste	SolidWasteGenerationRate	69.12	0.00
tblSolidWaste	SolidWasteGenerationRate	0.35	0.00
tblSolidWaste	SolidWasteGenerationRate	22.01	0.00
tblSolidWaste	SolidWasteGenerationRate	24.04	0.00
tblSolidWaste	SolidWasteGenerationRate	0.89	0.00
tblSolidWaste	SolidWasteGenerationRate	124.67	0.00
tblTripsAndVMT	HaulingTripNumber	797.00	798.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	223.00	446.00
tblTripsAndVMT	WorkerTripNumber	45.00	90.00
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00

tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	716.00	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	509,936.64	0.00
tblWater	IndoorWaterUseRate	169,978.88	0.00
tblWater	IndoorWaterUseRate	15,734,768.71	0.00

tblWater	IndoorWaterUseRate	561,537.37	0.00
tblWater	IndoorWaterUseRate	421,088.38	0.00
tblWater	IndoorWaterUseRate	12,105,937.50	0.00
tblWater	IndoorWaterUseRate	803,075.44	0.00
tblWater	IndoorWaterUseRate	115,342.81	0.00
tblWater	IndoorWaterUseRate	5,413,562.50	0.00
tblWater	IndoorWaterUseRate	1,696,260.74	0.00
tblWater	IndoorWaterUseRate	5,767,570.00	0.00
tblWater	IndoorWaterUseRate	30,670,687.50	0.00
tblWater	OutdoorWaterUseRate	32,549.15	0.00
tblWater	OutdoorWaterUseRate	10,849.72	0.00
tblWater	OutdoorWaterUseRate	9,643,890.50	0.00
tblWater	OutdoorWaterUseRate	35,842.81	0.00
tblWater	OutdoorWaterUseRate	46,787.60	0.00
tblWater	OutdoorWaterUseRate	152,966.75	0.00
tblWater	OutdoorWaterUseRate	7,362.31	0.00
tblWater	OutdoorWaterUseRate	1,039,643.68	0.00

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					
2020	301.6390	118.4208	69.1143	0.1796	38.6225	4.4089	42.7673	19.9681	4.0583	24.0141	0.0000	17,984.8213	17,984.8213	4.2681	0.0000	18,091.5238
Maximum	**301.6390**	**118.4208**	**69.1143**	**0.1796**	**38.6225**	**4.4089**	**42.7673**	**19.9681**	**4.0583**	**24.0141**	**0.0000**	**17,984.8213**	**17,984.8213**	**4.2681**	**0.0000**	**18,091.5238**

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					
2020	301.6390	118.4208	69.1143	0.1796	30.0005	4.4089	33.3841	9.0443	4.0583	13.0904	0.0000	17,984.8213	17,984.8213	4.2681	0.0000	18,091.5238
Maximum	**301.6390**	**118.4208**	**69.1143**	**0.1796**	**30.0005**	**4.4089**	**33.3841**	**9.0443**	**4.0583**	**13.0904**	**0.0000**	**17,984.8213**	**17,984.8213**	**4.2681**	**0.0000**	**18,091.5238**

	ROG	NOx	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**	**22.32**	**0.00**	**21.94**	**54.71**	**0.00**	**45.49**	**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	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**	**0.0000**	**0.0848**

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	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**	**0.0000**	**0.0848**

	ROG	NOx	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	1/1/2020	1/15/2020	5	11	
2	Site Preparation	Site Preparation	1/16/2020	1/22/2020	5	5	
3	Grading	Grading	1/23/2020	2/18/2020	5	19	
4	Building Construction	Building Construction	2/19/2020	11/27/2020	5	203	
5	Paving	Paving	11/28/2020	12/14/2020	5	11	
6	Architectural Coating	Architectural Coating	12/15/2020	12/29/2020	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 95

Acres of Paving: 4.83

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 525,843; Non-Residential Outdoor: 175,281; Striped Parking Area: 12,624 (Architectural Coating – sqft)

OffRoad Equipment

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	6	8.00	158	0.38
Demolition	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

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	12	30.00	0.00	798.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	14	36.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	1,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	446.00	92.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	90.00	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 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.6764	0.0000	15.6764	2.3735	0.0000	2.3735			0.0000			0.0000
Off-Road	6.6242	66.4020	43.5064	0.0776		3.3174	3.3174		3.0837	3.0837		7,495.4098	7,495.4098	2.1159		7,548.3072
Total	**6.6242**	**66.4020**	**43.5064**	**0.0776**	**15.6764**	**3.3174**	**18.9938**	**2.3735**	**3.0837**	**5.4573**		**7,495.4098**	**7,495.4098**	**2.1159**		**7,548.3072**

3.2 Demolition - 2020

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	0.5510	19.7427	3.9283	0.0563	22.6108	0.0636	22.6744	2.4758	0.0609	2.5367		6,081.6974	6,081.6974	0.4081		6,091.9001
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	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.6867**	**19.8339**	**5.1548**	**0.0597**	**22.9461**	**0.0662**	**23.0123**	**2.5647**	**0.0632**	**2.6279**		**6,425.0226**	**6,425.0226**	**0.4180**		**6,435.4721**

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					7.0544	0.0000	7.0544	1.0681	0.0000	1.0681			0.0000			0.0000
Off-Road	6.6242	66.4020	43.5064	0.0776		3.3174	3.3174		3.0837	3.0837	0.0000	7,495.4098	7,495.4098	2.1159		7,548.3072
Total	**6.6242**	**66.4020**	**43.5064**	**0.0776**	**7.0544**	**3.3174**	**10.3718**	**1.0681**	**3.0837**	**4.1518**	**0.0000**	**7,495.4098**	**7,495.4098**	**2.1159**		**7,548.3072**

3.2 Demolition - 2020

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	0.5510	19.7427	3.9283	0.0563	22.6108	0.0636	22.6744	2.4758	0.0609	2.5367		6,081.6974	6,081.6974	0.4081		6,091.9001
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	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.6867**	**19.8339**	**5.1548**	**0.0597**	**22.9461**	**0.0662**	**23.0123**	**2.5647**	**0.0632**	**2.6279**		**6,425.0226**	**6,425.0226**	**0.4180**		**6,435.4721**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	8.1529	84.8347	43.0272	0.0760		4.3948	4.3948		4.0432	4.0432		7,370.2031	7,370.2031	2.3837		7,429.7949
Total	**8.1529**	**84.8347**	**43.0272**	**0.0760**	**36.1325**	**4.3948**	**40.5273**	**19.8614**	**4.0432**	**23.9046**		**7,370.2031**	**7,370.2031**	**2.3837**		**7,429.7949**

3.3 Site Preparation - 2020

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	0.1629	0.1095	1.4717	4.1400e-003	0.4024	3.0500e-003	0.4055	0.1067	2.8100e-003	0.1095		411.9903	411.9903	0.0119		412.2864
Total	**0.1629**	**0.1095**	**1.4717**	**4.1400e-003**	**0.4024**	**3.0500e-003**	**0.4055**	**0.1067**	**2.8100e-003**	**0.1095**		**411.9903**	**411.9903**	**0.0119**		**412.2864**

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					16.2596	0.0000	16.2596	8.9376	0.0000	8.9376			0.0000			0.0000
Off-Road	8.1529	84.8347	43.0272	0.0760		4.3948	4.3948		4.0432	4.0432	0.0000	7,370.2031	7,370.2031	2.3837		7,429.7949
Total	**8.1529**	**84.8347**	**43.0272**	**0.0760**	**16.2596**	**4.3948**	**20.6545**	**8.9376**	**4.0432**	**12.9809**	**0.0000**	**7,370.2031**	**7,370.2031**	**2.3837**		**7,429.7949**

3.3 Site Preparation - 2020

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	0.1629	0.1095	1.4717	4.1400e-003	0.4024	3.0500e-003	0.4055	0.1067	2.8100e-003	0.1095		411.9903	411.9903	0.0119		412.2864
Total	**0.1629**	**0.1095**	**1.4717**	**4.1400e-003**	**0.4024**	**3.0500e-003**	**0.4055**	**0.1067**	**2.8100e-003**	**0.1095**		**411.9903**	**411.9903**	**0.0119**		**412.2864**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.4062	0.0000	17.4062	7.2020	0.0000	7.2020			0.0000			0.0000
Off-Road	8.9002	100.3950	63.9166	0.1240		4.3478	4.3478		4.0000	4.0000		12,011.7305	12,011.7305	3.8848		12,108.8515
Total	**8.9002**	**100.3950**	**63.9166**	**0.1240**	**17.4062**	**4.3478**	**21.7540**	**7.2020**	**4.0000**	**11.2020**		**12,011.7305**	**12,011.7305**	**3.8848**		**12,108.8515**

3.4 Grading - 2020

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	0.4997	17.9041	3.5625	0.0510	20.5051	0.0577	20.5628	2.2452	0.0552	2.3004		5,515.3237	5,515.3237	0.3701		5,524.5763
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	0.1810	0.1217	1.6353	4.6000e-003	0.4471	3.3900e-003	0.4505	0.1186	3.1200e-003	0.1217		457.7670	457.7670	0.0132		458.0960
Total	**0.6807**	**18.0257**	**5.1977**	**0.0556**	**20.9522**	**0.0611**	**21.0133**	**2.3638**	**0.0583**	**2.4221**		**5,973.0907**	**5,973.0907**	**0.3833**		**5,982.6723**

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					7.8328	0.0000	7.8328	3.2409	0.0000	3.2409			0.0000			0.0000
Off-Road	8.9002	100.3950	63.9166	0.1240		4.3478	4.3478		4.0000	4.0000	0.0000	12,011.7305	12,011.7305	3.8848		12,108.8515
Total	**8.9002**	**100.3950**	**63.9166**	**0.1240**	**7.8328**	**4.3478**	**12.1806**	**3.2409**	**4.0000**	**7.2409**	**0.0000**	**12,011.7305**	**12,011.7305**	**3.8848**		**12,108.8515**

3.4 Grading - 2020

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	0.4997	17.9041	3.5625	0.0510	20.5051	0.0577	20.5628	2.2452	0.0552	2.3004		5,515.3237	5,515.3237	0.3701		5,524.5763
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	0.1810	0.1217	1.6353	4.6000e-003	0.4471	3.3900e-003	0.4505	0.1186	3.1200e-003	0.1217		457.7670	457.7670	0.0132		458.0960
Total	**0.6807**	**18.0257**	**5.1977**	**0.0556**	**20.9522**	**0.0611**	**21.0133**	**2.3638**	**0.0583**	**2.4221**		**5,973.0907**	**5,973.0907**	**0.3833**		**5,982.6723**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2397	38.3721	33.6970	0.0538		2.2341	2.2341		2.1007	2.1007		5,106.1261	5,106.1261	1.2457		5,137.2690
Total	**4.2397**	**38.3721**	**33.6970**	**0.0538**		**2.2341**	**2.2341**		**2.1007**	**2.1007**		**5,106.1261**	**5,106.1261**	**1.2457**		**5,137.2690**

3.5 Building Construction - 2020

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	0.3021	9.6540	2.2988	0.0237	19.2649	0.0478	19.3127	2.0319	0.0458	2.0777		2,524.9258	2,524.9258	0.1585		2,528.8890
Worker	2.0179	1.3564	18.2333	0.0512	4.9852	0.0378	5.0230	1.3221	0.0348	1.3569		5,104.1019	5,104.1019	0.1468		5,107.7705
Total	**2.3200**	**11.0105**	**20.5321**	**0.0749**	**24.2501**	**0.0856**	**24.3357**	**3.3540**	**0.0806**	**3.4346**		**7,629.0276**	**7,629.0276**	**0.3053**		**7,636.6595**

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	4.2397	38.3721	33.6970	0.0538		2.2341	2.2341		2.1007	2.1007	0.0000	5,106.1261	5,106.1261	1.2457		5,137.2690
Total	**4.2397**	**38.3721**	**33.6970**	**0.0538**		**2.2341**	**2.2341**		**2.1007**	**2.1007**	**0.0000**	**5,106.1261**	**5,106.1261**	**1.2457**		**5,137.2690**

3.5 Building Construction - 2020

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	0.3021	9.6540	2.2988	0.0237	19.2649	0.0478	19.3127	2.0319	0.0458	2.0777		2,524.9258	2,524.9258	0.1585		2,528.8890
Worker	2.0179	1.3564	18.2333	0.0512	4.9852	0.0378	5.0230	1.3221	0.0348	1.3569		5,104.1019	5,104.1019	0.1468		5,107.7705
Total	**2.3200**	**11.0105**	**20.5321**	**0.0749**	**24.2501**	**0.0856**	**24.3357**	**3.3540**	**0.0806**	**3.4346**		**7,629.0276**	**7,629.0276**	**0.3053**		**7,636.6595**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851		4,415.4669	4,415.4669	1.4281		4,451.1682
Paving	1.1504					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.8635**	**28.1311**	**29.3042**	**0.0456**		**1.5056**	**1.5056**		**1.3851**	**1.3851**		**4,415.4669**	**4,415.4669**	**1.4281**		**4,451.1682**

3.6 Paving - 2020

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	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.1357**	**0.0912**	**1.2265**	**3.4500e-003**	**0.3353**	**2.5400e-003**	**0.3379**	**0.0889**	**2.3400e-003**	**0.0913**		**343.3252**	**343.3252**	**9.8700e-003**		**343.5720**

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	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851	0.0000	4,415.4669	4,415.4669	1.4281		4,451.1682
Paving	1.1504					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.8635**	**28.1311**	**29.3042**	**0.0456**		**1.5056**	**1.5056**		**1.3851**	**1.3851**	**0.0000**	**4,415.4669**	**4,415.4669**	**1.4281**		**4,451.1682**

3.6 Paving - 2020

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	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.1357**	**0.0912**	**1.2265**	**3.4500e-003**	**0.3353**	**2.5400e-003**	**0.3379**	**0.0889**	**2.3400e-003**	**0.0913**		**343.3252**	**343.3252**	**9.8700e-003**		**343.5720**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	300.7475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856
Total	**301.2318**	**3.3677**	**3.6628**	**5.9400e-003**		**0.2219**	**0.2219**		**0.2219**	**0.2219**		**562.8961**	**562.8961**	**0.0436**		**563.9856**

3.7 Architectural Coating - 2020

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	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160
Total	**0.4072**	**0.2737**	**3.6794**	**0.0103**	**1.0060**	**7.6300e-003**	**1.0136**	**0.2668**	**7.0300e-003**	**0.2738**		**1,029.9757**	**1,029.9757**	**0.0296**		**1,030.7160**

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	300.7475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856
Total	**301.2318**	**3.3677**	**3.6628**	**5.9400e-003**		**0.2219**	**0.2219**		**0.2219**	**0.2219**	**0.0000**	**562.8961**	**562.8961**	**0.0436**		**563.9856**

3.7 Architectural Coating - 2020

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	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160
Total	**0.4072**	**0.2737**	**3.6794**	**0.0103**	**1.0060**	**7.6300e-003**	**1.0136**	**0.2668**	**7.0300e-003**	**0.2738**		**1,029.9757**	**1,029.9757**	**0.0296**		**1,030.7160**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Fast Food Restaurant with Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
High Turnover (Sit Down Restaurant)	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Hotel	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Manufacturing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Medical Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Other Asphalt Surfaces	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Quality Restaurant	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Refrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Research & Development	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Unrefrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Summer

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	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
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Manufacturing	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
Medical Office Building	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
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
Quality Restaurant	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
Refrigerated Warehouse-No Rail	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
Regional Shopping Center	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
Research & Development	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
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	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
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Manufacturing	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
Medical Office Building	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
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
Quality Restaurant	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
Refrigerated Warehouse-No Rail	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
Regional Shopping Center	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
Research & Development	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
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Unmitigated	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**		**0.0848**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3800e-003	3.3000e-004	0.0369	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0796	0.0796	2.1000e-004		0.0848
Total	**3.3800e-003**	**3.3000e-004**	**0.0369**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0796**	**0.0796**	**2.1000e-004**		**0.0848**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Globemaster Corridor Specific Plan Construction

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	88.53	1000sqft	4.66	88,527.00	0
Medical Office Building	6.40	1000sqft	0.34	6,400.00	0
Research & Development	11.73	1000sqft	0.62	11,733.00	0
Manufacturing	52.35	1000sqft	2.76	52,348.00	0
Refrigerated Warehouse-No Rail	23.41	1000sqft	1.24	23,406.00	0
Unrefrigerated Warehouse-No Rail	132.63	1000sqft	6.98	132,632.00	0
Other Asphalt Surfaces	4.83	Acre	4.83	210,394.80	0
Fast Food Restaurant w/o Drive Thru	1.68	1000sqft	0.09	1,676.00	0
Fast Food Restaurant with Drive Thru	0.56	1000sqft	0.02	559.00	0
High Turnover (Sit Down Restaurant)	1.85	1000sqft	0.09	1,851.00	0
Hotel	16.60	Room	1.26	8,147.00	0
Quality Restaurant	0.38	1000sqft	0.02	382.00	0
Regional Shopping Center	22.90	1000sqft	1.24	22,901.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	636.97	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Construction emissions only.

Land Use - See 1.1 Land Usage. Assumes 5% of maximum development potential in one year. Acreage adjusted based on default acreage to total 24.15 acres. Assumes 20% of the site to be asphalt surface.

Construction Phase - See 3.0 Construction Detail. Adjusted to construct 5% of GCSP buildout over 1 year.

Off-road Equipment - Architectural Coating - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Building Construction - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Demolition - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Grading - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Paving - Default CalEEMod values x2. See 3.0 Construction Detail.

Off-road Equipment - Site Preparation - Default CalEEMod values x2. See 3.0 Construction Detail.

Trips and VMT - See 3.0 Construction Detail. CalEEMod equations applied. Assumes even number trips.

On-road Fugitive Dust - Assumed 100% worker paved, 98% vendor paved (0.14 miles/one-way trip unpaved), and 99% hauling paved (0.20 miles/one-way trip unpaved).

Demolition - Assumes 175,181 square feet of buildings demolished ine one year of construction.

Grading - See 3.0 Construction Detail. Default CalEEMod values for acres graded. Assumes 10,000 CY of export during grading phase.

Architectural Coating - Default CalEEMod values for VOC coating (g/L) and square footage.

Vehicle Trips - Operational emissions not estimated.

Woodstoves - Operational emissions not estimated.

Consumer Products - Operational emissions not estimated.

Area Coating - Operational emissions not estimated.

Landscape Equipment - Operational emissions not estimated.

Energy Use - Operational emissions not estimated.

Water And Wastewater - Operational emissions not estimated.

Solid Waste - Operational emissions not estimated.

Construction Off-road Equipment Mitigation - Water Exposed Area, Frequency: 2 times per day.

Vehicle Emission Factors -

Vehicle Emission Factors -
Vehicle Emission Factors -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	175281	0
tblAreaCoating	Area_Nonresidential_Interior	525843	0
tblAreaCoating	Area_Parking	12624	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	203.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	11.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	7.87	0.00
tblEnergyUse	LightingElect	2.73	0.00
tblEnergyUse	LightingElect	6.26	0.00

tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1.91	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	2.89	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	28.16	0.00
tblEnergyUse	NT24E	13.61	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	4.06	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	187.78	0.00
tblEnergyUse	NT24NG	0.09	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	8.11	0.00

tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	2.55	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	8.11	0.00
tblEnergyUse	T24E	0.42	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	0.65	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	19.92	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	42.98	0.00
tblEnergyUse	T24NG	0.94	0.00
tblEnergyUse	T24NG	1.15	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	0.84	0.00
tblGrading	MaterialExported	0.00	10,000.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	88,530.00	88,527.00
tblLandUse	LandUseSquareFeet	11,730.00	11,733.00

tblLandUse	LandUseSquareFeet	52,350.00	52,348.00
tblLandUse	LandUseSquareFeet	23,410.00	23,406.00
tblLandUse	LandUseSquareFeet	132,630.00	132,632.00
tblLandUse	LandUseSquareFeet	1,680.00	1,676.00
tblLandUse	LandUseSquareFeet	560.00	559.00
tblLandUse	LandUseSquareFeet	1,850.00	1,851.00
tblLandUse	LandUseSquareFeet	24,103.20	8,147.00
tblLandUse	LandUseSquareFeet	380.00	382.00
tblLandUse	LandUseSquareFeet	22,900.00	22,901.00
tblLandUse	LotAcreage	2.03	4.66
tblLandUse	LotAcreage	0.15	0.34
tblLandUse	LotAcreage	0.27	0.62
tblLandUse	LotAcreage	1.20	2.76
tblLandUse	LotAcreage	0.54	1.24
tblLandUse	LotAcreage	3.04	6.98
tblLandUse	LotAcreage	0.04	0.09
tblLandUse	LotAcreage	0.01	0.02
tblLandUse	LotAcreage	0.04	0.09
tblLandUse	LotAcreage	0.55	1.26
tblLandUse	LotAcreage	0.01	0.02
tblLandUse	LotAcreage	0.53	1.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	636.97
tblSolidWaste	SolidWasteGenerationRate	19.35	0.00

tblSolidWaste	SolidWasteGenerationRate	6.45	0.00
tblSolidWaste	SolidWasteGenerationRate	82.33	0.00
tblSolidWaste	SolidWasteGenerationRate	22.02	0.00
tblSolidWaste	SolidWasteGenerationRate	9.09	0.00
tblSolidWaste	SolidWasteGenerationRate	64.91	0.00
tblSolidWaste	SolidWasteGenerationRate	69.12	0.00
tblSolidWaste	SolidWasteGenerationRate	0.35	0.00
tblSolidWaste	SolidWasteGenerationRate	22.01	0.00
tblSolidWaste	SolidWasteGenerationRate	24.04	0.00
tblSolidWaste	SolidWasteGenerationRate	0.89	0.00
tblSolidWaste	SolidWasteGenerationRate	124.67	0.00
tblTripsAndVMT	HaulingTripNumber	797.00	798.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	223.00	446.00
tblTripsAndVMT	WorkerTripNumber	45.00	90.00
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00

tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	716.00	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	509,936.64	0.00
tblWater	IndoorWaterUseRate	169,978.88	0.00
tblWater	IndoorWaterUseRate	15,734,768.71	0.00

tblWater	IndoorWaterUseRate	561,537.37	0.00
tblWater	IndoorWaterUseRate	421,088.38	0.00
tblWater	IndoorWaterUseRate	12,105,937.50	0.00
tblWater	IndoorWaterUseRate	803,075.44	0.00
tblWater	IndoorWaterUseRate	115,342.81	0.00
tblWater	IndoorWaterUseRate	5,413,562.50	0.00
tblWater	IndoorWaterUseRate	1,696,260.74	0.00
tblWater	IndoorWaterUseRate	5,767,570.00	0.00
tblWater	IndoorWaterUseRate	30,670,687.50	0.00
tblWater	OutdoorWaterUseRate	32,549.15	0.00
tblWater	OutdoorWaterUseRate	10,849.72	0.00
tblWater	OutdoorWaterUseRate	9,643,890.50	0.00
tblWater	OutdoorWaterUseRate	35,842.81	0.00
tblWater	OutdoorWaterUseRate	46,787.60	0.00
tblWater	OutdoorWaterUseRate	152,966.75	0.00
tblWater	OutdoorWaterUseRate	7,362.31	0.00
tblWater	OutdoorWaterUseRate	1,039,643.68	0.00

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					
2020	2.4968	7.0423	6.6233	0.0158	2.9395	0.3165	3.2560	0.4891	0.2963	0.7854	0.0000	1,419.4837	1,419.4837	0.2051	0.0000	1,424.6109
Maximum	**2.4968**	**7.0423**	**6.6233**	**0.0158**	**2.9395**	**0.3165**	**3.2560**	**0.4891**	**0.2963**	**0.7854**	**0.0000**	**1,419.4837**	**1,419.4837**	**0.2051**	**0.0000**	**1,424.6109**

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					
2020	2.4968	7.0423	6.6233	0.0158	2.7514	0.3165	3.0680	0.4170	0.2963	0.7133	0.0000	1,419.4829	1,419.4829	0.2051	0.0000	1,424.6101
Maximum	**2.4968**	**7.0423**	**6.6233**	**0.0158**	**2.7514**	**0.3165**	**3.0680**	**0.4170**	**0.2963**	**0.7133**	**0.0000**	**1,419.4829**	**1,419.4829**	**0.2051**	**0.0000**	**1,424.6101**

	ROG	NOx	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**	**6.40**	**0.00**	**5.78**	**14.75**	**0.00**	**9.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	2.8167	2.8167
2	**4-1-2020**	**6-30-2020**	1.8181	1.8181
3	**7-1-2020**	**9-30-2020**	1.8381	1.8381
		Highest	2.8167	2.8167

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	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

	ROG	NOx	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	1/1/2020	1/15/2020	5	11	
2	Site Preparation	Site Preparation	1/16/2020	1/22/2020	5	5	
3	Grading	Grading	1/23/2020	2/18/2020	5	19	
4	Building Construction	Building Construction	2/19/2020	11/27/2020	5	203	
5	Paving	Paving	11/28/2020	12/14/2020	5	11	
6	Architectural Coating	Architectural Coating	12/15/2020	12/29/2020	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 95

Acres of Paving: 4.83

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 525,843; Non-Residential Outdoor: 175,281; Striped Parking Area: 12,624 (Architectural Coating – sqft)

OffRoad Equipment

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	6	8.00	158	0.38
Demolition	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

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	12	30.00	0.00	798.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	14	36.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	1,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	446.00	92.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	90.00	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 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0862	0.0000	0.0862	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0364	0.3652	0.2393	4.3000e-004		0.0183	0.0183		0.0170	0.0170	0.0000	37.3985	37.3985	0.0106	0.0000	37.6624
Total	**0.0364**	**0.3652**	**0.2393**	**4.3000e-004**	**0.0862**	**0.0183**	**0.1045**	**0.0131**	**0.0170**	**0.0300**	**0.0000**	**37.3985**	**37.3985**	**0.0106**	**0.0000**	**37.6624**

3.2 Demolition - 2020

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	3.0700e-003	0.1120	0.0223	3.1000e-004	0.1143	3.5000e-004	0.1146	0.0126	3.4000e-004	0.0129	0.0000	30.1101	30.1101	2.0700e-003	0.0000	30.1620
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	7.4000e-004	5.6000e-004	6.2500e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6297	1.6297	5.0000e-005	0.0000	1.6308
Total	**3.8100e-003**	**0.1125**	**0.0286**	**3.3000e-004**	**0.1161**	**3.6000e-004**	**0.1165**	**0.0131**	**3.5000e-004**	**0.0134**	**0.0000**	**31.7398**	**31.7398**	**2.1200e-003**	**0.0000**	**31.7928**

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					0.0388	0.0000	0.0388	5.8700e-003	0.0000	5.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0364	0.3652	0.2393	4.3000e-004		0.0183	0.0183		0.0170	0.0170	0.0000	37.3984	37.3984	0.0106	0.0000	37.6624
Total	**0.0364**	**0.3652**	**0.2393**	**4.3000e-004**	**0.0388**	**0.0183**	**0.0571**	**5.8700e-003**	**0.0170**	**0.0228**	**0.0000**	**37.3984**	**37.3984**	**0.0106**	**0.0000**	**37.6624**

3.2 Demolition - 2020

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	3.0700e-003	0.1120	0.0223	3.1000e-004	0.1143	3.5000e-004	0.1146	0.0126	3.4000e-004	0.0129	0.0000	30.1101	30.1101	2.0700e-003	0.0000	30.1620
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	7.4000e-004	5.6000e-004	6.2500e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6297	1.6297	5.0000e-005	0.0000	1.6308
Total	**3.8100e-003**	**0.1125**	**0.0286**	**3.3000e-004**	**0.1161**	**3.6000e-004**	**0.1165**	**0.0131**	**3.5000e-004**	**0.0134**	**0.0000**	**31.7398**	**31.7398**	**2.1200e-003**	**0.0000**	**31.7928**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**	**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

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	4.0000e-004	3.1000e-004	3.4100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8889	0.8889	3.0000e-005	0.0000	0.8895
Total	**4.0000e-004**	**3.1000e-004**	**3.4100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8889**	**0.8889**	**3.0000e-005**	**0.0000**	**0.8895**

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0407**	**0.0110**	**0.0516**	**0.0223**	**0.0101**	**0.0325**	**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

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	4.0000e-004	3.1000e-004	3.4100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8889	0.8889	3.0000e-005	0.0000	0.8895
Total	**4.0000e-004**	**3.1000e-004**	**3.4100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8889**	**0.8889**	**3.0000e-005**	**0.0000**	**0.8895**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1654	0.0000	0.1654	0.0684	0.0000	0.0684	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0846	0.9538	0.6072	1.1800e-003		0.0413	0.0413		0.0380	0.0380	0.0000	103.5202	103.5202	0.0335	0.0000	104.3572
Total	**0.0846**	**0.9538**	**0.6072**	**1.1800e-003**	**0.1654**	**0.0413**	**0.2067**	**0.0684**	**0.0380**	**0.1064**	**0.0000**	**103.5202**	**103.5202**	**0.0335**	**0.0000**	**104.3572**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.8000e-003	0.1754	0.0350	4.8000e-004	0.1790	5.5000e-004	0.1796	0.0197	5.3000e-004	0.0203	0.0000	47.1650	47.1650	3.2500e-003	0.0000	47.2463
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	1.7000e-003	1.3000e-003	0.0144	4.0000e-005	4.1700e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7531	3.7531	1.1000e-004	0.0000	3.7558
Total	**6.5000e-003**	**0.1767**	**0.0494**	**5.2000e-004**	**0.1832**	**5.8000e-004**	**0.1838**	**0.0208**	**5.6000e-004**	**0.0214**	**0.0000**	**50.9181**	**50.9181**	**3.3600e-003**	**0.0000**	**51.0021**

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					0.0744	0.0000	0.0744	0.0308	0.0000	0.0308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0846	0.9538	0.6072	1.1800e-003		0.0413	0.0413		0.0380	0.0380	0.0000	103.5200	103.5200	0.0335	0.0000	104.3571
Total	**0.0846**	**0.9538**	**0.6072**	**1.1800e-003**	**0.0744**	**0.0413**	**0.1157**	**0.0308**	**0.0380**	**0.0688**	**0.0000**	**103.5200**	**103.5200**	**0.0335**	**0.0000**	**104.3571**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.8000e-003	0.1754	0.0350	4.8000e-004	0.1790	5.5000e-004	0.1796	0.0197	5.3000e-004	0.0203	0.0000	47.1650	47.1650	3.2500e-003	0.0000	47.2463
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	1.7000e-003	1.3000e-003	0.0144	4.0000e-005	4.1700e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7531	3.7531	1.1000e-004	0.0000	3.7558
Total	**6.5000e-003**	**0.1767**	**0.0494**	**5.2000e-004**	**0.1832**	**5.8000e-004**	**0.1838**	**0.0208**	**5.6000e-004**	**0.0214**	**0.0000**	**50.9181**	**50.9181**	**3.3600e-003**	**0.0000**	**51.0021**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4303	3.8948	3.4203	5.4600e-003		0.2268	0.2268		0.2132	0.2132	0.0000	470.1683	470.1683	0.1147	0.0000	473.0359
Total	**0.4303**	**3.8948**	**3.4203**	**5.4600e-003**		**0.2268**	**0.2268**		**0.2132**	**0.2132**	**0.0000**	**470.1683**	**470.1683**	**0.1147**	**0.0000**	**473.0359**

3.5 Building Construction - 2020

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	0.0313	0.9965	0.2468	2.3700e-003	1.7934	4.8900e-003	1.7983	0.1900	4.6700e-003	0.1946	0.0000	229.6699	229.6699	0.0151	0.0000	230.0468
Worker	0.2021	0.1549	1.7145	4.9500e-003	0.4967	3.8400e-003	0.5005	0.1319	3.5400e-003	0.1354	0.0000	447.1065	447.1065	0.0128	0.0000	447.4273
Total	**0.2334**	**1.1515**	**1.9613**	**7.3200e-003**	**2.2901**	**8.7300e-003**	**2.2988**	**0.3219**	**8.2100e-003**	**0.3301**	**0.0000**	**676.7764**	**676.7764**	**0.0279**	**0.0000**	**677.4741**

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	0.4303	3.8948	3.4202	5.4600e-003		0.2268	0.2268		0.2132	0.2132	0.0000	470.1677	470.1677	0.1147	0.0000	473.0353
Total	**0.4303**	**3.8948**	**3.4202**	**5.4600e-003**		**0.2268**	**0.2268**		**0.2132**	**0.2132**	**0.0000**	**470.1677**	**470.1677**	**0.1147**	**0.0000**	**473.0353**

3.5 Building Construction - 2020

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	0.0313	0.9965	0.2468	2.3700e-003	1.7934	4.8900e-003	1.7983	0.1900	4.6700e-003	0.1946	0.0000	229.6699	229.6699	0.0151	0.0000	230.0468
Worker	0.2021	0.1549	1.7145	4.9500e-003	0.4967	3.8400e-003	0.5005	0.1319	3.5400e-003	0.1354	0.0000	447.1065	447.1065	0.0128	0.0000	447.4273
Total	**0.2334**	**1.1515**	**1.9613**	**7.3200e-003**	**2.2901**	**8.7300e-003**	**2.2988**	**0.3219**	**8.2100e-003**	**0.3301**	**0.0000**	**676.7764**	**676.7764**	**0.0279**	**0.0000**	**677.4741**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0149	0.1547	0.1612	2.5000e-004		8.2800e-003	8.2800e-003		7.6200e-003	7.6200e-003	0.0000	22.0310	22.0310	7.1300e-003	0.0000	22.2092
Paving	6.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.1547**	**0.1612**	**2.5000e-004**		**8.2800e-003**	**8.2800e-003**		**7.6200e-003**	**7.6200e-003**	**0.0000**	**22.0310**	**22.0310**	**7.1300e-003**	**0.0000**	**22.2092**

3.6 Paving - 2020

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	7.4000e-004	5.6000e-004	6.2500e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6297	1.6297	5.0000e-005	0.0000	1.6308
Total	**7.4000e-004**	**5.6000e-004**	**6.2500e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.6297**	**1.6297**	**5.0000e-005**	**0.0000**	**1.6308**

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	0.0149	0.1547	0.1612	2.5000e-004		8.2800e-003	8.2800e-003		7.6200e-003	7.6200e-003	0.0000	22.0310	22.0310	7.1300e-003	0.0000	22.2092
Paving	6.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.1547**	**0.1612**	**2.5000e-004**		**8.2800e-003**	**8.2800e-003**		**7.6200e-003**	**7.6200e-003**	**0.0000**	**22.0310**	**22.0310**	**7.1300e-003**	**0.0000**	**22.2092**

3.6 Paving - 2020

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	7.4000e-004	5.6000e-004	6.2500e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6297	1.6297	5.0000e-005	0.0000	1.6308
Total	**7.4000e-004**	**5.6000e-004**	**6.2500e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.6297**	**1.6297**	**5.0000e-005**	**0.0000**	**1.6308**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0185	0.0202	3.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	2.8086	2.8086	2.2000e-004	0.0000	2.8140
Total	**1.6568**	**0.0185**	**0.0202**	**3.0000e-005**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**2.8086**	**2.8086**	**2.2000e-004**	**0.0000**	**2.8140**

3.7 Architectural Coating - 2020

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	2.2100e-003	1.6900e-003	0.0188	5.0000e-005	5.4300e-003	4.0000e-005	5.4700e-003	1.4400e-003	4.0000e-005	1.4800e-003	0.0000	4.8890	4.8890	1.4000e-004	0.0000	4.8925
Total	**2.2100e-003**	**1.6900e-003**	**0.0188**	**5.0000e-005**	**5.4300e-003**	**4.0000e-005**	**5.4700e-003**	**1.4400e-003**	**4.0000e-005**	**1.4800e-003**	**0.0000**	**4.8890**	**4.8890**	**1.4000e-004**	**0.0000**	**4.8925**

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	1.6541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0185	0.0202	3.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	2.8086	2.8086	2.2000e-004	0.0000	2.8140
Total	**1.6568**	**0.0185**	**0.0202**	**3.0000e-005**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**2.8086**	**2.8086**	**2.2000e-004**	**0.0000**	**2.8140**

3.7 Architectural Coating - 2020

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	2.2100e-003	1.6900e-003	0.0188	5.0000e-005	5.4300e-003	4.0000e-005	5.4700e-003	1.4400e-003	4.0000e-005	1.4800e-003	0.0000	4.8890	4.8890	1.4000e-004	0.0000	4.8925
Total	**2.2100e-003**	**1.6900e-003**	**0.0188**	**5.0000e-005**	**5.4300e-003**	**4.0000e-005**	**5.4700e-003**	**1.4400e-003**	**4.0000e-005**	**1.4800e-003**	**0.0000**	**4.8890**	**4.8890**	**1.4000e-004**	**0.0000**	**4.8925**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Fast Food Restaurant with Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
High Turnover (Sit Down Restaurant)	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Hotel	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Manufacturing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Medical Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Other Asphalt Surfaces	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Quality Restaurant	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Refrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Research & Development	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Unrefrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan Construction - South Coast AQMD Air District, Annual

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant w/o Drive Thru	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
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Manufacturing	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
Medical Office Building	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
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
Quality Restaurant	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
Refrigerated Warehouse-No Rail	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
Regional Shopping Center	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
Research & Development	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
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant w/o Drive Thru	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
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Manufacturing	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
Medical Office Building	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
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
Quality Restaurant	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
Refrigerated Warehouse-No Rail	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
Regional Shopping Center	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
Research & Development	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
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**0.0000**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**0.0000**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Globemaster Corridor Specific Plan Operation

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,770.54	1000sqft	93.33	1,770,539.00	0
Medical Office Building	127.99	1000sqft	6.75	127,992.00	0
Research & Development	234.65	1000sqft	12.37	234,650.00	0
Manufacturing	1,046.95	1000sqft	55.17	1,046,952.00	0
Refrigerated Warehouse-No Rail	468.11	1000sqft	24.68	468,112.00	0
Unrefrigerated Warehouse-No Rail	2,652.64	1000sqft	139.82	2,652,640.00	0
Other Asphalt Surfaces	96.60	Acre	96.60	4,207,896.00	0
Fast Food Restaurant w/o Drive Thru	33.52	1000sqft	1.77	33,524.00	0
Fast Food Restaurant with Drive Thru	11.18	1000sqft	0.60	11,177.00	0
High Turnover (Sit Down Restaurant)	37.02	1000sqft	1.95	37,015.00	0
Hotel	332.00	Room	25.42	162,943.00	0
Quality Restaurant	7.64	1000sqft	0.41	7,636.00	0
Regional Shopping Center	458.01	1000sqft	24.13	458,015.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040 consistent with traffic report. CO2 Intensity factor adjusted for 2018 SCE Power Content Label assuming 36% renewables.

Land Use - See 1.1 Land Usage. Assumes maximum development potential. Acreage adjusted based on default acreage to total 483 acres. Assumes 20% of the site to be asphalt surface.

Construction Phase - Construction emissions not estimated.

Off-road Equipment - Construction emissions not estimated.

Trips and VMT - Construction emissions not estimated.

Vehicle Trips - Operational mobile source emissions calculated separately.

Woodstoves - Default CalEEMod values. No hearths or fireplaces.

Consumer Products - Default CalEEMod values.

Area Coating - Default CalEEMod values.

Landscape Equipment - Default CalEEMod values.

Energy Use - CalEEMod default values for Non-Title 24 and Lighting. Adjustments to Title 24 values to reflect 2019 Title 24 compliance.

Water And Wastewater - Default CalEEMod values for indoor and outdoor water use. Assumed 100% aerobic.

Solid Waste - Default CalEEMod values.

Construction Off-road Equipment Mitigation - Construction not estimated.

Mobile Land Use Mitigation - No traffic mitigation assumed.

Mobile Commute Mitigation - No traffic mitigation assumed.

Area Mitigation - No area source mitigation assumed.

Energy Mitigation - No energy mitigation assumed.

Water Mitigation - No water mitigation assumed.

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

Operational Off-Road Equipment - Forklifts, electric: 375, 8 hrs/day, 365 days/year. Rough Terrain Forklifts, diesel: 125, 8 hrs/day, 365 days/year. Yard trucks, diesel (Other Industrial Equipment): 16, 8 hrs/day, 365 days/year.

Stationary Sources - Emergency Generators and Fire Pumps - Diesel Emergency Generators. 500 HP. 1 hr/day. 50 hrs/year. 1.0 LF.

Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 Final engine standards.

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	7,750.00	1.00
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	4.60	4.11
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	2.55	2.28
tblEnergyUse	T24E	2.25	2.01
tblEnergyUse	T24E	4.60	4.11
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	0.42	0.38
tblEnergyUse	T24E	4.01	3.58
tblEnergyUse	T24E	2.25	2.01
tblEnergyUse	T24E	0.65	0.58
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	10.02	9.92
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	19.92	19.72
tblEnergyUse	T24NG	13.65	13.51
tblEnergyUse	T24NG	10.02	9.92
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	0.94	0.93
tblEnergyUse	T24NG	1.15	1.14
tblEnergyUse	T24NG	13.65	13.51

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Winter

tblEnergyUse	T24NG	0.84	0.83
tblLandUse	LandUseSquareFeet	1,770,540.00	1,770,539.00
tblLandUse	LandUseSquareFeet	127,990.00	127,992.00
tblLandUse	LandUseSquareFeet	1,046,950.00	1,046,952.00
tblLandUse	LandUseSquareFeet	468,110.00	468,112.00
tblLandUse	LandUseSquareFeet	33,520.00	33,524.00
tblLandUse	LandUseSquareFeet	11,180.00	11,177.00
tblLandUse	LandUseSquareFeet	37,020.00	37,015.00
tblLandUse	LandUseSquareFeet	482,064.00	162,943.00
tblLandUse	LandUseSquareFeet	7,640.00	7,636.00
tblLandUse	LandUseSquareFeet	458,010.00	458,015.00
tblLandUse	LotAcreage	40.65	93.33
tblLandUse	LotAcreage	2.94	6.75
tblLandUse	LotAcreage	5.39	12.37
tblLandUse	LotAcreage	24.03	55.17
tblLandUse	LotAcreage	10.75	24.68
tblLandUse	LotAcreage	60.90	139.82
tblLandUse	LotAcreage	0.77	1.77
tblLandUse	LotAcreage	0.26	0.60
tblLandUse	LotAcreage	0.85	1.95
tblLandUse	LotAcreage	11.07	25.42
tblLandUse	LotAcreage	0.18	0.41
tblLandUse	LotAcreage	10.51	24.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	88.00	200.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	375.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	125.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.30
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.01
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.01
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.0900e-004
tblStationaryGeneratorsPumpsEF	TOG_EF	2.4700e-003	3.0900e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	500.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	10.00
tblTripsAndVMT	VendorTripNumber	1,839.00	0.00
tblTripsAndVMT	WorkerTripNumber	4,453.00	0.00
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	2.46	0.00

tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	716.00	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	3.82	0.00

tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**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**

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	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Energy	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	58.8902	312.2228	796.8129	1.3506		3.5057	3.5057		3.5057	3.5057		127,924.5528	127,924.5528	5.1799		128,054.0506
Stationary	1.5450	3.3069	28.6601	0.0540		0.1102	0.1102		0.1102	0.1102		5,750.0967	5,750.0967	0.8062		5,770.2508
Total	**221.0266**	**334.4867**	**842.1295**	**1.5184**	**0.0000**	**5.0587**	**5.0587**	**0.0000**	**5.0587**	**5.0587**		**156,416.6019**	**156,416.6019**	**6.4260**	**0.4169**	**156,701.4910**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Energy	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	58.8902	312.2228	796.8129	1.3506		3.5057	3.5057		3.5057	3.5057		127,924.5528	127,924.5528	5.1799		128,054.0506
Stationary	1.5450	3.3069	28.6601	0.0540		0.1102	0.1102		0.1102	0.1102		5,750.0967	5,750.0967	0.8062		5,770.2508
Total	**221.0266**	**334.4867**	**842.1295**	**1.5184**	**0.0000**	**5.0587**	**5.0587**	**0.0000**	**5.0587**	**5.0587**		**156,416.6019**	**156,416.6019**	**6.4260**	**0.4169**	**156,701.4910**

	ROG	NOx	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	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 96.6

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2020

Unmitigated Construction On-Site

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

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

3.2 Building Construction - 2020

Mitigated Construction On-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Fast Food Restaurant with Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
High Turnover (Sit Down Restaurant)	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Hotel	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Manufacturing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Medical Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Other Asphalt Surfaces	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Quality Restaurant	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Refrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Research & Development	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Unrefrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944
NaturalGas Unmitigated	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944

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					
Fast Food Restaurant w/o Drive Thru	21155	0.2281	2.0740	1.7422	0.0124		0.1576	0.1576		0.1576	0.1576		2,488.8261	2,488.8261	0.0477	0.0456	2,503.6159
Fast Food Restaurant with Drive Thru	7053.15	0.0761	0.6915	0.5809	4.1500e-003		0.0526	0.0526		0.0526	0.0526		829.7819	829.7819	0.0159	0.0152	834.7129
General Office Building	50011.7	0.5393	4.9031	4.1186	0.0294		0.3726	0.3726		0.3726	0.3726		5,883.7251	5,883.7251	0.1128	0.1079	5,918.6891
High Turnover (Sit Down Restaurant)	23358	0.2519	2.2900	1.9236	0.0137		0.1740	0.1740		0.1740	0.1740		2,747.9984	2,747.9984	0.0527	0.0504	2,764.3284
Hotel	10615.8	0.1145	1.0408	0.8743	6.2400e-003		0.0791	0.0791		0.0791	0.0791		1,248.9233	1,248.9233	0.0239	0.0229	1,256.3450
Manufacturing	51515.8	0.5556	5.0506	4.2425	0.0303		0.3838	0.3838		0.3838	0.3838		6,060.6794	6,060.6794	0.1162	0.1111	6,096.6950
Medical Office Building	3615.34	0.0390	0.3544	0.2977	2.1300e-003		0.0269	0.0269		0.0269	0.0269		425.3336	425.3336	8.1500e-003	7.8000e-003	427.8612
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
Quality Restaurant	4818.63	0.0520	0.4724	0.3968	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.8976	566.8976	0.0109	0.0104	570.2664
Refrigerated Warehouse-No Rail	1308.15	0.0141	0.1283	0.1077	7.7000e-004		9.7500e-003	9.7500e-003		9.7500e-003	9.7500e-003		153.8998	153.8998	2.9500e-003	2.8200e-003	154.8144
Regional Shopping Center	2045.38	0.0221	0.2005	0.1684	1.2000e-003		0.0152	0.0152		0.0152	0.0152		240.6332	240.6332	4.6100e-003	4.4100e-003	242.0632
Research & Development	11546.1	0.1245	1.1320	0.9509	6.7900e-003		0.0860	0.0860		0.0860	0.0860		1,358.3607	1,358.3607	0.0260	0.0249	1,366.4327
Unrefrigerated Warehouse-No Rail	6250.06	0.0674	0.6128	0.5147	3.6800e-003		0.0466	0.0466		0.0466	0.0466		735.3007	735.3007	0.0141	0.0135	739.6702
Total		**2.0845**	**18.9503**	**15.9183**	**0.1137**		**1.4402**	**1.4402**		**1.4402**	**1.4402**		**22,740.3598**	**22,740.3598**	**0.4359**	**0.4169**	**22,875.4944**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	21.155	0.2281	2.0740	1.7422	0.0124		0.1576	0.1576		0.1576	0.1576		2,488.8261	2,488.8261	0.0477	0.0456	2,503.6159
Fast Food Restaurant with Drive Thru	7.05315	0.0761	0.6915	0.5809	4.1500e-003		0.0526	0.0526		0.0526	0.0526		829.7819	829.7819	0.0159	0.0152	834.7129
General Office Building	50.0117	0.5393	4.9031	4.1186	0.0294		0.3726	0.3726		0.3726	0.3726		5,883.7251	5,883.7251	0.1128	0.1079	5,918.6891
High Turnover (Sit Down Restaurant)	23.358	0.2519	2.2900	1.9236	0.0137		0.1740	0.1740		0.1740	0.1740		2,747.9984	2,747.9984	0.0527	0.0504	2,764.3284
Hotel	10.6158	0.1145	1.0408	0.8743	6.2400e-003		0.0791	0.0791		0.0791	0.0791		1,248.9233	1,248.9233	0.0239	0.0229	1,256.3450
Manufacturing	51.5158	0.5556	5.0506	4.2425	0.0303		0.3838	0.3838		0.3838	0.3838		6,060.6794	6,060.6794	0.1162	0.1111	6,096.6950
Medical Office Building	3.61534	0.0390	0.3544	0.2977	2.1300e-003		0.0269	0.0269		0.0269	0.0269		425.3336	425.3336	8.1500e-003	7.8000e-003	427.8612
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
Quality Restaurant	4.81863	0.0520	0.4724	0.3968	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.8976	566.8976	0.0109	0.0104	570.2664
Refrigerated Warehouse-No Rail	1.30815	0.0141	0.1283	0.1077	7.7000e-004		9.7500e-003	9.7500e-003		9.7500e-003	9.7500e-003		153.8998	153.8998	2.9500e-003	2.8200e-003	154.8144
Regional Shopping Center	2.04538	0.0221	0.2005	0.1684	1.2000e-003		0.0152	0.0152		0.0152	0.0152		240.6332	240.6332	4.6100e-003	4.4100e-003	242.0632
Research & Development	11.5461	0.1245	1.1320	0.9509	6.7900e-003		0.0860	0.0860		0.0860	0.0860		1,358.3607	1,358.3607	0.0260	0.0249	1,366.4327
Unrefrigerated Warehouse-No Rail	6.25006	0.0674	0.6128	0.5147	3.6800e-003		0.0466	0.0466		0.0466	0.0466		735.3007	735.3007	0.0141	0.0135	739.6702
Total		**2.0845**	**18.9503**	**15.9183**	**0.1137**		**1.4402**	**1.4402**		**1.4402**	**1.4402**		**22,740.3598**	**22,740.3598**	**0.4359**	**0.4169**	**22,875.4944**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Unmitigated	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951

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	18.1271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	140.3121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0676	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Total	**158.5068**	**6.6300e-003**	**0.7382**	**6.0000e-005**		**2.6200e-003**	**2.6200e-003**		**2.6200e-003**	**2.6200e-003**		**1.5926**	**1.5926**	**4.1000e-003**		**1.6951**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	18.1271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	140.3121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0676	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Total	**158.5068**	**6.6300e-003**	**0.7382**	**6.0000e-005**		**2.6200e-003**	**2.6200e-003**		**2.6200e-003**	**2.6200e-003**		**1.5926**	**1.5926**	**4.1000e-003**		**1.6951**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	375	8.00	365	89	0.20	Electrical
Other General Industrial Equipment	16	8.00	365	200	0.34	Diesel
Rough Terrain Forklifts	125	8.00	365	100	0.40	Diesel

UnMitigated/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
Equipment Type	lb/day										lb/day					
Forklifts	32.4926	175.5307	446.6557	0.7064		1.8836	1.8836		1.8836	1.8836		66,904.0500	66,904.0500	2.8254		66,974.6861
Other General Industrial Equipment	3.6459	5.7375	21.9331	0.1151		0.2111	0.2111		0.2111	0.2111		10,905.1096	10,905.1096	0.3262		10,913.2649
Rough Terrain Forklifts	22.7517	130.9546	328.2242	0.5291		1.4110	1.4110		1.4110	1.4110		50,115.3933	50,115.3933	2.0283		50,166.0996
Total	**58.8902**	**312.2228**	**796.8130**	**1.3506**		**3.5057**	**3.5057**		**3.5057**	**3.5057**		**127,924.5528**	**127,924.5528**	**5.1799**		**128,054.0506**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	10	1	50	500	1	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	1.5450	3.3069	28.6601	0.0540		0.1102	0.1102		0.1102	0.1102		5,750.0967	5,750.0967	0.8062		5,770.2508
Total	**1.5450**	**3.3069**	**28.6601**	**0.0540**		**0.1102**	**0.1102**		**0.1102**	**0.1102**		**5,750.0967**	**5,750.0967**	**0.8062**		**5,770.2508**

11.0 Vegetation

Globemaster Corridor Specific Plan Operation

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,770.54	1000sqft	93.33	1,770,539.00	0
Medical Office Building	127.99	1000sqft	6.75	127,992.00	0
Research & Development	234.65	1000sqft	12.37	234,650.00	0
Manufacturing	1,046.95	1000sqft	55.17	1,046,952.00	0
Refrigerated Warehouse-No Rail	468.11	1000sqft	24.68	468,112.00	0
Unrefrigerated Warehouse-No Rail	2,652.64	1000sqft	139.82	2,652,640.00	0
Other Asphalt Surfaces	96.60	Acre	96.60	4,207,896.00	0
Fast Food Restaurant w/o Drive Thru	33.52	1000sqft	1.77	33,524.00	0
Fast Food Restaurant with Drive Thru	11.18	1000sqft	0.60	11,177.00	0
High Turnover (Sit Down Restaurant)	37.02	1000sqft	1.95	37,015.00	0
Hotel	332.00	Room	25.42	162,943.00	0
Quality Restaurant	7.64	1000sqft	0.41	7,636.00	0
Regional Shopping Center	458.01	1000sqft	24.13	458,015.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040 consistent with traffic report. CO2 Intensity factor adjusted for 2018 SCE Power Content Label assuming 36% renewables.

Land Use - See 1.1 Land Usage. Assumes maximum development potential. Acreage adjusted based on default acreage to total 483 acres. Assumes 20% of the site to be asphalt surface.

Construction Phase - Construction emissions not estimated.

Off-road Equipment - Construction emissions not estimated.

Trips and VMT - Construction emissions not estimated.

Vehicle Trips - Operational mobile source emissions calculated separately.

Woodstoves - Default CalEEMod values. No hearths or fireplaces.

Consumer Products - Default CalEEMod values.

Area Coating - Default CalEEMod values.

Landscape Equipment - Default CalEEMod values.

Energy Use - CalEEMod default values for Non-Title 24 and Lighting. Adjustments to Title 24 values to reflect 2019 Title 24 compliance.

Water And Wastewater - Default CalEEMod values for indoor and outdoor water use. Assumed 100% aerobic.

Solid Waste - Default CalEEMod values.

Construction Off-road Equipment Mitigation - Construction not estimated.

Mobile Land Use Mitigation - No traffic mitigation assumed.

Mobile Commute Mitigation - No traffic mitigation assumed.

Area Mitigation - No area source mitigation assumed.

Energy Mitigation - No energy mitigation assumed.

Water Mitigation - No water mitigation assumed.

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

Operational Off-Road Equipment - Forklifts, electric: 375, 8 hrs/day, 365 days/year. Rough Terrain Forklifts, diesel: 125, 8 hrs/day, 365 days/year. Yard trucks, diesel (Other Industrial Equipment): 16, 8 hrs/day, 365 days/year.

Stationary Sources - Emergency Generators and Fire Pumps - Diesel Emergency Generators. 500 HP. 1 hr/day. 50 hrs/year. 1.0 LF.

Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 Final engine standards.

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	7,750.00	1.00
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	4.60	4.11
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	2.55	2.28
tblEnergyUse	T24E	2.25	2.01
tblEnergyUse	T24E	4.60	4.11
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	0.42	0.38
tblEnergyUse	T24E	4.01	3.58
tblEnergyUse	T24E	2.25	2.01
tblEnergyUse	T24E	0.65	0.58
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	10.02	9.92
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	19.92	19.72
tblEnergyUse	T24NG	13.65	13.51
tblEnergyUse	T24NG	10.02	9.92
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	0.94	0.93
tblEnergyUse	T24NG	1.15	1.14
tblEnergyUse	T24NG	13.65	13.51

tblEnergyUse	T24NG	0.84	0.83
tblLandUse	LandUseSquareFeet	1,770,540.00	1,770,539.00
tblLandUse	LandUseSquareFeet	127,990.00	127,992.00
tblLandUse	LandUseSquareFeet	1,046,950.00	1,046,952.00
tblLandUse	LandUseSquareFeet	468,110.00	468,112.00
tblLandUse	LandUseSquareFeet	33,520.00	33,524.00
tblLandUse	LandUseSquareFeet	11,180.00	11,177.00
tblLandUse	LandUseSquareFeet	37,020.00	37,015.00
tblLandUse	LandUseSquareFeet	482,064.00	162,943.00
tblLandUse	LandUseSquareFeet	7,640.00	7,636.00
tblLandUse	LandUseSquareFeet	458,010.00	458,015.00
tblLandUse	LotAcreage	40.65	93.33
tblLandUse	LotAcreage	2.94	6.75
tblLandUse	LotAcreage	5.39	12.37
tblLandUse	LotAcreage	24.03	55.17
tblLandUse	LotAcreage	10.75	24.68
tblLandUse	LotAcreage	60.90	139.82
tblLandUse	LotAcreage	0.77	1.77
tblLandUse	LotAcreage	0.26	0.60
tblLandUse	LotAcreage	0.85	1.95
tblLandUse	LotAcreage	11.07	25.42
tblLandUse	LotAcreage	0.18	0.41
tblLandUse	LotAcreage	10.51	24.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	88.00	200.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	375.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	125.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.30
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.01
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.01
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.0900e-004
tblStationaryGeneratorsPumpsEF	TOG_EF	2.4700e-003	3.0900e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	500.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	10.00
tblTripsAndVMT	VendorTripNumber	1,839.00	0.00
tblTripsAndVMT	WorkerTripNumber	4,453.00	0.00
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	2.46	0.00

tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	716.00	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	3.82	0.00

tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**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**

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	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Energy	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	58.8902	312.2228	796.8129	1.3506		3.5057	3.5057		3.5057	3.5057		127,924.5528	127,924.5528	5.1799		128,054.0506
Stationary	1.5450	3.3069	28.6601	0.0540		0.1102	0.1102		0.1102	0.1102		5,750.0967	5,750.0967	0.8062		5,770.2508
Total	**221.0266**	**334.4867**	**842.1295**	**1.5184**	**0.0000**	**5.0587**	**5.0587**	**0.0000**	**5.0587**	**5.0587**		**156,416.6019**	**156,416.6019**	**6.4260**	**0.4169**	**156,701.4910**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Energy	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	58.8902	312.2228	796.8129	1.3506		3.5057	3.5057		3.5057	3.5057		127,924.5528	127,924.5528	5.1799		128,054.0506
Stationary	1.5450	3.3069	28.6601	0.0540		0.1102	0.1102		0.1102	0.1102		5,750.0967	5,750.0967	0.8062		5,770.2508
Total	**221.0266**	**334.4867**	**842.1295**	**1.5184**	**0.0000**	**5.0587**	**5.0587**	**0.0000**	**5.0587**	**5.0587**		**156,416.6019**	**156,416.6019**	**6.4260**	**0.4169**	**156,701.4910**

	ROG	NOx	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	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 96.6

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2020

Unmitigated Construction On-Site

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

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

3.2 Building Construction - 2020

Mitigated Construction On-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Fast Food Restaurant with Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
High Turnover (Sit Down Restaurant)	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Hotel	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Manufacturing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Medical Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Other Asphalt Surfaces	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Quality Restaurant	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Refrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Research & Development	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Unrefrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944
NaturalGas Unmitigated	2.0845	18.9503	15.9183	0.1137		1.4402	1.4402		1.4402	1.4402		22,740.3598	22,740.3598	0.4359	0.4169	22,875.4944

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					
Fast Food Restaurant w/o Drive Thru	21155	0.2281	2.0740	1.7422	0.0124		0.1576	0.1576		0.1576	0.1576		2,488.8261	2,488.8261	0.0477	0.0456	2,503.6159
Fast Food Restaurant with Drive Thru	7053.15	0.0761	0.6915	0.5809	4.1500e-003		0.0526	0.0526		0.0526	0.0526		829.7819	829.7819	0.0159	0.0152	834.7129
General Office Building	50011.7	0.5393	4.9031	4.1186	0.0294		0.3726	0.3726		0.3726	0.3726		5,883.7251	5,883.7251	0.1128	0.1079	5,918.6891
High Turnover (Sit Down Restaurant)	23358	0.2519	2.2900	1.9236	0.0137		0.1740	0.1740		0.1740	0.1740		2,747.9984	2,747.9984	0.0527	0.0504	2,764.3284
Hotel	10615.8	0.1145	1.0408	0.8743	6.2400e-003		0.0791	0.0791		0.0791	0.0791		1,248.9233	1,248.9233	0.0239	0.0229	1,256.3450
Manufacturing	51515.8	0.5556	5.0506	4.2425	0.0303		0.3838	0.3838		0.3838	0.3838		6,060.6794	6,060.6794	0.1162	0.1111	6,096.6950
Medical Office Building	3615.34	0.0390	0.3544	0.2977	2.1300e-003		0.0269	0.0269		0.0269	0.0269		425.3336	425.3336	8.1500e-003	7.8000e-003	427.8612
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
Quality Restaurant	4818.63	0.0520	0.4724	0.3968	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.8976	566.8976	0.0109	0.0104	570.2664
Refrigerated Warehouse-No Rail	1308.15	0.0141	0.1283	0.1077	7.7000e-004		9.7500e-003	9.7500e-003		9.7500e-003	9.7500e-003		153.8998	153.8998	2.9500e-003	2.8200e-003	154.8144
Regional Shopping Center	2045.38	0.0221	0.2005	0.1684	1.2000e-003		0.0152	0.0152		0.0152	0.0152		240.6332	240.6332	4.6100e-003	4.4100e-003	242.0632
Research & Development	11546.1	0.1245	1.1320	0.9509	6.7900e-003		0.0860	0.0860		0.0860	0.0860		1,358.3607	1,358.3607	0.0260	0.0249	1,366.4327
Unrefrigerated Warehouse-No Rail	6250.06	0.0674	0.6128	0.5147	3.6800e-003		0.0466	0.0466		0.0466	0.0466		735.3007	735.3007	0.0141	0.0135	739.6702
Total		**2.0845**	**18.9503**	**15.9183**	**0.1137**		**1.4402**	**1.4402**		**1.4402**	**1.4402**		**22,740.3598**	**22,740.3598**	**0.4359**	**0.4169**	**22,875.4944**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant w/o Drive Thru	21.155	0.2281	2.0740	1.7422	0.0124		0.1576	0.1576		0.1576	0.1576		2,488.8261	2,488.8261	0.0477	0.0456	2,503.6159
Fast Food Restaurant with Drive Thru	7.05315	0.0761	0.6915	0.5809	4.1500e-003		0.0526	0.0526		0.0526	0.0526		829.7819	829.7819	0.0159	0.0152	834.7129
General Office Building	50.0117	0.5393	4.9031	4.1186	0.0294		0.3726	0.3726		0.3726	0.3726		5,883.7251	5,883.7251	0.1128	0.1079	5,918.6891
High Turnover (Sit Down Restaurant)	23.358	0.2519	2.2900	1.9236	0.0137		0.1740	0.1740		0.1740	0.1740		2,747.9984	2,747.9984	0.0527	0.0504	2,764.3284
Hotel	10.6158	0.1145	1.0408	0.8743	6.2400e-003		0.0791	0.0791		0.0791	0.0791		1,248.9233	1,248.9233	0.0239	0.0229	1,256.3450
Manufacturing	51.5158	0.5556	5.0506	4.2425	0.0303		0.3838	0.3838		0.3838	0.3838		6,060.6794	6,060.6794	0.1162	0.1111	6,096.6950
Medical Office Building	3.61534	0.0390	0.3544	0.2977	2.1300e-003		0.0269	0.0269		0.0269	0.0269		425.3336	425.3336	8.1500e-003	7.8000e-003	427.8612
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
Quality Restaurant	4.81863	0.0520	0.4724	0.3968	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.8976	566.8976	0.0109	0.0104	570.2664
Refrigerated Warehouse-No Rail	1.30815	0.0141	0.1283	0.1077	7.7000e-004		9.7500e-003	9.7500e-003		9.7500e-003	9.7500e-003		153.8998	153.8998	2.9500e-003	2.8200e-003	154.8144
Regional Shopping Center	2.04538	0.0221	0.2005	0.1684	1.2000e-003		0.0152	0.0152		0.0152	0.0152		240.6332	240.6332	4.6100e-003	4.4100e-003	242.0632
Research & Development	11.5461	0.1245	1.1320	0.9509	6.7900e-003		0.0860	0.0860		0.0860	0.0860		1,358.3607	1,358.3607	0.0260	0.0249	1,366.4327
Unrefrigerated Warehouse-No Rail	6.25006	0.0674	0.6128	0.5147	3.6800e-003		0.0466	0.0466		0.0466	0.0466		735.3007	735.3007	0.0141	0.0135	739.6702
Total		**2.0845**	**18.9503**	**15.9183**	**0.1137**		**1.4402**	**1.4402**		**1.4402**	**1.4402**		**22,740.3598**	**22,740.3598**	**0.4359**	**0.4169**	**22,875.4944**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Unmitigated	158.5068	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951

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	18.1271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	140.3121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0676	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Total	**158.5068**	**6.6300e-003**	**0.7382**	**6.0000e-005**		**2.6200e-003**	**2.6200e-003**		**2.6200e-003**	**2.6200e-003**		**1.5926**	**1.5926**	**4.1000e-003**		**1.6951**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	18.1271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	140.3121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0676	6.6300e-003	0.7382	6.0000e-005		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003		1.5926	1.5926	4.1000e-003		1.6951
Total	**158.5068**	**6.6300e-003**	**0.7382**	**6.0000e-005**		**2.6200e-003**	**2.6200e-003**		**2.6200e-003**	**2.6200e-003**		**1.5926**	**1.5926**	**4.1000e-003**		**1.6951**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	375	8.00	365	89	0.20	Electrical
Other General Industrial Equipment	16	8.00	365	200	0.34	Diesel
Rough Terrain Forklifts	125	8.00	365	100	0.40	Diesel

UnMitigated/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
Equipment Type	lb/day										lb/day					
Forklifts	32.4926	175.5307	446.6557	0.7064		1.8836	1.8836		1.8836	1.8836		66,904.0500	66,904.0500	2.8254		66,974.6861
Other General Industrial Equipment	3.6459	5.7375	21.9331	0.1151		0.2111	0.2111		0.2111	0.2111		10,905.1096	10,905.1096	0.3262		10,913.2649
Rough Terrain Forklifts	22.7517	130.9546	328.2242	0.5291		1.4110	1.4110		1.4110	1.4110		50,115.3933	50,115.3933	2.0283		50,166.0996
Total	**58.8902**	**312.2228**	**796.8130**	**1.3506**		**3.5057**	**3.5057**		**3.5057**	**3.5057**		**127,924.5528**	**127,924.5528**	**5.1799**		**128,054.0506**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	10	1	50	500	1	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	1.5450	3.3069	28.6601	0.0540		0.1102	0.1102		0.1102	0.1102		5,750.0967	5,750.0967	0.8062		5,770.2508
Total	**1.5450**	**3.3069**	**28.6601**	**0.0540**		**0.1102**	**0.1102**		**0.1102**	**0.1102**		**5,750.0967**	**5,750.0967**	**0.8062**		**5,770.2508**

11.0 Vegetation

Globemaster Corridor Specific Plan Operation

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,770.54	1000sqft	93.33	1,770,539.00	0
Medical Office Building	127.99	1000sqft	6.75	127,992.00	0
Research & Development	234.65	1000sqft	12.37	234,650.00	0
Manufacturing	1,046.95	1000sqft	55.17	1,046,952.00	0
Refrigerated Warehouse-No Rail	468.11	1000sqft	24.68	468,112.00	0
Unrefrigerated Warehouse-No Rail	2,652.64	1000sqft	139.82	2,652,640.00	0
Other Asphalt Surfaces	96.60	Acre	96.60	4,207,896.00	0
Fast Food Restaurant w/o Drive Thru	33.52	1000sqft	1.77	33,524.00	0
Fast Food Restaurant with Drive Thru	11.18	1000sqft	0.60	11,177.00	0
High Turnover (Sit Down Restaurant)	37.02	1000sqft	1.95	37,015.00	0
Hotel	332.00	Room	25.42	162,943.00	0
Quality Restaurant	7.64	1000sqft	0.41	7,636.00	0
Regional Shopping Center	458.01	1000sqft	24.13	458,015.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	566.2	**CH4 Intensity (lb/MWhr)**	0.023	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040 consistent with traffic report. CO2 Intensity factor adjusted for 2018 SCE Power Content Label assuming 36% renewables.

Land Use - See 1.1 Land Usage. Assumes maximum development potential. Acreage adjusted based on default acreage to total 483 acres. Assumes 20% of the site to be asphalt surface.

Construction Phase - Construction emissions not estimated.

Off-road Equipment - Construction emissions not estimated.

Trips and VMT - Construction emissions not estimated.

Vehicle Trips - Operational mobile source emissions calculated separately.

Woodstoves - Default CalEEMod values. No hearths or fireplaces.

Consumer Products - Default CalEEMod values.

Area Coating - Default CalEEMod values.

Landscape Equipment - Default CalEEMod values.

Energy Use - CalEEMod default values for Non-Title 24 and Lighting. Adjustments to Title 24 values to reflect 2019 Title 24 compliance.

Water And Wastewater - Default CalEEMod values for indoor and outdoor water use. Assumed 100% aerobic.

Solid Waste - Default CalEEMod values.

Construction Off-road Equipment Mitigation - Construction not estimated.

Mobile Land Use Mitigation - No traffic mitigation assumed.

Mobile Commute Mitigation - No traffic mitigation assumed.

Area Mitigation - No area source mitigation assumed.

Energy Mitigation - No energy mitigation assumed.

Water Mitigation - No water mitigation assumed.

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

Operational Off-Road Equipment - Forklifts, electric: 375, 8 hrs/day, 365 days/year. Rough Terrain Forklifts, diesel: 125, 8 hrs/day, 365 days/year. Yard trucks, diesel (Other Industrial Equipment): 16, 8 hrs/day, 365 days/year.

Stationary Sources - Emergency Generators and Fire Pumps - Diesel Emergency Generators. 500 HP. 1 hr/day. 50 hrs/year. 1.0 LF.

Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 Final engine standards.

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	7,750.00	1.00
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	4.60	4.11
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	2.55	2.28
tblEnergyUse	T24E	2.25	2.01
tblEnergyUse	T24E	4.60	4.11
tblEnergyUse	T24E	8.11	7.24
tblEnergyUse	T24E	0.42	0.38
tblEnergyUse	T24E	4.01	3.58
tblEnergyUse	T24E	2.25	2.01
tblEnergyUse	T24E	0.65	0.58
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	10.02	9.92
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	19.92	19.72
tblEnergyUse	T24NG	13.65	13.51
tblEnergyUse	T24NG	10.02	9.92
tblEnergyUse	T24NG	42.98	42.55
tblEnergyUse	T24NG	0.94	0.93
tblEnergyUse	T24NG	1.15	1.14
tblEnergyUse	T24NG	13.65	13.51

tblEnergyUse	T24NG	0.84	0.83
tblLandUse	LandUseSquareFeet	1,770,540.00	1,770,539.00
tblLandUse	LandUseSquareFeet	127,990.00	127,992.00
tblLandUse	LandUseSquareFeet	1,046,950.00	1,046,952.00
tblLandUse	LandUseSquareFeet	468,110.00	468,112.00
tblLandUse	LandUseSquareFeet	33,520.00	33,524.00
tblLandUse	LandUseSquareFeet	11,180.00	11,177.00
tblLandUse	LandUseSquareFeet	37,020.00	37,015.00
tblLandUse	LandUseSquareFeet	482,064.00	162,943.00
tblLandUse	LandUseSquareFeet	7,640.00	7,636.00
tblLandUse	LandUseSquareFeet	458,010.00	458,015.00
tblLandUse	LotAcreage	40.65	93.33
tblLandUse	LotAcreage	2.94	6.75
tblLandUse	LotAcreage	5.39	12.37
tblLandUse	LotAcreage	24.03	55.17
tblLandUse	LotAcreage	10.75	24.68
tblLandUse	LotAcreage	60.90	139.82
tblLandUse	LotAcreage	0.77	1.77
tblLandUse	LotAcreage	0.26	0.60
tblLandUse	LotAcreage	0.85	1.95
tblLandUse	LotAcreage	11.07	25.42
tblLandUse	LotAcreage	0.18	0.41
tblLandUse	LotAcreage	10.51	24.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	88.00	200.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	375.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	125.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	702.44	566.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.30
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.01
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.01
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	3.0900e-004
tblStationaryGeneratorsPumpsEF	TOG_EF	2.4700e-003	3.0900e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	500.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	10.00
tblTripsAndVMT	VendorTripNumber	1,839.00	0.00
tblTripsAndVMT	WorkerTripNumber	4,453.00	0.00
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	2.46	0.00

tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	716.00	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	3.82	0.00

tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**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**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	28.9236	8.3000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1806	0.1806	4.7000e-004	0.0000	0.1922
Energy	0.3804	3.4584	2.9051	0.0208		0.2628	0.2628		0.2628	0.2628	0.0000	20,889.9227	20,889.9227	0.7678	0.2203	20,974.7527
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	10.7475	56.9807	145.4184	0.2465		0.6398	0.6398		0.6398	0.6398	0.0000	21,179.3444	21,179.3444	0.8576	0.0000	21,200.7842
Stationary	0.0386	0.0827	0.7165	1.3500e-003		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	130.4100	130.4100	0.0183	0.0000	130.8671
Waste						0.0000	0.0000		0.0000	0.0000	1,807.3341	0.0000	1,807.3341	106.8104	0.0000	4,477.5937
Water						0.0000	0.0000		0.0000	0.0000	523.4045	5,573.1702	6,096.5747	2.0279	1.1875	6,501.1320
Total	**40.0901**	**60.5226**	**149.1322**	**0.2686**	**0.0000**	**0.9057**	**0.9057**	**0.0000**	**0.9057**	**0.9057**	**2,330.7386**	**47,773.0278**	**50,103.7665**	**110.4824**	**1.4077**	**53,285.3219**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	28.9236	8.3000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1806	0.1806	4.7000e-004	0.0000	0.1922
Energy	0.3804	3.4584	2.9051	0.0208		0.2628	0.2628		0.2628	0.2628	0.0000	20,889.9227	20,889.9227	0.7678	0.2203	20,974.7527
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	10.7475	56.9807	145.4184	0.2465		0.6398	0.6398		0.6398	0.6398	0.0000	21,179.3444	21,179.3444	0.8576	0.0000	21,200.7842
Stationary	0.0386	0.0827	0.7165	1.3500e-003		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	130.4100	130.4100	0.0183	0.0000	130.8671
Waste						0.0000	0.0000		0.0000	0.0000	903.6671	0.0000	903.6671	53.4052	0.0000	2,238.7969
Water						0.0000	0.0000		0.0000	0.0000	523.4045	5,573.1702	6,096.5747	2.0279	1.1875	6,501.1320
Total	**40.0901**	**60.5226**	**149.1322**	**0.2686**	**0.0000**	**0.9057**	**0.9057**	**0.0000**	**0.9057**	**0.9057**	**1,427.0716**	**47,773.0278**	**49,200.0994**	**57.0772**	**1.4077**	**51,046.5250**

	ROG	NOx	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**	**38.77**	**0.00**	**1.80**	**48.34**	**0.00**	**4.20**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 96.6

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2020

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Building Construction - 2020

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Fast Food Restaurant with Drive Thru	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
High Turnover (Sit Down Restaurant)	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Hotel	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Manufacturing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Medical Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Other Asphalt Surfaces	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Quality Restaurant	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Refrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Research & Development	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Unrefrigerated Warehouse-No Rail	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan Operation - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17,125.0011	17,125.0011	0.6957	0.1512	17,187.4580
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17,125.0011	17,125.0011	0.6957	0.1512	17,187.4580
NaturalGas Mitigated	0.3804	3.4584	2.9051	0.0208		0.2628	0.2628		0.2628	0.2628	0.0000	3,764.9216	3,764.9216	0.0722	0.0690	3,787.2947
NaturalGas Unmitigated	0.3804	3.4584	2.9051	0.0208		0.2628	0.2628		0.2628	0.2628	0.0000	3,764.9216	3,764.9216	0.0722	0.0690	3,787.2947

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					
Fast Food Restaurant w/o Drive Thru	7.72158e+006	0.0416	0.3785	0.3180	2.2700e-003		0.0288	0.0288		0.0288	0.0288	0.0000	412.0531	412.0531	7.9000e-003	7.5500e-003	414.5017
Fast Food Restaurant with Drive Thru	2.5744e+006	0.0139	0.1262	0.1060	7.6000e-004		9.5900e-003	9.5900e-003		9.5900e-003	9.5900e-003	0.0000	137.3797	137.3797	2.6300e-003	2.5200e-003	138.1961
General Office Building	1.82543e+007	0.0984	0.8948	0.7517	5.3700e-003		0.0680	0.0680		0.0680	0.0680	0.0000	974.1167	974.1167	0.0187	0.0179	979.9054
High Turnover (Sit Down Restaurant)	8.52566e+006	0.0460	0.4179	0.3511	2.5100e-003		0.0318	0.0318		0.0318	0.0318	0.0000	454.9620	454.9620	8.7200e-003	8.3400e-003	457.6656
Hotel	3.87478e+006	0.0209	0.1899	0.1596	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.7733	206.7733	3.9600e-003	3.7900e-003	208.0020
Manufacturing	1.88033e+007	0.1014	0.9217	0.7743	5.5300e-003		0.0701	0.0701		0.0701	0.0701	0.0000	1,003.4135	1,003.4135	0.0192	0.0184	1,009.3762
Medical Office Building	1.3196e+006	7.1200e-003	0.0647	0.0543	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4188	70.4188	1.3500e-003	1.2900e-003	70.8372
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
Quality Restaurant	1.7588e+006	9.4800e-003	0.0862	0.0724	5.2000e-004		6.5500e-003	6.5500e-003		6.5500e-003	6.5500e-003	0.0000	93.8563	93.8563	1.8000e-003	1.7200e-003	94.4140
Refrigerated Warehouse-No Rail	477474	2.5700e-003	0.0234	0.0197	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003	0.0000	25.4798	25.4798	4.9000e-004	4.7000e-004	25.6313
Regional Shopping Center	746564	4.0300e-003	0.0366	0.0307	2.2000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	39.8395	39.8395	7.6000e-004	7.3000e-004	40.0763
Research & Development	4.21431e+006	0.0227	0.2066	0.1735	1.2400e-003		0.0157	0.0157		0.0157	0.0157	0.0000	224.8918	224.8918	4.3100e-003	4.1200e-003	226.2283
Unrefrigerated Warehouse-No Rail	2.28127e+006	0.0123	0.1118	0.0939	6.7000e-004		8.5000e-003	8.5000e-003		8.5000e-003	8.5000e-003	0.0000	121.7373	121.7373	2.3300e-003	2.2300e-003	122.4607
Total		**0.3804**	**3.4585**	**2.9051**	**0.0208**		**0.2629**	**0.2629**		**0.2629**	**0.2629**	**0.0000**	**3,764.9216**	**3,764.9216**	**0.0722**	**0.0690**	**3,787.2946**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant w/o Drive Thru	7.72158e+006	0.0416	0.3785	0.3180	2.2700e-003		0.0288	0.0288		0.0288	0.0288	0.0000	412.0531	412.0531	7.9000e-003	7.5500e-003	414.5017
Fast Food Restaurant with Drive Thru	2.5744e+006	0.0139	0.1262	0.1060	7.6000e-004		9.5900e-003	9.5900e-003		9.5900e-003	9.5900e-003	0.0000	137.3797	137.3797	2.6300e-003	2.5200e-003	138.1961
General Office Building	1.82543e+007	0.0984	0.8948	0.7517	5.3700e-003		0.0680	0.0680		0.0680	0.0680	0.0000	974.1167	974.1167	0.0187	0.0179	979.9054
High Turnover (Sit Down Restaurant)	8.52566e+006	0.0460	0.4179	0.3511	2.5100e-003		0.0318	0.0318		0.0318	0.0318	0.0000	454.9620	454.9620	8.7200e-003	8.3400e-003	457.6656
Hotel	3.87478e+006	0.0209	0.1899	0.1596	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.7733	206.7733	3.9600e-003	3.7900e-003	208.0020
Manufacturing	1.88033e+007	0.1014	0.9217	0.7743	5.5300e-003		0.0701	0.0701		0.0701	0.0701	0.0000	1,003.4135	1,003.4135	0.0192	0.0184	1,009.3762
Medical Office Building	1.3196e+006	7.1200e-003	0.0647	0.0543	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4188	70.4188	1.3500e-003	1.2900e-003	70.8372
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
Quality Restaurant	1.7588e+006	9.4800e-003	0.0862	0.0724	5.2000e-004		6.5500e-003	6.5500e-003		6.5500e-003	6.5500e-003	0.0000	93.8563	93.8563	1.8000e-003	1.7200e-003	94.4140
Refrigerated Warehouse-No Rail	477474	2.5700e-003	0.0234	0.0197	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003	0.0000	25.4798	25.4798	4.9000e-004	4.7000e-004	25.6313
Regional Shopping Center	746564	4.0300e-003	0.0366	0.0307	2.2000e-004		2.7800e-003	2.7800e-003		2.7800e-003	2.7800e-003	0.0000	39.8395	39.8395	7.6000e-004	7.3000e-004	40.0763
Research & Development	4.21431e+006	0.0227	0.2066	0.1735	1.2400e-003		0.0157	0.0157		0.0157	0.0157	0.0000	224.8918	224.8918	4.3100e-003	4.1200e-003	226.2283
Unrefrigerated Warehouse-No Rail	2.28127e+006	0.0123	0.1118	0.0939	6.7000e-004		8.5000e-003	8.5000e-003		8.5000e-003	8.5000e-003	0.0000	121.7373	121.7373	2.3300e-003	2.2300e-003	122.4607
Total		**0.3804**	**3.4585**	**2.9051**	**0.0208**		**0.2629**	**0.2629**		**0.2629**	**0.2629**	**0.0000**	**3,764.9216**	**3,764.9216**	**0.0722**	**0.0690**	**3,787.2946**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	1.45058e+006	372.5447	0.0151	3.2900e-003	373.9034
Fast Food Restaurant with Drive Thru	483629	124.2075	5.0500e-003	1.1000e-003	124.6605
General Office Building	2.21317e+007	5,683.9614	0.2309	0.0502	5,704.6915
High Turnover (Sit Down Restaurant)	1.60164e+006	411.3394	0.0167	3.6300e-003	412.8396
Hotel	1.19111e+006	305.9065	0.0124	2.7000e-003	307.0222
Manufacturing	1.13699e+007	2,920.0629	0.1186	0.0258	2,930.7127
Medical Office Building	1.5999e+006	410.8927	0.0167	3.6300e-003	412.3913
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	330410	84.8572	3.4500e-003	7.5000e-004	85.1666
Refrigerated Warehouse-No Rail	7.82683e+006	2,010.1185	0.0817	0.0178	2,017.4496
Regional Shopping Center	5.98626e+006	1,537.4142	0.0625	0.0136	1,543.0214
Research & Development	2.5483e+006	654.4643	0.0266	5.7800e-003	656.8513
Unrefrigerated Warehouse-No Rail	1.01596e+007	2,609.2320	0.1060	0.0230	2,618.7482
Total		**17,125.0011**	**0.6957**	**0.1512**	**17,187.4580**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	1.45058e+006	372.5447	0.0151	3.2900e-003	373.9034
Fast Food Restaurant with Drive Thru	483629	124.2075	5.0500e-003	1.1000e-003	124.6605
General Office Building	2.21317e+007	5,683.9614	0.2309	0.0502	5,704.6915
High Turnover (Sit Down Restaurant)	1.60164e+006	411.3394	0.0167	3.6300e-003	412.8396
Hotel	1.19111e+006	305.9065	0.0124	2.7000e-003	307.0222
Manufacturing	1.13699e+007	2,920.0629	0.1186	0.0258	2,930.7127
Medical Office Building	1.5999e+006	410.8927	0.0167	3.6300e-003	412.3913
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	330410	84.8572	3.4500e-003	7.5000e-004	85.1666
Refrigerated Warehouse-No Rail	7.82683e+006	2,010.1185	0.0817	0.0178	2,017.4496
Regional Shopping Center	5.98626e+006	1,537.4142	0.0625	0.0136	1,543.0214
Research & Development	2.5483e+006	654.4643	0.0266	5.7800e-003	656.8513
Unrefrigerated Warehouse-No Rail	1.01596e+007	2,609.2320	0.1060	0.0230	2,618.7482
Total		**17,125.0011**	**0.6957**	**0.1512**	**17,187.4580**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	28.9236	8.3000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1806	0.1806	4.7000e-004	0.0000	0.1922
Unmitigated	28.9236	8.3000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1806	0.1806	4.7000e-004	0.0000	0.1922

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	3.3082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	25.6070					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.4400e-003	8.3000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1806	0.1806	4.7000e-004	0.0000	0.1922
Total	**28.9236**	**8.3000e-004**	**0.0923**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.1806**	**0.1806**	**4.7000e-004**	**0.0000**	**0.1922**

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	3.3082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	25.6070					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.4400e-003	8.3000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1806	0.1806	4.7000e-004	0.0000	0.1922
Total	**28.9236**	**8.3000e-004**	**0.0923**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.1806**	**0.1806**	**4.7000e-004**	**0.0000**	**0.1922**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6,096.5747	2.0279	1.1875	6,501.1320
Unmitigated	6,096.5747	2.0279	1.1875	6,501.1320

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	10.1745 / 0.649433	39.4772	0.0139	8.1500e-003	42.2506
Fast Food Restaurant with Drive Thru	3.39351 / 0.216607	13.1669	4.6200e-003	2.7200e-003	14.0919
General Office Building	314.685 / 192.871	1,713.9972	0.4483	0.2563	1,801.5740
High Turnover (Sit Down Restaurant)	11.2368 / 0.717244	43.5992	0.0153	9.0000e-003	46.6622
Hotel	8.42177 / 0.935752	33.8129	0.0115	6.7500e-003	36.1127
Manufacturing	242.107 / 0	895.2898	0.3277	0.1934	961.1241
Medical Office Building	16.0603 / 3.0591	68.1179	0.0221	0.0129	72.5169
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.319 / 0.148021	8.9978	3.1600e-003	1.8600e-003	9.6299
Refrigerated Warehouse-No Rail	108.25 / 0	400.3000	0.1465	0.0865	429.7357
Regional Shopping Center	33.926 / 20.7933	184.7849	0.0483	0.0276	194.2265
Research & Development	115.376 / 0	426.6497	0.1562	0.0922	458.0229
Unrefrigerated Warehouse-No Rail	613.423 / 0	2,268.3811	0.8303	0.4901	2,435.1844
Total		**6,096.5747**	**2.0279**	**1.1875**	**6,501.1320**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	10.1745 / 0.649433	39.4772	0.0139	8.1500e-003	42.2506
Fast Food Restaurant with Drive Thru	3.39351 / 0.216607	13.1669	4.6200e-003	2.7200e-003	14.0919
General Office Building	314.685 / 192.871	1,713.9972	0.4483	0.2563	1,801.5740
High Turnover (Sit Down Restaurant)	11.2368 / 0.717244	43.5992	0.0153	9.0000e-003	46.6622
Hotel	8.42177 / 0.935752	33.8129	0.0115	6.7500e-003	36.1127
Manufacturing	242.107 / 0	895.2898	0.3277	0.1934	961.1241
Medical Office Building	16.0603 / 3.0591	68.1179	0.0221	0.0129	72.5169
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.319 / 0.148021	8.9978	3.1600e-003	1.8600e-003	9.6299
Refrigerated Warehouse-No Rail	108.25 / 0	400.3000	0.1465	0.0865	429.7357
Regional Shopping Center	33.926 / 20.7933	184.7849	0.0483	0.0276	194.2265
Research & Development	115.376 / 0	426.6497	0.1562	0.0922	458.0229
Unrefrigerated Warehouse-No Rail	613.423 / 0	2,268.3811	0.8303	0.4901	2,435.1844
Total		**6,096.5747**	**2.0279**	**1.1875**	**6,501.1320**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	903.6671	53.4052	0.0000	2,238.7969
Unmitigated	1,807.3341	106.8104	0.0000	4,477.5937

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	386.11	78.3768	4.6319	0.0000	194.1753
Fast Food Restaurant with Drive Thru	128.78	26.1412	1.5449	0.0000	64.7637
General Office Building	1646.6	334.2449	19.7533	0.0000	828.0776
High Turnover (Sit Down Restaurant)	440.54	89.4256	5.2849	0.0000	221.5482
Hotel	181.77	36.8977	2.1806	0.0000	91.4124
Manufacturing	1298.22	263.5269	15.5740	0.0000	652.8768
Medical Office Building	1382.29	280.5924	16.5825	0.0000	695.1557
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	6.97	1.4149	0.0836	0.0000	3.5052
Refrigerated Warehouse-No Rail	440.02	89.3201	5.2787	0.0000	221.2867
Regional Shopping Center	480.91	97.6204	5.7692	0.0000	241.8504
Research & Development	17.83	3.6193	0.2139	0.0000	8.9667
Unrefrigerated Warehouse-No Rail	2493.48	506.1539	29.9128	0.0000	1,253.9749
Total		**1,807.3341**	**106.8104**	**0.0000**	**4,477.5937**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	193.055	39.1884	2.3160	0.0000	97.0877
Fast Food Restaurant with Drive Thru	64.39	13.0706	0.7725	0.0000	32.3818
General Office Building	823.3	167.1225	9.8767	0.0000	414.0388
High Turnover (Sit Down Restaurant)	220.27	44.7128	2.6425	0.0000	110.7741
Hotel	90.885	18.4488	1.0903	0.0000	45.7062
Manufacturing	649.11	131.7635	7.7870	0.0000	326.4384
Medical Office Building	691.145	140.2962	8.2913	0.0000	347.5779
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.485	0.7074	0.0418	0.0000	1.7526
Refrigerated Warehouse-No Rail	220.01	44.6600	2.6393	0.0000	110.6434
Regional Shopping Center	240.455	48.8102	2.8846	0.0000	120.9252
Research & Development	8.915	1.8097	0.1070	0.0000	4.4834
Unrefrigerated Warehouse-No Rail	1246.74	253.0770	14.9564	0.0000	626.9874
Total		**903.6670**	**53.4052**	**0.0000**	**2,238.7969**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	375	8.00	365	89	0.20	Electrical
Other General Industrial Equipment	16	8.00	365	200	0.34	Diesel
Rough Terrain Forklifts	125	8.00	365	100	0.40	Diesel

UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Forklifts	5.9299	32.0344	81.5147	0.1289		0.3438	0.3438		0.3438	0.3438	0.0000	11,076.7158	11,076.7158	0.4678	0.0000	11,088.4104
Other General Industrial Equipment	0.6654	1.0471	4.0028	0.0210		0.0385	0.0385		0.0385	0.0385	0.0000	1,805.4632	1,805.4632	0.0540	0.0000	1,806.8134
Rough Terrain Forklifts	4.1522	23.8992	59.9009	0.0966		0.2575	0.2575		0.2575	0.2575	0.0000	8,297.1654	8,297.1654	0.3358	0.0000	8,305.5604
Total	**10.7475**	**56.9807**	**145.4184**	**0.2465**		**0.6398**	**0.6398**		**0.6398**	**0.6398**	**0.0000**	**21,179.3444**	**21,179.3444**	**0.8576**	**0.0000**	**21,200.7842**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	10	1	50	500	1	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	0.0386	0.0827	0.7165	1.3500e-003		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	130.4100	130.4100	0.0183	0.0000	130.8671
Total	**0.0386**	**0.0827**	**0.7165**	**1.3500e-003**		**2.7600e-003**	**2.7600e-003**		**2.7600e-003**	**2.7600e-003**	**0.0000**	**130.4100**	**130.4100**	**0.0183**	**0.0000**	**130.8671**

11.0 Vegetation

Globemaster Corridor Specific Plan - Existing

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	4.51	1000sqft	0.10	4,507.00	0
General Office Building	136.66	1000sqft	3.14	136,662.00	0
Hospital	3.28	1000sqft	0.08	3,280.00	0
Medical Office Building	14.82	1000sqft	0.34	14,823.00	0
General Light Industry	259.67	1000sqft	5.96	259,667.00	0
Manufacturing	758.12	1000sqft	17.40	758,116.00	0
Unrefrigerated Warehouse-No Rail	546.04	1000sqft	12.54	546,039.00	0
High Turnover (Sit Down Restaurant)	19.37	1000sqft	0.44	19,372.00	0
Racquet Club	14.68	1000sqft	0.34	14,683.00	0
Automobile Care Center	178.50	1000sqft	4.10	178,501.00	0
Convenience Market (24 Hour)	5.43	1000sqft	0.12	5,435.00	0
Hardware/Paint Store	23.05	1000sqft	0.53	23,049.00	0
Regional Shopping Center	130.04	1000sqft	2.99	130,041.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	636.97	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2018 to reflect existing conditions. CO2 Intensity factor adjusted for 2018 SCE Power Content Label assuming 36% renewables.

Land Use - Land use surrogates used to represent existing land use categories. Automotive land uses represented by the Automobile Care Center.

Construction Phase - Construction not modeled.

Off-road Equipment - Construction not modeled.

Trips and VMT - Construction not modeled.

Vehicle Trips - Operational mobile source emissions calculated separately.

Consumer Products - Default CalEEMod values.

Area Coating - Default CalEEMod values.

Landscape Equipment - Default CalEEMod values.

Energy Use - Default CalEEMod values. General Light Industry changed to reflect Unrefrigerated Warehouse-No Rail.

Water And Wastewater - Default CalEEMod values for indoor and outdoor water use. Assumed 100% aerobic.

Solid Waste - Default CalEEMod values.

Construction Off-road Equipment Mitigation - Construction not modeled.

Mobile Land Use Mitigation - No traffic mitigation assumed.

Mobile Commute Mitigation - No traffic mitigation assumed.

Area Mitigation - No area source mitigation assumed.

Energy Mitigation - No energy mitigation assumed.

Water Mitigation - No water mitigation assumed.

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

Operational Off-Road Equipment - Forklifts, electric: 141, 8 hrs/day, 365 days/year. Rough Terrain Forklifts, diesel: 47, 8 hrs/day, 365 days/year. Yard trucks, diesel (Other Industrial Equipment): 6, 8 hrs/day, 365 days/year.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	740.00	1.00

tblEnergyUse	LightingElect	3.10	1.91
tblEnergyUse	NT24E	5.75	1.34
tblEnergyUse	NT24NG	4.45	0.03
tblEnergyUse	T24E	2.25	0.65
tblEnergyUse	T24NG	13.65	0.84
tblLandUse	LandUseSquareFeet	4,510.00	4,507.00
tblLandUse	LandUseSquareFeet	136,660.00	136,662.00
tblLandUse	LandUseSquareFeet	14,820.00	14,823.00
tblLandUse	LandUseSquareFeet	259,670.00	259,667.00
tblLandUse	LandUseSquareFeet	758,120.00	758,116.00
tblLandUse	LandUseSquareFeet	546,040.00	546,039.00
tblLandUse	LandUseSquareFeet	19,370.00	19,372.00
tblLandUse	LandUseSquareFeet	14,680.00	14,683.00
tblLandUse	LandUseSquareFeet	178,500.00	178,501.00
tblLandUse	LandUseSquareFeet	5,430.00	5,435.00
tblLandUse	LandUseSquareFeet	23,050.00	23,049.00
tblLandUse	LandUseSquareFeet	130,040.00	130,041.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	88.00	200.00

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	141.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	6.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	47.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	636.97
tblSolidWaste	SolidWasteGenerationRate	321.99	244.09
tblTripsAndVMT	VendorTripNumber	343.00	0.00
tblTripsAndVMT	WorkerTripNumber	830.00	0.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	86.32	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	82.52	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	31.90	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	68.65	0.00
tblVehicleTrips	SU_TR	131.84	0.00

tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	148.15	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	51.29	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**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**

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	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Energy	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	34.6663	342.5877	289.6729	0.4123		23.1958	23.1958		21.3401	21.3401		41,509.0694	41,509.0694	12.9223		41,832.1279
Total	**82.1948**	**349.1761**	**295.4222**	**0.4519**	**0.0000**	**23.6971**	**23.6971**	**0.0000**	**21.8415**	**21.8415**		**49,413.0592**	**49,413.0592**	**13.0751**	**0.1449**	**49,783.1158**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Energy	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	34.6663	342.5877	289.6729	0.4123		23.1958	23.1958		21.3401	21.3401		41,509.0694	41,509.0694	12.9223		41,832.1279
Total	**82.1948**	**349.1761**	**295.4222**	**0.4519**	**0.0000**	**23.6971**	**23.6971**	**0.0000**	**21.8415**	**21.8415**		**49,413.0592**	**49,413.0592**	**13.0751**	**0.1449**	**49,783.1158**

	ROG	NOx	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	Building Construction	Building Construction	12/27/2018	12/27/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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

3.2 Building Construction - 2018

Mitigated Construction On-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Bank (with Drive-Through)	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Hardware/Paint Store	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Bank (with Drive-Through)	16.60	8.40	6.90	6.60	74.40	19.00	27	26	47
Convenience Market (24 Hour)	16.60	8.40	6.90	0.90	80.10	19.00	24	15	61
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hardware/Paint Store	16.60	8.40	6.90	13.60	67.40	19.00	45	29	26
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Racquet Club	16.60	8.40	6.90	11.50	69.50	19.00	52	39	9
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Bank (with Drive-Through)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Convenience Market (24 Hour)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Hardware/Paint Store	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
High Turnover (Sit Down Restaurant)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Hospital	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Manufacturing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Medical Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Racquet Club	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Regional Shopping Center	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan - Existing - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982
NaturalGas Unmitigated	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982

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					
Automobile Care Center	8851.69	0.0955	0.8678	0.7290	5.2100e-003		0.0660	0.0660		0.0660	0.0660		1,041.3757	1,041.3757	0.0200	0.0191	1,047.5641
Bank (with Drive-Through)	223.498	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003		26.2939	26.2939	5.0000e-004	4.8000e-004	26.4501
Convenience Market (24 Hour)	24.4203	2.6000e-004	2.3900e-003	2.0100e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8730	2.8730	6.0000e-005	5.0000e-005	2.8901
General Light Industry	618.932	6.6700e-003	0.0607	0.0510	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.8156	72.8156	1.4000e-003	1.3300e-003	73.2483
General Office Building	3897.68	0.0420	0.3821	0.3210	2.2900e-003		0.0290	0.0290		0.0290	0.0290		458.5500	458.5500	8.7900e-003	8.4100e-003	461.2750
Hardware/Paint Store	103.563	1.1200e-003	0.0102	8.5300e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		12.1838	12.1838	2.3000e-004	2.2000e-004	12.2562
High Turnover (Sit Down Restaurant)	12247.3	0.1321	1.2007	1.0086	7.2000e-003		0.0913	0.0913		0.0913	0.0913		1,440.8647	1,440.8647	0.0276	0.0264	1,449.4270
Hospital	581.953	6.2800e-003	0.0571	0.0479	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003		68.4650	68.4650	1.3100e-003	1.2600e-003	68.8719
Manufacturing	37594.2	0.4054	3.6857	3.0960	0.0221		0.2801	0.2801		0.2801	0.2801		4,422.8524	4,422.8524	0.0848	0.0811	4,449.1352
Medical Office Building	422.76	4.5600e-003	0.0415	0.0348	2.5000e-004		3.1500e-003	3.1500e-003		3.1500e-003	3.1500e-003		49.7365	49.7365	9.5000e-004	9.1000e-004	50.0320
Racquet Club	728.116	7.8500e-003	0.0714	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003		85.6607	85.6607	1.6400e-003	1.5700e-003	86.1697
Regional Shopping Center	584.294	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7405	68.7405	1.3200e-003	1.2600e-003	69.1489
Unrefrigerated Warehouse-No Rail	1301.52	0.0140	0.1276	0.1072	7.7000e-004		9.7000e-003	9.7000e-003		9.7000e-003	9.7000e-003		153.1197	153.1197	2.9300e-003	2.8100e-003	154.0296
Total		**0.7245**	**6.5863**	**5.5325**	**0.0395**		**0.5006**	**0.5006**		**0.5006**	**0.5006**		**7,903.5314**	**7,903.5314**	**0.1515**	**0.1449**	**7,950.4982**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	8.85169	0.0955	0.8678	0.7290	5.2100e-003		0.0660	0.0660		0.0660	0.0660		1,041.3757	1,041.3757	0.0200	0.0191	1,047.5641
Bank (with Drive-Through)	0.223498	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003		26.2939	26.2939	5.0000e-004	4.8000e-004	26.4501
Convenience Market (24 Hour)	0.0244203	2.6000e-004	2.3900e-003	2.0100e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8730	2.8730	6.0000e-005	5.0000e-005	2.8901
General Light Industry	0.618932	6.6700e-003	0.0607	0.0510	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.8156	72.8156	1.4000e-003	1.3300e-003	73.2483
General Office Building	3.89768	0.0420	0.3821	0.3210	2.2900e-003		0.0290	0.0290		0.0290	0.0290		458.5500	458.5500	8.7900e-003	8.4100e-003	461.2750
Hardware/Paint Store	0.103563	1.1200e-003	0.0102	8.5300e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		12.1838	12.1838	2.3000e-004	2.2000e-004	12.2562
High Turnover (Sit Down Restaurant)	12.2473	0.1321	1.2007	1.0086	7.2000e-003		0.0913	0.0913		0.0913	0.0913		1,440.8647	1,440.8647	0.0276	0.0264	1,449.4270
Hospital	0.581953	6.2800e-003	0.0571	0.0479	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003		68.4650	68.4650	1.3100e-003	1.2600e-003	68.8719
Manufacturing	37.5942	0.4054	3.6857	3.0960	0.0221		0.2801	0.2801		0.2801	0.2801		4,422.8524	4,422.8524	0.0848	0.0811	4,449.1352
Medical Office Building	0.42276	4.5600e-003	0.0415	0.0348	2.5000e-004		3.1500e-003	3.1500e-003		3.1500e-003	3.1500e-003		49.7365	49.7365	9.5000e-004	9.1000e-004	50.0320
Racquet Club	0.728116	7.8500e-003	0.0714	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003		85.6607	85.6607	1.6400e-003	1.5700e-003	86.1697
Regional Shopping Center	0.584294	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7405	68.7405	1.3200e-003	1.2600e-003	69.1489
Unrefrigerated Warehouse-No Rail	1.30152	0.0140	0.1276	0.1072	7.7000e-004		9.7000e-003	9.7000e-003		9.7000e-003	9.7000e-003		153.1197	153.1197	2.9300e-003	2.8100e-003	154.0296
Total		**0.7245**	**6.5863**	**5.5325**	**0.0395**		**0.5006**	**0.5006**		**0.5006**	**0.5006**		**7,903.5314**	**7,903.5314**	**0.1515**	**0.1449**	**7,950.4982**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Unmitigated	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898

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	5.3186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	41.4647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0207	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Total	**46.8040**	**2.0300e-003**	**0.2168**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**		**0.4583**	**0.4583**	**1.2600e-003**		**0.4898**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.3186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	41.4647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0207	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Total	**46.8040**	**2.0300e-003**	**0.2168**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**		**0.4583**	**0.4583**	**1.2600e-003**		**0.4898**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	141	8.00	365	89	0.20	Electrical
Other General Industrial Equipment	6	8.00	365	200	0.34	Diesel
Rough Terrain Forklifts	47	8.00	365	100	0.40	Diesel

UnMitigated/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
Equipment Type	lb/day										lb/day					
Forklifts	25.1179	222.0039	170.7839	0.2152		17.7169	17.7169		16.2996	16.2996		21,684.0495	21,684.0495	6.7505		21,852.8130
Other General Industrial Equipment	2.1814	26.2520	10.4718	0.0352		0.9697	0.9697		0.8921	0.8921		3,537.6876	3,537.6876	1.1013		3,565.2209
Rough Terrain Forklifts	7.3670	94.3318	108.4172	0.1620		4.5092	4.5092		4.1485	4.1485		16,287.3323	16,287.3323	5.0705		16,414.0940
Total	**34.6663**	**342.5877**	**289.6729**	**0.4123**		**23.1958**	**23.1958**		**21.3401**	**21.3401**		**41,509.0694**	**41,509.0694**	**12.9223**		**41,832.1279**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Globemaster Corridor Specific Plan - Existing

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	4.51	1000sqft	0.10	4,507.00	0
General Office Building	136.66	1000sqft	3.14	136,662.00	0
Hospital	3.28	1000sqft	0.08	3,280.00	0
Medical Office Building	14.82	1000sqft	0.34	14,823.00	0
General Light Industry	259.67	1000sqft	5.96	259,667.00	0
Manufacturing	758.12	1000sqft	17.40	758,116.00	0
Unrefrigerated Warehouse-No Rail	546.04	1000sqft	12.54	546,039.00	0
High Turnover (Sit Down Restaurant)	19.37	1000sqft	0.44	19,372.00	0
Racquet Club	14.68	1000sqft	0.34	14,683.00	0
Automobile Care Center	178.50	1000sqft	4.10	178,501.00	0
Convenience Market (24 Hour)	5.43	1000sqft	0.12	5,435.00	0
Hardware/Paint Store	23.05	1000sqft	0.53	23,049.00	0
Regional Shopping Center	130.04	1000sqft	2.99	130,041.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	636.97	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2018 to reflect existing conditions. CO2 Intensity factor adjusted for 2018 SCE Power Content Label assuming 36% renewables.

Land Use - Land use surrogates used to represent existing land use categories. Automotive land uses represented by the Automobile Care Center.

Construction Phase - Construction not modeled.

Off-road Equipment - Construction not modeled.

Trips and VMT - Construction not modeled.

Vehicle Trips - Operational mobile source emissions calculated separately.

Consumer Products - Default CalEEMod values.

Area Coating - Default CalEEMod values.

Landscape Equipment - Default CalEEMod values.

Energy Use - Default CalEEMod values. General Light Industry changed to reflect Unrefrigerated Warehouse-No Rail.

Water And Wastewater - Default CalEEMod values for indoor and outdoor water use. Assumed 100% aerobic.

Solid Waste - Default CalEEMod values.

Construction Off-road Equipment Mitigation - Construction not modeled.

Mobile Land Use Mitigation - No traffic mitigation assumed.

Mobile Commute Mitigation - No traffic mitigation assumed.

Area Mitigation - No area source mitigation assumed.

Energy Mitigation - No energy mitigation assumed.

Water Mitigation - No water mitigation assumed.

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

Operational Off-Road Equipment - Forklifts, electric: 141, 8 hrs/day, 365 days/year. Rough Terrain Forklifts, diesel: 47, 8 hrs/day, 365 days/year. Yard trucks, diesel (Other Industrial Equipment): 6, 8 hrs/day, 365 days/year.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	740.00	1.00

tblEnergyUse	LightingElect	3.10	1.91
tblEnergyUse	NT24E	5.75	1.34
tblEnergyUse	NT24NG	4.45	0.03
tblEnergyUse	T24E	2.25	0.65
tblEnergyUse	T24NG	13.65	0.84
tblLandUse	LandUseSquareFeet	4,510.00	4,507.00
tblLandUse	LandUseSquareFeet	136,660.00	136,662.00
tblLandUse	LandUseSquareFeet	14,820.00	14,823.00
tblLandUse	LandUseSquareFeet	259,670.00	259,667.00
tblLandUse	LandUseSquareFeet	758,120.00	758,116.00
tblLandUse	LandUseSquareFeet	546,040.00	546,039.00
tblLandUse	LandUseSquareFeet	19,370.00	19,372.00
tblLandUse	LandUseSquareFeet	14,680.00	14,683.00
tblLandUse	LandUseSquareFeet	178,500.00	178,501.00
tblLandUse	LandUseSquareFeet	5,430.00	5,435.00
tblLandUse	LandUseSquareFeet	23,050.00	23,049.00
tblLandUse	LandUseSquareFeet	130,040.00	130,041.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	88.00	200.00

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	141.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	6.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	47.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	636.97
tblSolidWaste	SolidWasteGenerationRate	321.99	244.09
tblTripsAndVMT	VendorTripNumber	343.00	0.00
tblTripsAndVMT	WorkerTripNumber	830.00	0.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	86.32	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	82.52	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	31.90	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	68.65	0.00
tblVehicleTrips	SU_TR	131.84	0.00

tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	148.15	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	51.29	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**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**

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	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Energy	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	34.6663	342.5877	289.6729	0.4123		23.1958	23.1958		21.3401	21.3401		41,509.0694	41,509.0694	12.9223		41,832.1279
Total	**82.1948**	**349.1761**	**295.4222**	**0.4519**	**0.0000**	**23.6971**	**23.6971**	**0.0000**	**21.8415**	**21.8415**		**49,413.0592**	**49,413.0592**	**13.0751**	**0.1449**	**49,783.1158**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Energy	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	34.6663	342.5877	289.6729	0.4123		23.1958	23.1958		21.3401	21.3401		41,509.0694	41,509.0694	12.9223		41,832.1279
Total	**82.1948**	**349.1761**	**295.4222**	**0.4519**	**0.0000**	**23.6971**	**23.6971**	**0.0000**	**21.8415**	**21.8415**		**49,413.0592**	**49,413.0592**	**13.0751**	**0.1449**	**49,783.1158**

	ROG	NOx	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	Building Construction	Building Construction	12/27/2018	12/27/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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

3.2 Building Construction - 2018

Mitigated Construction On-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Bank (with Drive-Through)	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Hardware/Paint Store	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Bank (with Drive-Through)	16.60	8.40	6.90	6.60	74.40	19.00	27	26	47
Convenience Market (24 Hour)	16.60	8.40	6.90	0.90	80.10	19.00	24	15	61
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hardware/Paint Store	16.60	8.40	6.90	13.60	67.40	19.00	45	29	26
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Racquet Club	16.60	8.40	6.90	11.50	69.50	19.00	52	39	9
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Bank (with Drive-Through)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Convenience Market (24 Hour)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Hardware/Paint Store	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
High Turnover (Sit Down Restaurant)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Hospital	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Manufacturing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Medical Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Racquet Club	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Regional Shopping Center	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan - Existing - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982
NaturalGas Unmitigated	0.7245	6.5863	5.5325	0.0395		0.5006	0.5006		0.5006	0.5006		7,903.5314	7,903.5314	0.1515	0.1449	7,950.4982

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					
Automobile Care Center	8851.69	0.0955	0.8678	0.7290	5.2100e-003		0.0660	0.0660		0.0660	0.0660		1,041.3757	1,041.3757	0.0200	0.0191	1,047.5641
Bank (with Drive-Through)	223.498	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003		26.2939	26.2939	5.0000e-004	4.8000e-004	26.4501
Convenience Market (24 Hour)	24.4203	2.6000e-004	2.3900e-003	2.0100e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8730	2.8730	6.0000e-005	5.0000e-005	2.8901
General Light Industry	618.932	6.6700e-003	0.0607	0.0510	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.8156	72.8156	1.4000e-003	1.3300e-003	73.2483
General Office Building	3897.68	0.0420	0.3821	0.3210	2.2900e-003		0.0290	0.0290		0.0290	0.0290		458.5500	458.5500	8.7900e-003	8.4100e-003	461.2750
Hardware/Paint Store	103.563	1.1200e-003	0.0102	8.5300e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		12.1838	12.1838	2.3000e-004	2.2000e-004	12.2562
High Turnover (Sit Down Restaurant)	12247.3	0.1321	1.2007	1.0086	7.2000e-003		0.0913	0.0913		0.0913	0.0913		1,440.8647	1,440.8647	0.0276	0.0264	1,449.4270
Hospital	581.953	6.2800e-003	0.0571	0.0479	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003		68.4650	68.4650	1.3100e-003	1.2600e-003	68.8719
Manufacturing	37594.2	0.4054	3.6857	3.0960	0.0221		0.2801	0.2801		0.2801	0.2801		4,422.8524	4,422.8524	0.0848	0.0811	4,449.1352
Medical Office Building	422.76	4.5600e-003	0.0415	0.0348	2.5000e-004		3.1500e-003	3.1500e-003		3.1500e-003	3.1500e-003		49.7365	49.7365	9.5000e-004	9.1000e-004	50.0320
Racquet Club	728.116	7.8500e-003	0.0714	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003		85.6607	85.6607	1.6400e-003	1.5700e-003	86.1697
Regional Shopping Center	584.294	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7405	68.7405	1.3200e-003	1.2600e-003	69.1489
Unrefrigerated Warehouse-No Rail	1301.52	0.0140	0.1276	0.1072	7.7000e-004		9.7000e-003	9.7000e-003		9.7000e-003	9.7000e-003		153.1197	153.1197	2.9300e-003	2.8100e-003	154.0296
Total		**0.7245**	**6.5863**	**5.5325**	**0.0395**		**0.5006**	**0.5006**		**0.5006**	**0.5006**		**7,903.5314**	**7,903.5314**	**0.1515**	**0.1449**	**7,950.4982**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	8.85169	0.0955	0.8678	0.7290	5.2100e-003		0.0660	0.0660		0.0660	0.0660		1,041.3757	1,041.3757	0.0200	0.0191	1,047.5641
Bank (with Drive-Through)	0.223498	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003		26.2939	26.2939	5.0000e-004	4.8000e-004	26.4501
Convenience Market (24 Hour)	0.0244203	2.6000e-004	2.3900e-003	2.0100e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8730	2.8730	6.0000e-005	5.0000e-005	2.8901
General Light Industry	0.618932	6.6700e-003	0.0607	0.0510	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.8156	72.8156	1.4000e-003	1.3300e-003	73.2483
General Office Building	3.89768	0.0420	0.3821	0.3210	2.2900e-003		0.0290	0.0290		0.0290	0.0290		458.5500	458.5500	8.7900e-003	8.4100e-003	461.2750
Hardware/Paint Store	0.103563	1.1200e-003	0.0102	8.5300e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		12.1838	12.1838	2.3000e-004	2.2000e-004	12.2562
High Turnover (Sit Down Restaurant)	12.2473	0.1321	1.2007	1.0086	7.2000e-003		0.0913	0.0913		0.0913	0.0913		1,440.8647	1,440.8647	0.0276	0.0264	1,449.4270
Hospital	0.581953	6.2800e-003	0.0571	0.0479	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003		68.4650	68.4650	1.3100e-003	1.2600e-003	68.8719
Manufacturing	37.5942	0.4054	3.6857	3.0960	0.0221		0.2801	0.2801		0.2801	0.2801		4,422.8524	4,422.8524	0.0848	0.0811	4,449.1352
Medical Office Building	0.42276	4.5600e-003	0.0415	0.0348	2.5000e-004		3.1500e-003	3.1500e-003		3.1500e-003	3.1500e-003		49.7365	49.7365	9.5000e-004	9.1000e-004	50.0320
Racquet Club	0.728116	7.8500e-003	0.0714	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003		85.6607	85.6607	1.6400e-003	1.5700e-003	86.1697
Regional Shopping Center	0.584294	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7405	68.7405	1.3200e-003	1.2600e-003	69.1489
Unrefrigerated Warehouse-No Rail	1.30152	0.0140	0.1276	0.1072	7.7000e-004		9.7000e-003	9.7000e-003		9.7000e-003	9.7000e-003		153.1197	153.1197	2.9300e-003	2.8100e-003	154.0296
Total		**0.7245**	**6.5863**	**5.5325**	**0.0395**		**0.5006**	**0.5006**		**0.5006**	**0.5006**		**7,903.5314**	**7,903.5314**	**0.1515**	**0.1449**	**7,950.4982**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Unmitigated	46.8040	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898

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	5.3186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	41.4647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0207	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Total	**46.8040**	**2.0300e-003**	**0.2168**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**		**0.4583**	**0.4583**	**1.2600e-003**		**0.4898**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.3186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	41.4647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0207	2.0300e-003	0.2168	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		0.4583	0.4583	1.2600e-003		0.4898
Total	**46.8040**	**2.0300e-003**	**0.2168**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**		**0.4583**	**0.4583**	**1.2600e-003**		**0.4898**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	141	8.00	365	89	0.20	Electrical
Other General Industrial Equipment	6	8.00	365	200	0.34	Diesel
Rough Terrain Forklifts	47	8.00	365	100	0.40	Diesel

UnMitigated/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
Equipment Type	lb/day										lb/day					
Forklifts	25.1179	222.0039	170.7839	0.2152		17.7169	17.7169		16.2996	16.2996		21,684.0495	21,684.0495	6.7505		21,852.8130
Other General Industrial Equipment	2.1814	26.2520	10.4718	0.0352		0.9697	0.9697		0.8921	0.8921		3,537.6876	3,537.6876	1.1013		3,565.2209
Rough Terrain Forklifts	7.3670	94.3318	108.4172	0.1620		4.5092	4.5092		4.1485	4.1485		16,287.3323	16,287.3323	5.0705		16,414.0940
Total	**34.6663**	**342.5877**	**289.6729**	**0.4123**		**23.1958**	**23.1958**		**21.3401**	**21.3401**		**41,509.0694**	**41,509.0694**	**12.9223**		**41,832.1279**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Globemaster Corridor Specific Plan - Existing

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	4.51	1000sqft	0.10	4,507.00	0
General Office Building	136.66	1000sqft	3.14	136,662.00	0
Hospital	3.28	1000sqft	0.08	3,280.00	0
Medical Office Building	14.82	1000sqft	0.34	14,823.00	0
General Light Industry	259.67	1000sqft	5.96	259,667.00	0
Manufacturing	758.12	1000sqft	17.40	758,116.00	0
Unrefrigerated Warehouse-No Rail	546.04	1000sqft	12.54	546,039.00	0
High Turnover (Sit Down Restaurant)	19.37	1000sqft	0.44	19,372.00	0
Racquet Club	14.68	1000sqft	0.34	14,683.00	0
Automobile Care Center	178.50	1000sqft	4.10	178,501.00	0
Convenience Market (24 Hour)	5.43	1000sqft	0.12	5,435.00	0
Hardware/Paint Store	23.05	1000sqft	0.53	23,049.00	0
Regional Shopping Center	130.04	1000sqft	2.99	130,041.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	636.97	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2018 to reflect existing conditions. CO2 Intensity factor adjusted for 2018 SCE Power Content Label assuming 36% renewables.

Land Use - Land use surrogates used to represent existing land use categories. Automotive land uses represented by the Automobile Care Center.

Construction Phase - Construction not modeled.

Off-road Equipment - Construction not modeled.

Trips and VMT - Construction not modeled.

Vehicle Trips - Operational mobile source emissions calculated separately.

Consumer Products - Default CalEEMod values.

Area Coating - Default CalEEMod values.

Landscape Equipment - Default CalEEMod values.

Energy Use - Default CalEEMod values. General Light Industry changed to reflect Unrefrigerated Warehouse-No Rail.

Water And Wastewater - Default CalEEMod values for indoor and outdoor water use. Assumed 100% aerobic.

Solid Waste - Default CalEEMod values.

Construction Off-road Equipment Mitigation - Construction not modeled.

Mobile Land Use Mitigation - No traffic mitigation assumed.

Mobile Commute Mitigation - No traffic mitigation assumed.

Area Mitigation - No area source mitigation assumed.

Energy Mitigation - No energy mitigation assumed.

Water Mitigation - No water mitigation assumed.

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

Operational Off-Road Equipment - Forklifts, electric: 141, 8 hrs/day, 365 days/year. Rough Terrain Forklifts, diesel: 47, 8 hrs/day, 365 days/year. Yard trucks, diesel (Other Industrial Equipment): 6, 8 hrs/day, 365 days/year.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	740.00	1.00

tblEnergyUse	LightingElect	3.10	1.91
tblEnergyUse	NT24E	5.75	1.34
tblEnergyUse	NT24NG	4.45	0.03
tblEnergyUse	T24E	2.25	0.65
tblEnergyUse	T24NG	13.65	0.84
tblLandUse	LandUseSquareFeet	4,510.00	4,507.00
tblLandUse	LandUseSquareFeet	136,660.00	136,662.00
tblLandUse	LandUseSquareFeet	14,820.00	14,823.00
tblLandUse	LandUseSquareFeet	259,670.00	259,667.00
tblLandUse	LandUseSquareFeet	758,120.00	758,116.00
tblLandUse	LandUseSquareFeet	546,040.00	546,039.00
tblLandUse	LandUseSquareFeet	19,370.00	19,372.00
tblLandUse	LandUseSquareFeet	14,680.00	14,683.00
tblLandUse	LandUseSquareFeet	178,500.00	178,501.00
tblLandUse	LandUseSquareFeet	5,430.00	5,435.00
tblLandUse	LandUseSquareFeet	23,050.00	23,049.00
tblLandUse	LandUseSquareFeet	130,040.00	130,041.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	88.00	200.00

tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	141.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	6.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	47.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	636.97
tblSolidWaste	SolidWasteGenerationRate	321.99	244.09
tblTripsAndVMT	VendorTripNumber	343.00	0.00
tblTripsAndVMT	WorkerTripNumber	830.00	0.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	86.32	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	82.52	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	31.90	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	68.65	0.00
tblVehicleTrips	SU_TR	131.84	0.00

tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	148.15	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	51.29	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**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**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.5405	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0555
Energy	0.1322	1.2020	1.0097	7.2100e-003		0.0914	0.0914		0.0914	0.0914	0.0000	6,737.2748	6,737.2748	0.2722	0.0751	6,766.4685
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	6.3266	62.5223	52.8653	0.0753		4.2332	4.2332		3.8946	3.8946	0.0000	6,872.2920	6,872.2920	2.1394	0.0000	6,925.7779
Waste						0.0000	0.0000		0.0000	0.0000	696.0032	0.0000	696.0032	41.1326	0.0000	1,724.3186
Water						0.0000	0.0000		0.0000	0.0000	149.8908	1,702.4179	1,852.3087	0.5934	0.3420	1,969.0600
Total	**14.9994**	**63.7245**	**53.9021**	**0.0825**	**0.0000**	**4.3247**	**4.3247**	**0.0000**	**3.9860**	**3.9860**	**845.8940**	**15,312.0367**	**16,157.9307**	**44.1379**	**0.4171**	**17,385.6804**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.5405	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0555
Energy	0.1322	1.2020	1.0097	7.2100e-003		0.0914	0.0914		0.0914	0.0914	0.0000	6,737.2748	6,737.2748	0.2722	0.0751	6,766.4685
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	6.3266	62.5223	52.8653	0.0753		4.2332	4.2332		3.8946	3.8946	0.0000	6,872.2920	6,872.2920	2.1394	0.0000	6,925.7779
Waste						0.0000	0.0000		0.0000	0.0000	348.0016	0.0000	348.0016	20.5663	0.0000	862.1593
Water						0.0000	0.0000		0.0000	0.0000	149.8908	1,702.4179	1,852.3087	0.5934	0.3420	1,969.0600
Total	**14.9994**	**63.7245**	**53.9021**	**0.0825**	**0.0000**	**4.3247**	**4.3247**	**0.0000**	**3.9860**	**3.9860**	**497.8924**	**15,312.0367**	**15,809.9291**	**23.5716**	**0.4171**	**16,523.5212**

	ROG	NOx	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**	**41.14**	**0.00**	**2.15**	**46.60**	**0.00**	**4.96**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	12/27/2018	12/27/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

3.2 Building Construction - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Bank (with Drive-Through)	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Hardware/Paint Store	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hospital	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Bank (with Drive-Through)	16.60	8.40	6.90	6.60	74.40	19.00	27	26	47
Convenience Market (24 Hour)	16.60	8.40	6.90	0.90	80.10	19.00	24	15	61
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hardware/Paint Store	16.60	8.40	6.90	13.60	67.40	19.00	45	29	26
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Racquet Club	16.60	8.40	6.90	11.50	69.50	19.00	52	39	9
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Bank (with Drive-Through)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Convenience Market (24 Hour)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Light Industry	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
General Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Hardware/Paint Store	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
High Turnover (Sit Down Restaurant)	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Hospital	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Manufacturing	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Medical Office Building	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Racquet Club	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Regional Shopping Center	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944
Unrefrigerated Warehouse-No Rail	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Globemaster Corridor Specific Plan - Existing - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,428.7566	5,428.7566	0.2472	0.0511	5,450.1743
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,428.7566	5,428.7566	0.2472	0.0511	5,450.1743
NaturalGas Mitigated	0.1322	1.2020	1.0097	7.2100e-003		0.0914	0.0914		0.0914	0.0914	0.0000	1,308.5183	1,308.5183	0.0251	0.0240	1,316.2941
NaturalGas Unmitigated	0.1322	1.2020	1.0097	7.2100e-003		0.0914	0.0914		0.0914	0.0914	0.0000	1,308.5183	1,308.5183	0.0251	0.0240	1,316.2941

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					
Automobile Care Center	3.23087e+006	0.0174	0.1584	0.1330	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.4114	172.4114	3.3000e-003	3.1600e-003	173.4360
Bank (with Drive-Through)	81576.7	4.4000e-004	4.0000e-003	3.3600e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.3532	4.3532	8.0000e-005	8.0000e-005	4.3791
Convenience Market (24 Hour)	8913.4	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4757	0.4757	1.0000e-005	1.0000e-005	0.4785
General Light Industry	225910	1.2200e-003	0.0111	9.3000e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0554	12.0554	2.3000e-004	2.2000e-004	12.1271
General Office Building	1.42265e+006	7.6700e-003	0.0697	0.0586	4.2000e-004		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	75.9181	75.9181	1.4600e-003	1.3900e-003	76.3692
Hardware/Paint Store	37800.4	2.0000e-004	1.8500e-003	1.5600e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0172	2.0172	4.0000e-005	4.0000e-005	2.0292
High Turnover (Sit Down Restaurant)	4.47028e+006	0.0241	0.2191	0.1841	1.3100e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.5513	238.5513	4.5700e-003	4.3700e-003	239.9689
Hospital	212413	1.1500e-003	0.0104	8.7500e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3352	11.3352	2.2000e-004	2.1000e-004	11.4025
Manufacturing	1.37219e+007	0.0740	0.6726	0.5650	4.0400e-003		0.0511	0.0511		0.0511	0.0511	0.0000	732.2528	732.2528	0.0140	0.0134	736.6042
Medical Office Building	154307	8.3000e-004	7.5600e-003	6.3500e-003	5.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	8.2344	8.2344	1.6000e-004	1.5000e-004	8.2834
Racquet Club	265762	1.4300e-003	0.0130	0.0109	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	14.1821	14.1821	2.7000e-004	2.6000e-004	14.2664
Regional Shopping Center	213267	1.1500e-003	0.0105	8.7800e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3808	11.3808	2.2000e-004	2.1000e-004	11.4484
Unrefrigerated Warehouse-No Rail	475054	2.5600e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.3507	25.3507	4.9000e-004	4.6000e-004	25.5013
Total		**0.1322**	**1.2020**	**1.0097**	**7.2100e-003**		**0.0913**	**0.0913**		**0.0913**	**0.0913**	**0.0000**	**1,308.5183**	**1,308.5183**	**0.0251**	**0.0240**	**1,316.2941**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	3.23087e+006	0.0174	0.1584	0.1330	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.4114	172.4114	3.3000e-003	3.1600e-003	173.4360
Bank (with Drive-Through)	81576.7	4.4000e-004	4.0000e-003	3.3600e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.3532	4.3532	8.0000e-005	8.0000e-005	4.3791
Convenience Market (24 Hour)	8913.4	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4757	0.4757	1.0000e-005	1.0000e-005	0.4785
General Light Industry	225910	1.2200e-003	0.0111	9.3000e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0554	12.0554	2.3000e-004	2.2000e-004	12.1271
General Office Building	1.42265e+006	7.6700e-003	0.0697	0.0586	4.2000e-004		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	75.9181	75.9181	1.4600e-003	1.3900e-003	76.3692
Hardware/Paint Store	37800.4	2.0000e-004	1.8500e-003	1.5600e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0172	2.0172	4.0000e-005	4.0000e-005	2.0292
High Turnover (Sit Down Restaurant)	4.47028e+006	0.0241	0.2191	0.1841	1.3100e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.5513	238.5513	4.5700e-003	4.3700e-003	239.9689
Hospital	212413	1.1500e-003	0.0104	8.7500e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3352	11.3352	2.2000e-004	2.1000e-004	11.4025
Manufacturing	1.37219e+007	0.0740	0.6726	0.5650	4.0400e-003		0.0511	0.0511		0.0511	0.0511	0.0000	732.2528	732.2528	0.0140	0.0134	736.6042
Medical Office Building	154307	8.3000e-004	7.5600e-003	6.3500e-003	5.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	8.2344	8.2344	1.6000e-004	1.5000e-004	8.2834
Racquet Club	265762	1.4300e-003	0.0130	0.0109	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	14.1821	14.1821	2.7000e-004	2.6000e-004	14.2664
Regional Shopping Center	213267	1.1500e-003	0.0105	8.7800e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3808	11.3808	2.2000e-004	2.1000e-004	11.4484
Unrefrigerated Warehouse-No Rail	475054	2.5600e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.3507	25.3507	4.9000e-004	4.6000e-004	25.5013
Total		**0.1322**	**1.2020**	**1.0097**	**7.2100e-003**		**0.0913**	**0.0913**		**0.0913**	**0.0913**	**0.0000**	**1,308.5183**	**1,308.5183**	**0.0251**	**0.0240**	**1,316.2941**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	1.98136e+006	572.4642	0.0261	5.3900e-003	574.7227
Bank (with Drive-Through)	50027.7	14.4542	6.6000e-004	1.4000e-004	14.5113
Convenience Market (24 Hour)	73372.5	21.1991	9.7000e-004	2.0000e-004	21.2828
General Light Industry	1.0127e+006	292.5945	0.0133	2.7600e-003	293.7488
General Office Building	1.77524e+006	512.9106	0.0234	4.8300e-003	514.9341
Hardware/Paint Store	311162	89.9023	4.0900e-003	8.5000e-004	90.2569
High Turnover (Sit Down Restaurant)	855080	247.0538	0.0113	2.3300e-003	248.0285
Hospital	74849.6	21.6259	9.8000e-004	2.0000e-004	21.7112
Manufacturing	8.41509e+006	2,431.3269	0.1107	0.0229	2,440.9191
Medical Office Building	192551	55.6327	2.5300e-003	5.2000e-004	55.8522
Racquet Club	162981	47.0893	2.1400e-003	4.4000e-004	47.2751
Regional Shopping Center	1.75555e+006	507.2228	0.0231	4.7800e-003	509.2239
Unrefrigerated Warehouse-No Rail	2.12955e+006	615.2803	0.0280	5.8000e-003	617.7077
Total		**5,428.7566**	**0.2471**	**0.0511**	**5,450.1743**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	1.98136e+006	572.4642	0.0261	5.3900e-003	574.7227
Bank (with Drive-Through)	50027.7	14.4542	6.6000e-004	1.4000e-004	14.5113
Convenience Market (24 Hour)	73372.5	21.1991	9.7000e-004	2.0000e-004	21.2828
General Light Industry	1.0127e+006	292.5945	0.0133	2.7600e-003	293.7488
General Office Building	1.77524e+006	512.9106	0.0234	4.8300e-003	514.9341
Hardware/Paint Store	311162	89.9023	4.0900e-003	8.5000e-004	90.2569
High Turnover (Sit Down Restaurant)	855080	247.0538	0.0113	2.3300e-003	248.0285
Hospital	74849.6	21.6259	9.8000e-004	2.0000e-004	21.7112
Manufacturing	8.41509e+006	2,431.3269	0.1107	0.0229	2,440.9191
Medical Office Building	192551	55.6327	2.5300e-003	5.2000e-004	55.8522
Racquet Club	162981	47.0893	2.1400e-003	4.4000e-004	47.2751
Regional Shopping Center	1.75555e+006	507.2228	0.0231	4.7800e-003	509.2239
Unrefrigerated Warehouse-No Rail	2.12955e+006	615.2803	0.0280	5.8000e-003	617.7077
Total		**5,428.7566**	**0.2471**	**0.0511**	**5,450.1743**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.5405	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0555
Unmitigated	8.5405	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0555

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	0.9707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.5673					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5900e-003	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0555
Total	**8.5405**	**2.5000e-004**	**0.0271**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.0520**	**0.0520**	**1.4000e-004**	**0.0000**	**0.0555**

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	0.9707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.5673					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5900e-003	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0520	0.0520	1.4000e-004	0.0000	0.0555
Total	**8.5405**	**2.5000e-004**	**0.0271**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.0520**	**0.0520**	**1.4000e-004**	**0.0000**	**0.0555**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,852.3087	0.5934	0.3420	1,969.0600
Unmitigated	1,852.3087	0.5934	0.3420	1,969.0600

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	16.7935 / 10.2928	102.1595	0.0248	0.0138	106.9008
Bank (with Drive-Through)	0.178699 / 0.109525	1.0871	2.6000e-004	1.5000e-004	1.1375
Convenience Market (24 Hour)	0.402214 / 0.246518	2.4468	5.9000e-004	3.3000e-004	2.5603
General Light Industry	60.0487 / 0	247.1538	0.0834	0.0483	263.6413
General Office Building	24.2891 / 14.8869	147.7574	0.0359	0.0200	154.6149
Hardware/Paint Store	1.70737 / 1.04645	10.3864	2.5200e-003	1.4100e-003	10.8685
High Turnover (Sit Down Restaurant)	5.87945 / 0.375284	25.4038	8.2200e-003	4.7400e-003	27.0229
Hospital	0.411576 / 0.0783955	1.9457	5.8000e-004	3.3000e-004	2.0597
Manufacturing	175.315 / 0	721.5784	0.2435	0.1411	769.7143
Medical Office Building	1.85962 / 0.354214	8.7910	2.6300e-003	1.5100e-003	9.3061
Racquet Club	0.868221 / 0.532136	5.2816	1.2800e-003	7.1000e-004	5.5268
Regional Shopping Center	9.63239 / 5.90372	58.5965	0.0142	7.9300e-003	61.3161
Unrefrigerated Warehouse-No Rail	126.272 / 0	519.7207	0.1754	0.1016	554.3909
Total		**1,852.3087**	**0.5934**	**0.3420**	**1,969.0600**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	16.7935 / 10.2928	102.1595	0.0248	0.0138	106.9008
Bank (with Drive-Through)	0.178699 / 0.109525	1.0871	2.6000e-004	1.5000e-004	1.1375
Convenience Market (24 Hour)	0.402214 / 0.246518	2.4468	5.9000e-004	3.3000e-004	2.5603
General Light Industry	60.0487 / 0	247.1538	0.0834	0.0483	263.6413
General Office Building	24.2891 / 14.8869	147.7574	0.0359	0.0200	154.6149
Hardware/Paint Store	1.70737 / 1.04645	10.3864	2.5200e-003	1.4100e-003	10.8685
High Turnover (Sit Down Restaurant)	5.87945 / 0.375284	25.4038	8.2200e-003	4.7400e-003	27.0229
Hospital	0.411576 / 0.0783955	1.9457	5.8000e-004	3.3000e-004	2.0597
Manufacturing	175.315 / 0	721.5784	0.2435	0.1411	769.7143
Medical Office Building	1.85962 / 0.354214	8.7910	2.6300e-003	1.5100e-003	9.3061
Racquet Club	0.868221 / 0.532136	5.2816	1.2800e-003	7.1000e-004	5.5268
Regional Shopping Center	9.63239 / 5.90372	58.5965	0.0142	7.9300e-003	61.3161
Unrefrigerated Warehouse-No Rail	126.272 / 0	519.7207	0.1754	0.1016	554.3909
Total		**1,852.3087**	**0.5934**	**0.3420**	**1,969.0600**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	348.0016	20.5663	0.0000	862.1593
Unmitigated	696.0032	41.1326	0.0000	1,724.3186

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	681.87	138.4135	8.1800	0.0000	342.9135
Bank (with Drive-Through)	4.21	0.8546	0.0505	0.0000	2.1172
Convenience Market (24 Hour)	16.32	3.3128	0.1958	0.0000	8.2074
General Light Industry	244.09	49.5481	2.9282	0.0000	122.7532
General Office Building	127.09	25.7981	1.5246	0.0000	63.9138
Hardware/Paint Store	255.61	51.8865	3.0664	0.0000	128.5467
High Turnover (Sit Down Restaurant)	230.5	46.7894	2.7652	0.0000	115.9188
Hospital	35.42	7.1899	0.4249	0.0000	17.8128
Manufacturing	940.07	190.8257	11.2775	0.0000	472.7626
Medical Office Building	160.06	32.4907	1.9202	0.0000	80.4944
Racquet Club	83.68	16.9863	1.0039	0.0000	42.0828
Regional Shopping Center	136.54	27.7164	1.6380	0.0000	68.6662
Unrefrigerated Warehouse-No Rail	513.28	104.1912	6.1575	0.0000	258.1293
Total		**696.0032**	**41.1326**	**0.0000**	**1,724.3186**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	340.935	69.2067	4.0900	0.0000	171.4567
Bank (with Drive-Through)	2.105	0.4273	0.0253	0.0000	1.0586
Convenience Market (24 Hour)	8.16	1.6564	0.0979	0.0000	4.1037
General Light Industry	122.045	24.7740	1.4641	0.0000	61.3766
General Office Building	63.545	12.8991	0.7623	0.0000	31.9569
Hardware/Paint Store	127.805	25.9433	1.5332	0.0000	64.2733
High Turnover (Sit Down Restaurant)	115.25	23.3947	1.3826	0.0000	57.9594
Hospital	17.71	3.5950	0.2125	0.0000	8.9064
Manufacturing	470.035	95.4129	5.6387	0.0000	236.3813
Medical Office Building	80.03	16.2454	0.9601	0.0000	40.2472
Racquet Club	41.84	8.4931	0.5019	0.0000	21.0414
Regional Shopping Center	68.27	13.8582	0.8190	0.0000	34.3331
Unrefrigerated Warehouse-No Rail	256.64	52.0956	3.0788	0.0000	129.0647
Total		**348.0016**	**20.5663**	**0.0000**	**862.1593**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	141	8.00	365	89	0.20	Electrical
Other General Industrial Equipment	6	8.00	365	200	0.34	Diesel
Rough Terrain Forklifts	47	8.00	365	100	0.40	Diesel

UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Forklifts	4.5840	40.5157	31.1681	0.0393		3.2333	3.2333		2.9747	2.9747	0.0000	3,590.0376	3,590.0376	1.1176	0.0000	3,617.9783
Other General Industrial Equipment	0.3981	4.7910	1.9111	6.4200e-003		0.1770	0.1770		0.1628	0.1628	0.0000	585.7039	585.7039	0.1823	0.0000	590.2623
Rough Terrain Forklifts	1.3445	17.2156	19.7861	0.0296		0.8229	0.8229		0.7571	0.7571	0.0000	2,696.5505	2,696.5505	0.8395	0.0000	2,717.5374
Total	**6.3266**	**62.5223**	**52.8653**	**0.0753**		**4.2332**	**4.2332**		**3.8946**	**3.8946**	**0.0000**	**6,872.2920**	**6,872.2920**	**2.1394**	**0.0000**	**6,925.7779**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2040 Operation Mobile Source Emissions Factors - EMFAC2017 Annual

Emission Factors: Summary

Project Vehicle	Vehicle Classes	Fuel	Speed	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
				Running Exhaust, Tire Wear, and Break Wear (grams/mile)								
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.020	2.161	0.496	0.009	0.019	0.018	1,029.166	0.080	0.164
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.008	1.021	0.089	0.008	0.007	0.006	806.181	0.001	0.102
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.025	0.092	0.165	0.005	0.005	0.005	517.625	0.002	0.037
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.015	0.028	0.580	0.002	0.001	0.001	216.845	0.001	0.004

Project Vehicle	Vehicle Classes	Fuel	Speed	PM10	PM2.5
				Paved Road - PM Only (grams/mile)	
4-axle trucks	HHDT		*0.000*	*0.040*	0.300	0.074
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074

Project Vehicle	Vehicle Classes	Fuel	Speed	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
				Starting Exhaust, Hot Soak, Running Loss Evaporative, Resting Loss Evap, Diurnal Loss Evap								
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.000	2.398	0.003	0.000	0.000	0.000	0.025	0.000	0.000
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.018	1.941	0.341	0.000	0.000	0.000	3.629	0.004	0.004
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.019	0.126	0.583	0.000	0.000	0.000	6.961	0.004	0.013
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.087	0.115	1.501	0.000	0.001	0.001	41.117	0.001	0.018

Project Vehicle	Vehicle Classes	Fuel	Speed	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
				Idling (grams/Idle-min/vehicle)								
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.047	0.550	0.704	0.001	0.000	0.000	91.514	0.002	0.014
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.030	0.513	0.670	0.001	0.000	0.000	100.312	0.006	0.014
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.106	0.315	1.215	0.001	0.009	0.008	65.619	0.024	0.007
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.000	0.001	0.002	0.000	0.000	0.000	0.400	0.000	0.000

Transport Refrigeration Units

OFFROAD2017 (v1.0.1) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2040
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2017 Equipment Types
Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	CalYr	VehClass	MdlYr	HP_Bin	Fuel	ROG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2_5_tpd	PM_tpd	SOx_tpd	Fuel_gpy	Total_Activity_hpy	Total_Population	Horsepower_Hours_hhpy
South Coas	2040	TRU - Insta	Aggregatec	25	Diesel	0.0463728	0.37694562	0.4500274	9.0490348	0.017585	0.0161782	0.017585	8.30742E-05	5743.99947	4555520.369	3347.186	64232837.2
						ROG	**CO**	**Nox**	**CO2**	**PM10**	**PM2.5**	**SOx**					
						lb/hr	**lb/hr**	**lb/hr**	**lb/hr**	**lb/hr**	**lb/hr**	**lb/hr**					
						7.43E-03	6.04E-02	7.21E-02	1.45E+00	2.82E-03	2.59E-03	1.33E-05					

2040 Globemaster Project - Operation Mobile Source Assumptions Summary

Project Vehicle	EMFAC Class	Average Daily Trip Length (miles)	Max Daily Trips (trips/day)	Max Daily VMT (VMT/day)	Annual Trips (trips/year)	Annual VMT (VMT/year)
4-axle trucks	HHDT	20.4	2,982	60,833	1,088,430	22,203,972
3-axle trucks	MHDT	20.4	1,333	27,193	486,545	9,925,518
2-axle trucks	LHDT1 and LHDT2 composite	20.4	1,015	20,706	370,475	7,557,690
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	6.95	54,107	376,044	19,749,055	137,255,932
			59,437	*484,776*	*21,694,505*	*176,943,112*

Project Vehicle	EMFAC Class	Average Daily Trip Length (miles)	Max Daily Trips (trips/day)	Max Daily VMT (VMT/day)	Annual Trips (trips/year)	Annual VMT (VMT/year)
4-axle trucks	HHDT	20.4	2,982	60,833	1,088,430	22,203,972
3-axle trucks	MHDT	20.4	1333	27,193	486,545	9,925,518
2-axle trucks	LHDT1 and LHDT2 composite	20.4	1015	20,706	370,475	7,557,690
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	6.95	54107	376,044	19,749,055	137,255,932

Project Vehicle	EMFAC Class	Max Daily Trips (trips/day)	Annual Trips (trips/year)
4-axle trucks	HHDT	2,982	1,088,430
3-axle trucks	MHDT	1333	486,545
2-axle trucks	LHDT1 and LHDT2 composite	1015	370,475
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	54107	19,749,055

Project Vehicle	EMFAC Class	Idling Minutes per Day (min/day)	Idling Minutes per Year (min/year)
4-axle trucks	HHDT	44,730	16,326,450
3-axle trucks	MHDT	19,995	7,298,175
2-axle trucks	LHDT1 and LHDT2 composite	15,225	5,557,125

Project Vehicle	OFFROAD	Max Daily Trips (trips/day)	Idling Minutes per Day (min/day)	Annual Trips (trips/year)	Idling Minutes per Year (min/year)
4-axle trucks	TRU - Instate Truck	296	17,760	108,040	6,482,400
3-axle trucks	TRU - Instate Truck	90	5,400	32,850	1,971,000

2040 Project Operation Mobile Source Emissions Summary

	Emissions - Max Daily (Pounds/Day)						Emissions - Annual (Tons/Year)						(Metric Tons/Year)			
	ROG	NOx	CO	SOx	PM10	PM2.5	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Running Exhaust, Tire Wear, and Break Wear																
	2.66	289.79	66.51	1.24	2.48	2.38	0.49	52.89	12.14	0.23	0.45	0.43	22,851.58	1.78	3.64	23,981.85
	0.46	61.20	5.32	0.46	0.40	0.38	0.08	11.17	0.97	0.08	0.07	0.07	8,001.76	0.01	1.02	8,304.68
	1.15	4.19	7.53	0.23	0.23	0.22	0.21	0.77	1.37	0.04	0.04	0.04	3,912.05	0.01	0.28	3,995.40
	12.49	22.80	480.81	1.76	0.58	0.54	2.28	4.16	87.75	0.32	0.11	0.10	29,763.19	0.07	0.60	29,945.28
Subtotal	*16.77*	*377.98*	*560.17*	*3.69*	*3.69*	*3.51*	*3.06*	*68.98*	*102.23*	*0.67*	*0.67*	*0.64*	*64,528.58*	*1.87*	*5.54*	*66,227.21*

	PM10	PM2.5	PM10	PM2.5
Paved Road - PM only				
	40.21	9.87	7.34	1.80
	17.98	4.41	3.28	0.81
	13.69	3.36	2.50	0.61
	248.59	61.02	45.37	11.14
Subtotal	*320.46*	*78.66*	*58.48*	*14.36*

	ROG	NOx	CO	SOx	PM10	PM2.5	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Starting Exhaust, Hot Soak, Running Loss Evaporative, Resting Loss Evap, Diurnal Loss Evap																
	0.00	15.76	0.02	0.00	0.00	0.00	0.00	2.88	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03
	0.05	5.70	1.00	0.00	0.00	0.00	0.01	1.04	0.18	0.00	0.00	0.00	1.77	0.00	0.00	2.34
	0.04	0.28	1.30	0.00	0.00	0.00	0.01	0.05	0.24	0.00	0.00	0.00	2.58	0.00	0.00	4.01
	10.36	13.74	179.08	0.05	0.09	0.08	1.89	2.51	32.68	0.01	0.02	0.02	812.01	0.02	0.35	917.25
Subtotal	*10.46*	*35.49*	*181.41*	*0.05*	*0.09*	*0.09*	*1.91*	*6.48*	*33.11*	*0.01*	*0.02*	*0.02*	*816.38*	*0.03*	*0.36*	*923.63*
Idling																
	4.68	54.23	69.45	0.08	0.02	0.02	0.85	9.90	12.67	0.02	0.00	0.00	1,494.10	0.04	0.24	1,565.20
	1.31	22.62	29.51	0.04	0.01	0.01	0.24	4.13	5.39	0.01	0.00	0.00	732.10	0.04	0.11	764.72
	3.55	10.56	40.77	0.02	0.30	0.28	0.65	1.93	7.44	0.00	0.05	0.05	364.65	0.13	0.04	379.47
Subtotal	*9.53*	*87.41*	*139.73*	*0.15*	*0.32*	*0.31*	*1.74*	*15.95*	*25.50*	*0.03*	*0.06*	*0.06*	*2,590.85*	*0.21*	*0.38*	*2,709.39*
TOTAL	**36.76**	**500.87**	**881.31**	**3.88**	**324.57**	**82.57**	**6.71**	**91.41**	**160.84**	**0.71**	**59.23**	**15.07**	**67,935.82**	**2.11**	**6.28**	**69,860.23**

	ROG	NOx	CO	SOx	PM10	PM2.5	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Transport Refrigeration Units																
TRU Idling																
	2.20	21.35	17.88	0.00	0.83	0.77	0.40	3.90	3.26	0.00	0.15	0.14	71.08	0.00	0.00	71.08
	0.67	6.49	5.44	0.00	0.25	0.23	0.12	1.18	0.99	0.00	0.05	0.04	21.61	0.00	0.00	21.61
TOTAL	**2.87**	**27.84**	**23.32**	**0.01**	**1.09**	**1.00**	**0.52**	**5.08**	**4.26**	**0.00**	**0.20**	**0.18**	**92.69**	**0.00**	**0.00**	**92.69**
COMBINED TOTAL	**39.62**	**528.71**	**904.62**	**3.89**	**325.66**	**83.57**	**7.23**	**96.49**	**165.09**	**0.71**	**59.43**	**15.25**	**68,028.51**	**2.11**	**6.28**	**69,952.93**

2018 Operation Mobile Source Emissions Factors - EMFAC2017 Annual

Emission Factors: Summary

Project Vehicle	Vehicle Classes	Fuel	Speed	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
				Running Exhaust, Tire Wear, and Break Wear (grams/mile)								
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.200	5.243	0.917	0.014	0.090	0.086	1,568.922	0.082	0.249
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.200	3.419	1.119	0.011	0.108	0.103	1,143.599	0.012	0.140
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.071	1.325	1.014	0.007	0.010	0.009	712.246	0.008	0.044
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.043	0.129	1.436	0.003	0.002	0.002	347.683	0.019	0.010

Project Vehicle	Vehicle Classes	Fuel	Speed	PM10	PM2.5
				Paved Road - PM Only (grams/mile)	
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.300	0.074

Project Vehicle	Vehicle Classes	Fuel	Speed	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
				Starting Exhaust, Hot Soak, Running Loss Evaporative, Resting Loss Evap, Diurnal Loss Evap								
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.000	1.392	0.003	0.000	0.000	0.000	0.040	0.000	0.000
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.043	0.915	0.875	0.000	0.000	0.000	6.938	0.008	0.005
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.095	0.338	1.132	0.000	0.000	0.000	11.838	0.019	0.026
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.405	0.319	2.742	0.001	0.002	0.002	68.822	0.082	0.034

Project Vehicle	Vehicle Classes	Fuel	Speed	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
				Idling (grams/Idle-min/vehicle)								
4-axle trucks	HHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.046	0.613	0.482	0.001	0.002	0.002	104.922	0.002	0.017
3-axle trucks	MHDT	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.052	1.405	0.752	0.001	0.007	0.006	139.469	0.008	0.020
2-axle trucks	LHDT1 and LHDT2 composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.185	0.539	1.511	0.001	0.006	0.006	79.672	0.045	0.007
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	Gas, Electric, NG & Diesel (Aggregate)	Aggregate	0.000	0.003	0.002	0.000	0.000	0.000	0.476	0.000	0.000

2018 Globemaster Existing - Operation Mobile Source Assumptions Summary

Project Vehicle	EMFAC Class	Average Daily Trip Length (miles)	Max Daily Trips (trips/day)	Max Daily VMT (VMT/day)	Annual Trips (trips/year)	Annual VMT (VMT/year)
4-axle trucks	HHDT	20.4	1,350	27,540	492,750	10,052,100
3-axle trucks	MHDT	20.4	723	14,749	263,895	5,383,458
2-axle trucks	LHDT1 and LHDT2 composite	20.4	438	8,935	159,870	3,261,348
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	6.95	15,627	108,608	5,703,855	39,641,792
			18,138	*159,832*	*6,620,370*	*58,338,698*

Project Vehicle	EMFAC Class	Average Daily Trip Length (miles)	Max Daily Trips (trips/day)	Max Daily VMT (VMT/day)	Annual Trips (trips/year)	Annual VMT (VMT/year)
4-axle trucks	HHDT	20.4	1350	27,540	492,750	10,052,100
3-axle trucks	MHDT	20.4	723	14,749	263,895	5,383,458
2-axle trucks	LHDT1 and LHDT2 composite	20.4	438	8,935	159,870	3,261,348
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	6.95	15,627	108,608	5,703,855	39,641,792

Project Vehicle	EMFAC Class	Max Daily Trips (trips/day)	Annual Trips (trips/year)
4-axle trucks	HHDT	1,350	492,750
3-axle trucks	MHDT	723	263,895
2-axle trucks	LHDT1 and LHDT2 composite	438	159,870
Passenger cars	LDA, LDT1, LDT2, MCY, MDV, MH, OBUS, SBUS, and UBUS Composite	15627	5,703,855

Project Vehicle	EMFAC Class	Idling Minutes per Day (min/day)	Idling Minutes per Year (min/year)
4-axle trucks	HHDT	20,250	7,391,250
3-axle trucks	MHDT	10,845	3,958,425
2-axle trucks	LHDT1 and LHDT2 composite	6,570	2,398,050

2018 Existing Operation Mobile Source Emissions Summary

	Emissions - Max Daily (Pounds/Day)						Emissions - Annual (Tons/Year)						(Metric Tons/Year)			
	ROG	NOx	CO	SOx	PM10	PM2.5	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
	Running Exhaust, Tire Wear, and Break Wear															
4-axle trucks	12.17	318.35	55.66	0.87	5.49	5.25	2.22	58.10	10.16	0.16	1.00	0.96	15,770.96	0.82	2.50	16,536.19
3-axle trucks	6.49	111.16	36.40	0.36	3.51	3.36	1.19	20.29	6.64	0.06	0.64	0.61	6,156.52	0.07	0.76	6,383.29
2-axle trucks	1.41	26.11	19.98	0.14	0.19	0.18	0.26	4.76	3.65	0.03	0.03	0.03	2,322.88	0.03	0.14	2,365.86
Passenger cars	10.30	30.86	343.76	0.82	0.54	0.50	1.88	5.63	62.74	0.15	0.10	0.09	13,782.78	0.75	0.40	13,920.76
Subtotal	*30.36*	*486.47*	*455.79*	*2.18*	*9.73*	*9.29*	*5.54*	*88.78*	*83.18*	*0.40*	*1.78*	*1.70*	*38,033.14*	*1.66*	*3.80*	*39,206.10*

	PM10	PM2.5	PM10	PM2.5
	Paved Road - PM only			
4-axle trucks	18.21	4.47	3.32	0.82
3-axle trucks	9.75	2.39	1.78	0.44
2-axle trucks	5.91	1.45	1.08	0.26
Passenger cars	71.80	17.62	13.10	3.22
Subtotal	*105.66*	*25.93*	*19.28*	*4.73*

	ROG	NOx	CO	SOx	PM10	PM2.5	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
	Starting Exhaust, Hot Soak, Running Loss Evaporative, Resting Loss Evap, Diurnal Loss Evap															
4-axle trucks	0.00	4.14	0.01	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02
3-axle trucks	0.07	1.46	1.39	0.00	0.00	0.00	0.01	0.27	0.25	0.00	0.00	0.00	1.83	0.00	0.00	2.26
2-axle trucks	0.09	0.33	1.09	0.00	0.00	0.00	0.02	0.06	0.20	0.00	0.00	0.00	1.89	0.00	0.00	3.23
Passenger cars	13.96	11.00	94.45	0.02	0.08	0.07	2.55	2.01	17.24	0.00	0.01	0.01	392.55	0.47	0.19	461.15
Subtotal	*14.12*	*16.93*	*96.95*	*0.02*	*0.08*	*0.07*	*2.58*	*3.09*	*17.69*	*0.00*	*0.01*	*0.01*	*396.29*	*0.47*	*0.20*	*466.65*

	ROG	NOx	CO	SOx	PM10	PM2.5	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
	Idling															
4-axle trucks	2.04	27.36	21.51	0.04	0.10	0.09	0.37	4.99	3.92	0.01	0.02	0.02	775.51	0.02	0.12	812.30
3-axle trucks	1.24	33.58	17.99	0.03	0.16	0.16	0.23	6.13	3.28	0.01	0.03	0.03	552.08	0.03	0.08	576.06
2-axle trucks	2.68	7.81	21.88	0.01	0.09	0.09	0.49	1.43	3.99	0.00	0.02	0.02	191.06	0.11	0.02	198.72
Subtotal	*5.97*	*68.75*	*61.37*	*0.09*	*0.35*	*0.34*	*1.09*	*12.55*	*11.20*	*0.02*	*0.06*	*0.06*	*1,518.64*	*0.16*	*0.22*	*1,587.08*
TOTAL	**50.45**	**572.15**	**614.11**	**2.29**	**115.82**	**35.63**	**9.21**	**104.42**	**112.08**	**0.42**	**21.14**	**6.50**	**39,948.07**	**2.29**	**4.21**	**41,259.83**

DRAFT
MEMORANDUM

To:	Memorandum to File
From:	Jennifer Reed; Dudek
Subject:	Health Effects from Criteria Air Pollutants Associated with the Globemaster Corridor Specific Plan Project
Date:	June 10, 2020

1 Purpose and Introduction

In response to the California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision), this memorandum addresses the potential for adverse health effects related to emissions of criteria air pollutants associated with construction and net change in operation of the proposed Globemaster Corridor Specific Plan (proposed project) and existing land uses (Existing Scenario), based on scientific information and technological methods available at the time of this memorandum's preparation. The published Friant Ranch decision (issued on December 24, 2018) addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (Italics original.) (Sierra Club v. County of Fresno 2018.)

As discussed below, at the time of this memorandum's preparation, no expert agency, including the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (CARB), or the U.S. Environmental Protection Agency (EPA), have approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the proposed project to specific health effects. No California air district or other expert agency/entity has published *quantitative* guidance on how to address the Friant Ranch decision.[1] However, in April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing the Friant Ranch decision in the review and analysis of proposed projects under the California Environmental Quality Act (CEQA) in Sacramento County. The SMAQMD Interim Recommendation, which does not endorse use of any quantitative methodology, is summarized in Section 4, below.

[1] The following air districts, state agencies and entities were contacted by Dudek in January 2019, which could not provide guidance on how to proceed in response to the Friant Ranch decision at that time: San Diego Air Pollution Control District (APCD), Mojave Desert AQMD, San Joaquin Valley APCD, Santa Barbara County APCD, San Luis Obispo County APCD, Bay Area AQMD, California Air Resources Board, California Office of Planning and Research, California Air Pollution Control Officers Association, and Office of Environmental Health Hazard Assessment.

Nonetheless, following the Supreme Court's Friant Ranch decision, some EIRs where estimated criteria air pollutant emissions exceeded applicable air district thresholds, have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model (PGM) and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition (CE)). The publically available health impact assessments (HIA) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from the project's estimated increase in concentrations of ozone (O_3) and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$). To date, all of the HIAs that are publically available have concluded that the evaluated project's health effects associated with the estimated project-generated increase in concentrations of O_3 and $PM_{2.5}$ represent a small increase in incidences and a very small percent of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. A review of the publically available HIAs in CEQA documents is provided in Section 4.

2 National and California Ambient Air Quality Standards

As discussed in Section 3.2, Air Quality, of the proposed project's EIR, ambient air quality standards (AAQS) define clean air, and are established to protect even the most sensitive individuals (CARB 2019a). An AAQS defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. The EPA and California Air Resources Board (CARB) are both authorized to set AAQS.

The Clean Air Act Amendments of 1970 instruct the EPA to set primary National AAQS (NAAQS) to protect public health, and secondary NAAQS to protect plants, forests, crops and materials from damage due to exposure to the following criteria air pollutants: O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), $PM_{2.5}$, and lead.

The federal Clean Air Act requires that the EPA reassess, at least every five years, whether adopted standards are adequate to protect public health based on current scientific evidence. The EPA is required to rely on the advice of an independent scientific panel, the Clean Air Scientific Advisory Committee. Reviewing the NAAQS is a lengthy undertaking and includes the following major phases: planning, integrated science assessment, risk/exposure assessment, policy assessment, and rulemaking (EPA 2018a). During the integrated science assessment, a comprehensive review, synthesis, and evaluation of the most policy-relevant science is conducted, including key science judgments that are important to inform the development of the risk and exposure assessments (EPA 2018a). Then, the risk/exposure assessment draws upon information and conclusions presented in the integrated science assessment to develop quantitative characterizations of exposures and associated risks to human health or the environment associated with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2018a). Scientific review during policy assessment development, and the NAAQS review process in general, is thorough and extensive.

In 1959, California enacted legislation requiring the state Department of Public Health to establish AAQS and necessary controls for motor vehicle emissions (CARB 2019b). California's AAQS (CAAQS) were adopted in 1971 (CARB 2019b). The CAAQS are established for O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$, as well as hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to

develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board of CARB at a regularly scheduled Board hearing (CARB 2017a).

Federal law requires that all states attain the NAAQS. Failure of a state to reach attainment of the NAAQS by the target date can trigger penalties, including withholding of federal highway funds (CARB 2019b). California law similarly continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS (CARB 2019b).

Of importance to this memorandum, California air districts have based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health. The particular thresholds of relevance to the proposed project are illustrated in Table 3.2-4, South Coast Air Quality Management District Air Quality Significance Thresholds, of the PEIR/PEIS. Because O_3 is not emitted directly, air districts have established emissions-based thresholds for O_3 precursors—volatile organic compounds (VOCs) and oxides of nitrogen (NO_x)—which are intended to serve as a surrogate for an "O_3 significance threshold" (i.e., the potential for adverse O_3 impacts to occur).

The NAAQS and CAAQS for O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$ are presented in Table 1. Hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles are not addressed further in this evaluation because they are not routinely associated with land use development projects subject to CEQA review, and are thus not presented in Table 1.[2]

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 μg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	

[2] Ambient Air Quality Standards table is provided as Table 3.2-1 in the PEIR/PEIS Section 3.2, Air Quality.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
CO	8 hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	None
SO_2[h]	1 hour	0.25 ppm (655 μg/m^3)	0.075 ppm (196 μg/m^3)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m^3)
	24 hours	0.04 ppm (105 μg/m^3)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m^3	150 μg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m^3	—	
$PM_{2.5}$[i]	24 hours	—	35 μg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m^3	12.0 μg/m^3	15.0 μg/m^3

Source: CARB 2016.

Notes: μg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter; ppm = parts per million by volume; O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] CARB adopted new PM standards in June of 2002, responding to requirements of the Children's Environmental Health Protection Act (Senate Bill 25, Escutia 1999), specifically the evaluation of all health-based AAQS to determine if the standards adequately protect human health, particularly that of infants and children. The subsequent review of the PM standards resulted in the recommendation of more health-protective AAQS for PM_{10} and a new standard for $PM_{2.5}$. The new PM standards became effective in 2003. Upon further review, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3 on December 14, 2012. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35

μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

Pursuant to the 1990 Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Nonattainment areas must develop plans to attain the NAAQS. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than NAAQS. The attainment designations for O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$ for the South Coast Air Basin (SCAB) are listed in Table 2.[3]

Table 2
South Coast Air Basin Attainment Designation

Pollutant	National Designation	California Designation
O_3 (1-hour)	No National Standard	**Nonattainment**
O_3 (8-hour – 2008)	**Extreme Nonattainment**	**Nonattainment**
NO_2	Unclassifiable/attainment	Attainment
CO	Attainment/maintenance	Attainment
SO_2	Unclassifiable/attainment	Attainment
PM_{10}	Attainment/maintenance	**Nonattainment**
$PM_{2.5}$	**Serious nonattainment**	**Nonattainment**

Sources: EPA 2020 (national); CARB 2019c (California).
Notes:
Bold text = not in attainment; Attainment = meets the standards; Attainment (Maintenance) = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/Attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

As shown in Table 2, the SCAB is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$ under the NAAQS and/or the CAAQS.

As discussed in 3.2.2.3, Regional and Local, the SCAQMD is responsible for developing and implementing the clean air plan for attainment and maintenance of the AAQS in the SCAB and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. Accordingly, the SCAQMD has adopted federal and state attainment plans; most recently, the 2016 Air Quality Management Plan (AQMP). The AQMP relies on information from CARB and Southern California Association of Governments, as well as information regarding projected growth in the cities and counties (all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties) within the

[3] The same discussion of the SCAB attainment designation is provided in Section 3.2.2.4, Air Quality Conditions, of the PEIR/PEIS.

SCAQMD jurisdiction, to forecast future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. As the SCAQMD develops and implements plans and control measures designed to attain the AAQS, the SCAQMD implements measures to reduce public health effects associated with criteria air pollutants.

3 Health Effects of Criteria Air Pollutants and their Precursors

Numerous scientific studies published over the past 50 years point to the harmful effects of air pollution (CARB 2019b). As explained above, the AAQS are designed to prevent these effects (CARB 2019b). The adverse health effects associated with air pollution are diverse and include (SCAQMD 2017):

- Premature mortality
- Cardiovascular effects
- Increased health care utilization (hospitalization, physician and emergency room visits)
- Increased respiratory illness and other morbidity (symptoms, infections, and asthma exacerbation)
- Decreased lung function (breathing capacity)
- Lung inflammation
- Potential immunological changes
- Increased airway reactivity to a known pharmacological agent exposure - a method used in laboratories to evaluate the tendency of airways to have an increased possibility of developing an asthmatic response
- A decreased tolerance for exercise
- Adverse birth outcomes such as low birth weights

The evidence linking these effects to air pollutants is derived from population-based observational and field studies (epidemiological) as well as controlled laboratory studies involving human subjects and animals. There have been an increasing number of studies focusing on the mechanisms (that is, on learning how specific organs, cell types, and biomarkers are involved in the human body's response to air pollution) and specific pollutants responsible for individual effects. Yet the underlying biological pathways for these effects are not always clearly understood (SCAQMD 2017).

Although individuals inhale pollutants as a mixture under ambient conditions, the regulatory framework and the control measures developed are pollutant-specific for six major outdoor pollutants covered under Sections 108 and 109 of the Clean Air Act. This is appropriate, in that different pollutants usually differ in their sources, their times and places of occurrence, the kinds of health effects they may cause, and their overall levels of health risk. Different pollutants, from the same or different sources, oftentimes occur together. Evidence for more than additive effects has not been strong and, as a practical matter, health scientists, as well as regulatory officials, usually must deal with one pollutant at a time in adopting AAQS (SCAQMD 2017).

Health effects associated with criteria air pollutants are discussed below; the same or similar information is provided in Section 3.2.1.2, Pollutants and Effects, of the proposed project's PEIR/PEIS.

Ozone (O_3). O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of

breathing capacity, respiratory symptoms, worsening of lung disease leading to premature death, increased susceptibility to infections, inflammation of and damage to the lung tissue, and some immunological changes (EPA 2013, CARB 2019d). These health problems are particularly acute in sensitive receptors such as the sick, older adults, and young children.

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies of O_3's effects on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019d).

A number of population groups are potentially at increased risk for O_3 exposure effects. In the ongoing review of O_3, the EPA has identified populations as having adequate evidence for increased risk from O_3 exposures include individuals with asthma, younger and older age groups, individuals with reduced intake of certain nutrients such as Vitamins C and E, and outdoor workers. There is suggestive evidence for other potential factors, such as variations in genes related to oxidative metabolism or inflammation, gender, socioeconomic status, and obesity. However further evidence is needed (SCAQMD 2017).

The adverse effects reported with short-term O_3 exposure are greater with increased activity because activity increases the breathing rate and the volume of air reaching the lungs, resulting in an increased amount of O_3 reaching the lungs. Children may be a particularly vulnerable population to air pollution effects because they spend more time outdoors, are generally more active, and have a higher specific ventilation relative to their body weight, compared to adults (SCAQMD 2017).

Volatile Organic Compounds (VOCs). The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group. Within this evaluation, VOC and reactive organic gases (ROGs) are used interchangeably.

Nitrogen Dioxide (NO_2). A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the AAQS for NO_2, is results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk

because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019e).

Carbon Monoxide (CO). Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, and light-headedness, dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019f).

Sulfur Dioxide (SO_2). SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter (PM), SO_2 can injure lung tissue and reduce visibility and the level of sunlight. SO_2 can worsen asthma resulting in increased symptoms, increased medication usage, and emergency room visits.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 parts per million (ppm)) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019g).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in PM (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter (PM_{10} and $PM_{2.5}$). A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and world-wide based on the World Health

Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017b).

Long-term (months to years) exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that PM in outdoor air pollution causes lung cancer (CARB 2017b).

People with influenza, people with chronic respiratory and cardiovascular diseases, and older adults may suffer worsening illness and premature death as a result of breathing PM. People with bronchitis can expect aggravated symptoms from breathing PM. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$ (EPA 2009).

PM encompasses a physically and chemically diverse class of ambient air pollutants of both anthropogenic and biological origin. The PM standard is the only NAAQS that does not target a specific chemical or family of chemical species (NRC 2005). The range of human health effects associated with ambient PM levels or demonstrated in laboratory studies has expanded from earlier concerns for total mortality and respiratory morbidity to include cardiac mortality and morbidity, blood vessel constriction, stroke, premature birth, low birth weight, retarded lung growth, enhancement of allergic responses, reduced resistance to infection, degenerative lesions in the brain, and lung cancer (EPA 2004).

4 Scientific and Technological Complexities

At issue in the Friant Ranch decision was the fact that a development project's PEIR/PEIS did not connect its mass emission totals to specific adverse human health effects. Concerned with the sufficiency of the PEIR/PEIS as an informational document, and specifically whether the magnitude of project impacts was adequately disclosed, the California Supreme Court stated the following:

> "The task for real party and the County is clear: The EIR must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must adequately explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (Sierra Club v. County of Fresno 2018; italics original)

As discussed further below, at the time of this writing, no available modeling tools have been proven to provide a reliable and meaningful analysis to correlate an increase in mass totals or concentrations of criteria air pollutants from an individual project to specific health effects, or estimate additional pollutant nonattainment days relative to the NAAQS and CAAQS due to a single project.

Formation of Secondary Pollutants

The California Supreme Court noted, in the Friant Ranch decision, that: "The raw numbers estimating the tons per year of ROG and NO_x from the Project do not give any information to the reader about how much ozone is estimated to be produced as a result."

In response, the formation of O_3 and PM in the atmosphere, as secondary pollutants,[4] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources, as further explained below. The complexity in how secondary pollutants are formed and dispersed has resulted in ongoing difficulties in measuring and regulating those pollutants.

Tropospheric, or ground level O_3, is not emitted directly into the air, but is created by chemical reactions between NO_x and VOCs (EPA 2018c). This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight (EPA 2018c). O_3 is most likely to reach unhealthy levels on hot sunny days in urban environments, but can still reach high levels during colder months (EPA 2018c). O_3 can also be transported long distances by wind, so even rural areas can experience high O_3 levels (EPA 2018c).

The O_3 reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO_2 is photochemically reformed from nitric oxide (NO). In this way, O_3 is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O_3 (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O_3 concentrations to which downwind populations may be exposed (NRC 2005). This is especially true for individual projects, like the proposed project, where project-generated criteria air pollutant emissions are not derived from a single "point source," but from mobile sources (cars and trucks) driving to, from and around the Project area and area sources (consumer products, architectural coating, natural gas fireplaces, etc.).

In many urban areas, O_3 nonattainment is not caused by emissions from the local area alone (EPA 2008). Due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008, O_3 NAAQS). Thus, in designing control strategies to reduce O_3 concentrations in a local area, it is often necessary to account for regional transport within the U.S. (EPA 2008). In some areas, such as California, global transport of O_3 from beyond North America also can contribute to nonattainment areas (EPA 2008).

PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). In general, PM_{10} is composed largely of primary particles, and a much greater portion of $PM_{2.5}$ contains secondary particles (EPA 2015b). The secondary formation of $PM_{2.5}$ is dominated by a variety of chemical species or components of atmospheric particles, such as ammonium sulfate, ammonium nitrate, organic carbon mass, elemental carbon, and other soil compounds and oxidized metals. $PM_{2.5}$, sulfate, nitrate, and ammonium ions are predominantly the result of chemical reactions of the oxidized products of SO_2 and NO_x emissions with direct ammonia emission (EPA 2017a). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015).

Because of the long-range transport of some pollutants, important emission sources may be far from the locations where measured pollutant concentrations exceed the AAQS (NRC 2005). Thus, for areas experiencing higher

[4] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

ambient concentrations of pollutants, such as O_3 and PM, controlling emissions of those pollutants and their precursors is typically a regional, often multistate, problem, not a local one (NRC 2005).

San Joaquin Valley Air Pollution Control District and South Coast Air Quality Management District Briefs

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the South Coast Air Quality Management District (SCAQMD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both the SJVAPCD and the SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in the State. While the information and arguments presented in those briefs was considered by the California Supreme Court, the Court noted that such information was not part of the administrative record associated with the County's decision to approve the Friant Ranch project. A summary of the key, relevant points of the SJVAPCD and SCAQMD briefs is provided below.

Difference between Toxic Air Contaminants and Criteria Air Pollutants

As explained in Section 3.2.1.2, Pollutants and Effects, a toxic air contaminant (TAC) is an air pollutant, identified in regulation by CARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code section 39650 et seq.) than pollutants subject to CAAQS and NAAQS. Health effects to TACs may occur at extremely low levels and it is typically difficult to identify levels of exposure which do not produce adverse health effects. A criteria air pollutant, on the other hand, is an air pollutant for which acceptable levels of exposure can be determined and for which an AAQS has been set (CARB 2019h).

As the SJVAPCD explained in their brief, "Although criteria air pollutants can also be harmful to human health, they are distinguishable from TACs and are regulated separately. The most relevant difference between criteria pollutants and TACs for purposes of this case is the manner in which human health impacts are accounted for. While it is common practice to analyze the correlation between an individual facility's TAC emissions and the expected localized human health impacts, such is not the case for criteria pollutants" (SJVAPCD 2015). Unlike with TACs (where assessment occurs in conjunction with environmental analysis for individual projects), the human health impacts associated with criteria air pollutants are analyzed and taken into consideration when EPA sets the NAAQS for each criteria pollutant. (42 U.S.C. § 7409(b)(1).) The health impact of a particular criteria pollutant is analyzed on a regional and not a facility or individual project level based on how close the area is to complying with (attaining) the NAAQS (SJVAPCD 2015). The SJVAPCD concluded that while it is possible to perform a health impact analysis for TACs, which was done for construction of the proposed project (see Section 3.2.4 Impacts Analysis), "it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task" (SJVAPCD 2015).

Disconnect Between Mass and Concentration

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O_3 are correlated with increases in the ambient level of

O_3 in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region (SCAQMD 2015).

For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

As the SJVAPCD points out, the tonnage of PM "emitted does not always equate to the local PM concentration because it can be transported long distances by wind," and "[s]econdary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO_x) and NO_x," meaning that "the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area" (SJVAPCD 2015). The disconnect between the tonnage of precursor pollutants (NO_x, SO_x and VOCs) and the concentration of O_3 or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O_3 or PM (SJVAPCD 2015). As discussed previously, the AAQS are established as concentrations of O_3 or PM and not as tonnages of their precursor pollutants (SJVAPCD 2015). The disconnect between the amount of precursor pollutants and the concentration of O_3 or PM formed makes it difficult to determine potential health impacts, which are related to the concentration of O_3 and PM experienced by the receptor rather than levels of NO_x, SO_x, and VOCs produced by a source (SJVAPCD 2015).

As discussed above, attainment of a particular AAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region (SJVAPCD 2015). Because the AAQS are focused on achieving a particular concentration of pollution region-wide, an air district's tools and plans for attaining the AAQS are regional in nature (SJVAPCD 2015). For instance, the computer models used to simulate and predict an attainment date for the O_3 or PM NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO_x, SO_x and VOCs) and the atmospheric chemistry and meteorology of the San Joaquin Valley (SJVAPCD 2015). At a very basic level, the models simulate future O_3 or PM levels based on predicted changes in precursor emissions San Joaquin Valley Air Basin-wide (SJVAPCD 2015). Because the AAQS are set levels necessary to protect human health, the closer a region is to attaining a particular AAQS, the lower the human health impact is from that pollutant (SJVAPCD 2015).

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the San Joaquin Valley Air Basin attains the AAQS (SJVAPCD 2015). Rather, the SJVAPCD's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the San Joaquin Valley Air Basin (current and future) must be controlled in order to reach attainment (SJVAPCD 2015).

Correlation to Health Effects

The SJVAPCD ties the difficulty of correlating the emission of criteria pollutants to health impacts to how O_3 and PM are formed, as explained above. According to SJVAPCD, "even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O_3 and some particulates, it remains impossible,

using today's models, to correlate that increase in concentration to a specific health impact [because] such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level" (SJVAPCD 2015).

To demonstrate the relative scale between emissions within the SCAQMD jurisdiction used in photochemical and other regional modeling and proposed project-level emissions, emissions for the SCAQMD jurisdiction from the CARB California Emissions Projection Analysis Model (CEPAM) emissions inventory and estimated emissions from the proposed project are summarized below. CEPAM produces projected emissions that can then be gridded to serve as the emission input for photochemical modeling. Including all sources except natural sources,[5] total emissions for the SCAQMD for the CEPAM baseline year of 2012 is as follows: 485 tons per day for VOC, 573 tons per day of NO_x, 2,183 tons per day of CO, 19 tons per day for SO_x, 168 tons per day of PM_{10}, and 70 tons per day of $PM_{2.5}$ (CARB 2018b). For the year 2035 (the latest year available), total projected emissions for the SCAQMD for all sources except natural, as forecasted by CEPAM, is as follows: 361 tons per day for VOC, 238 tons per day of NO_x, 1,222 tons per day of CO, 18 tons per day for SO_x, 200 tons per day of PM_{10}, and 70 tons per day of $PM_{2.5}$ (CARB 2018b). Construction of the proposed project is estimated to result in maximum daily emissions of 0.17 ton per day for VOC, 0.04 ton per day of NO_x, 0.05 ton per day of CO, less than 0.01 ton per day for SO_x, 0.07 ton per day of PM_{10}, and 0.01 ton per day of $PM_{2.5}$ after incorporation of mitigation (see Table 3.2-9, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions - Unmitigated). The net change maximum daily emissions associated with the proposed project operation in 2040 and under the Existing Scenario in 2018 is anticipated to result in maximum daily emissions of 0.06 ton per day for VOC, -0.01 ton per day of NO_x, 0.28 ton per day of CO, less than 0.01 ton per day for SO_x, 0.10 ton per day of PM_{10}, and 0.02 ton per day of $PM_{2.5}$ under unmitigated conditions (see Table 3.2-11, Estimated Maximum Daily Operational Criteria Air Pollutant Emissions - Unmitigated). As presented above, proposed project emissions represent a small fraction of the total emissions in the SCAQMD jurisdiction.

SCAQMD used O_3, which is formed from the chemical reaction of NO_x and VOCs in the presence of sunlight, as an example of why it is impracticable to determine specific health outcomes from criteria pollutants for all but very large, regional-scale projects. First, forming O_3 "takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources" (SCAQMD 2015). Second, "it takes a large amount of additional precursor emissions (NO_x and VOCs) to cause a modeled increase in ambient ozone levels over an entire region," with a 2012 study showing that "reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion" (SCAQMD 2015). SCAQMD thus concludes that it "does not currently know of a way to accurately quantify O_3-related health impacts caused by NO_x or VOC emissions from relatively small projects" (SCAQMD 2015).

Essentially, SCAQMD takes the position that a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient O_3 levels may not be detected in the regional air quality models that are currently used to determine O_3 levels; thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from O_3 (SCAQMD 2015). Therefore, lead agencies that use SCAQMD's

[5] Natural sources are non-manmade emission sources, which include biological and geological sources, wildfires, windblown dust, and biogenic emissions from plants and trees.

thresholds of significance may determine that many projects have "significant" air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts.

Effects on Number of Nonattainment Days

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it "would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have" (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin, but are constantly fluctuating based upon meteorology and other environmental factors. As discussed above, the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, "Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015).

Sacramento Metropolitan Air Quality Management District Interim Recommendation

As previously discussed, the SMAQMD is to date the only California air district to formally release guidance (Interim Recommendation, April 2019) for lead agencies and practitioners preparing CEQA documents for projects within Sacramento County to comply with the Friant Ranch decision. Consistent with the expert opinions submitted to the Court in Friant Ranch by SJVAPCD and SCAQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to the likely health consequences to people of project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court's advice to explain in meaningful detail why this analysis is not yet feasible.

The Interim Recommendation further states that, "neither the Sac Metro Air District nor any other air district currently have methodologies that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions" (SMAQMD 2019). The recommendation further explains that air districts have focused on reducing regional emissions from all sectors to meet the health-based concentration standards, thereby reducing the pollutant specific health impacts for the entire population. For example, the SMAQMD prepared plans to attain and maintain the O_3 and PM AAQS. These attainment plans include emissions inventories, air monitoring data, control measures, modeling, future pollutant-level estimates, and general health information. Attainment planning models rely on regional inputs to determine O_3 and PM formation and concentrations in a regional context, not a project specific context. Because of the complexity of O_3 formation, the pounds or tons of emissions from a proposed project in a specific geographical location does not equate to a specific concentration of ozone formation in a given area, because in addition to emission levels, O_3 formation is affected by atmospheric chemistry, geography, and weather. Secondary formation of PM is very similar to the complexity of O_3 formation, and localized impacts of directly emitted PM do not always equate to local PM concentrations due to transport of emissions. Accordingly, because air district attainment plans and supporting air model tools are regional in nature, they do not allow for analysis of the health impacts of specific projects on any given geographic location. The Interim Recommendation

also references available health-related information, but indicates that the available information cannot be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project.

The Interim Recommendation is in place to assist lead agencies and practitioners with CEQA document preparation until SMAQMD develops a methodology that provides a consistent, reliable and meaningful analysis to address the Court's direction on correlating health impacts to a project's emissions.

Methods Available

At the time of writing, no specific tools have been developed for use in CEQA documents to connect criteria air pollutant emissions from an individual project to specific health effects in response to Friant Ranch. However, it has been demonstrated to be technically feasible to use existing regional models and an existing health effect modeling program to evaluate individual projects, which has been conducted for a few projects in 2019. The following CEQA documents included a quantitative HIA to address Friant Ranch:

1. California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH MP) (Cal State University Dominguez Hills 2019)

2. March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA K4) (March JPA 2019)

3. Mineta San Jose Airport Amendment to the Airport Master Plan EIR (San Jose Airport) (City of San Jose 2019)

4. City of Inglewood Basketball and Entertainment Center Project EIR (IBEC) (City of Inglewood 2019)

5. San Diego State University Mission Valley Campus Master Plan EIR (SDSU) (San Diego State University 2019)

The first step in all of the five above listed examples including running a regional PGM, such as the Community Multiscale Air Quality (CMAQ)[6] model or the Comprehensive Air Quality Model with extensions (CAMx)[7] to estimate the increase in concentrations of O_3 and $PM_{2.5}$ as a result of project-generated emissions of criteria and precursor pollutants. Air districts, such as the SCAQMD, use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant

[6] The CMAQ modeling system includes state-of-the-science capabilities for conducting urban-to-regional-to-hemispheric scale simulations of multiple air quality issues, including tropospheric O_3, fine particles, TACs, acid deposition, and visibility degradation. CMAQ brings together three kinds of models: (1) Meteorological models to represent atmospheric and weather activities, (2) Emission models to represent man-made and naturally-occurring contributions to the atmosphere, and (3) An air chemistry-transport model to predict the atmospheric fate of air pollutants under varying conditions (EPA 2018d).

[7] CAMx is a three-dimensional grid-based Eulerian air quality model designed to estimate the formation and fate of oxidant precursors, primary and secondary particulate matter concentrations, and deposition over regional and urban spatial scales (e.g., over the contiguous U.S.) (EPA 2015a).

concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017b).

After estimating the increase in concentrations of O_3 and $PM_{2.5}$, the second step in the five examples includes use of BenMAP or BenMAP-CE to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2018e). The health impact function in BenMAP-CE incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. While BenMAP can estimate the health effects of emissions of VOC, NO_x, CO, SO_2, and $PM_{2.5}$, O_3 and $PM_{2.5}$ were determined to have the most critical health impacts and thus, were the pollutants evaluated to determine the project's health effects in three of the five examples (i.e., CSUDH MP, March JPA K4, and San Jose Airport). The current version of BenMAP-CE only has health impact functions associated with O_3 and $PM_{2.5}$, which is why the example HIA using BenMAP-CE only quantitatively addressed O_3 and $PM_{2.5}$ related health outcomes. As such, all example HIAs focused on O_3 and $PM_{2.5}$.

BenMAP outputs include O_3- and PM-related health endpoints such as premature mortality, hospital admissions, and emergency room visits (City of San Jose 2019). BenMAP uses the following simplified formula to relate changes in ambient air pollution to certain health endpoints (City of San Jose 2019):

$$Health\ Effect = Air\ Quality\ Change\ \times Health\ Effect\ Estimate\ \times Exposed\ Population \times Background\ Health\ Incidence$$

Population characteristics are a key variable in the BenMAP estimate of health incidences. As such, small increases in emissions in an area with a high population may have a much greater affect than large increases in emissions over an area with a small population. While location and associated population is a key factor, making the five examples specific not only to the project-generated emissions, but also to the geographic location and underlying population estimates, the findings of the five examples are provided herein for context, particularly for the conclusions.For the CSUDH MP, the proposed project retains the existing campus enrollment cap of 20,000 full-time-equivalent students, while providing a framework for development of the CSUDH's campus in a forward-looking manner that accommodates growth from the current enrollment of approximately 11,000 full-time-equivalent students to the maximum enrollment of 20,000 full-time-equivalent students over a planning horizon extending to 2035. The project is located within Los Angeles County within the SCAQMD jurisdictional boundaries (within the South Coast Air Basin). For context, the maximum daily emissions of relevant pollutants generated by the CSUDH MP were estimated to be 482.6 pounds per day of VOC, 240.1 pounds per day of NO_x, 2.7 pounds per day of SO_2, and 79.5 pounds per day of $PM_{2.5}$.

The CSUDH MP presented HIA results in terms of an increase in health incidences and the increase in background health incidence for various health outcomes referred to as endpoints. The background health incidence is the actual incidence of health effects as measured in the local population in the absence of additional emissions from the project. (CSUDH 2019)

The two highest $PM_{2.5}$-related health outcomes attributed to the CSUDH MP project-related increases in ambient air concentrations included mortality (10.31 incidences per year, 0.0032% in background health incidence) and asthma-related emergency room visits (4.38 incidences per year, 0.0033% in background health incidence). The remaining health endpoints, including asthma-related hospital admissions, all cardiovascular-related hospital admissions (not including myocardial infarctions), all respiratory-related hospital admissions, and nonfatal acute

myocardial infarction ranged from 0.00044 to 2.44 incidences per year (0.00047% to 0.0014% in background health incidence). (CSUDH 2019)

O_3-related health outcomes attributed to the CSDUDH project-related increases in ambient air concentrations included respiratory-related hospital admissions (0.67 incidences per year, 0.00034% in background health incidence), mortality (0.28 incidences per year, 0.00013% in background health incidence), and asthma-related emergency room visits for any age range (lower than 3.38 incidences per year for all age groups, lower than 0.0058% percent in background health incidence for all age groups). (CSUDH 2019)

The CSUDH MP HIA then concluded that "for all these health endpoints, the number of estimated incidences is less than 0.0058% of the background health incidence. … When taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment." (CSUDH 2019). Of the five examples, the CSUDH MP project is most similar to the Globemaster Corridor Specific Plan project based on both the population characteristics (both within Los Angeles County) and total relevant criteria and precursor pollutant emissions.

The March JPA K4 project is also located within the SCAQMD jurisdictional boundaries (within the South Coast Air Basin), but within Riverside County. The proposed project involves the development of the five parcels on the 35.4-acre K4 Parcel with a 718,000-square-foot building conservatively assumed to be occupied by High-Cube ecommerce/fulfillment center use. The mitigated maximum daily operational emissions of relevant pollutants generated by the March JPA K4 were estimated to be 41.0 pounds per day of VOC, 253.0 pounds per day of NO_x, 1.4 pounds per day of SO_x, and 30.3 pounds per day of $PM_{2.5}$. The March HPA K4 HIA determined that, "for all these health endpoints, the number of estimated incidences is less than 0.0042% of the baseline number of incidences," and that "these health impacts are conservatively estimated, and the actual impacts may be zero." (March JPA 2019).

The SDSU project is located within the City of San Diego. The SDSU project proposes construction and operation of the SDSU Mission Valley campus, stadium, parks, recreation, and innovation area to accommodate up to 15,000 full-time-equivalent students over time, resulting in a total student headcount of approximately 20,000 students. The maximum daily emissions of relevant pollutants generated by SDSU were estimated to be 314.1 pounds per day of VOC, 1,120.7 pounds per day of NO_x, 6.5 pounds per day of SO_2, and 205.9 pounds per day of $PM_{2.5}$ (SDSU 2019).

The $PM_{2.5}$-related health outcomes attributed to the SDSU project-related increases in ambient air concentrations included mortality (8.97 incidences per year, 0.0026% in background health incidence) and asthma-related emergency room visits (5.29 incidences per year, 0.0040% in background health incidence). The remaining health endpoints, including asthma-related hospital admissions, all cardiovascular-related hospital admissions (not including myocardial infarctions), all respiratory-related hospital admissions, and nonfatal acute myocardial infarction ranged from 0.00083 to 3.33 incidences per year (0.00223% to 0.00164% in background health incidence) (SDSU 2019)

O_3-related health outcomes attributed to the SDSU project-related increases in ambient air concentrations included respiratory-related hospital admissions (0.45 incidences per year, 0.0002% in background health incidence), mortality (0.21 incidences per year, 0.00010% in background health incidence), asthma-related emergency room visits for age groups 0-17 (1.73 incidences per year, 0.003% percent in background health incidence), and asthma-

related emergency room visits for age groups 18-99 (2.02 incidences per year, 0.002% percent in background health incidence) (SDSU 2019)

The SDSU HIA found that "health effects estimation using the log-linear method presumes that effects seen at large concentration differences can be linearly scaled down to small increases in concentration, with no consideration of potential thresholds below which health effects may occur; thus, this potentially overstates the potential effects. In summary, health effects are conservatively estimated, and the actual effects may be zero." (SDSU 2019).

While the San Jose Airport project is not similar to the proposed Globemaster Corridor Specific Plan project based on land use type, emissions profile, and geographical location, the results still provide a relevant data point. San Jose Airport is located in Santa Clara County within the Bay Area AQMD jurisdictional boundaries (within the San Francisco Bay Area Air Basin). The San Jose Airport project includes amending the approved 2018 Airport Master Plan to a) shift the planning horizon year from 2027 to 2037, b) modify future facility requirements at the airport to reflect updated demand forecasts, and c) modify certain components of the airfield to reduce to potential for runway incursions. (City of San Jose 2019). The estimated maximum daily incremental operational emissions of relevant pollutants generated by the San Jose Airport project were estimated to be -49.4 pounds per day of VOC, 5,325 pounds per day of NO_x, and 52 pounds per day of $PM_{2.5}$. However, the following emissions inventory was assumed for the HIA: 57.3 pounds per day of VOC, 5,643.0 pounds per day of NO_x, and 51.6 pounds per day of $PM_{2.5}$.

The San Jose Airport HIA estimated that the highest health endpoint from $PM_{2.5}$ was mortality at 4.46 incidences (0.0017% percent in background health incidence). All other PM_{2-5}-related health incidences ranged from 0.00022 to 1.89 (0.00027% to 0.0016% percent in background health incidence). For O_3-related health endpoints, the highest was emergency room visits for asthma, which was estimated to be 11.05 incidences (0.028% percent in background health incidence) for ages 0-17 and 14.59 incidences (0.019% percent in background health incidence) for ages 18-99 (City of San Jose 2019). Of the five examples discussed herein, the San Jose Airport resulted in the greatest O_3 incidences, which correlates with the estimated high emissions of ozone-precursors, specifically NO_x at 5,643 pounds per day. Nonetheless, the conclusion was that "when taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment." (City of San Jose 2019)

The IBEC project HIA provides another important data point for consideration. The IBEC project consists of an arena designed to host the LA Clippers basketball team with up to 18,000 fixed seals for National Basketball Association games and up to 500 additional temporary seats for events such as family shows, concerts, conventions, corporate events, and non-LA Clippers sporting events. The IBEC project is located within Los Angeles County within the jurisdictional boundaries of the SCAQMD (within the South Coast Air Basin). The IBEC EIR evaluated nine operational scenarios; across these multiple scenarios, the estimated maximum daily net increase in operational emissions of relevant pollutants was 94 pounds per day of VOC, 99 pounds per day of NO_x, 3 pounds per day of SO_x, and 89 pounds per day of $PM_{2.5}$.

The IBEC EIR analysis provided helpful context on using regional models for individual projects, as follows: "Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only

very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. … For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in such modeling is large enough that, even if the modeled results report a given health effect, the model is sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level." (City of Inglewood 2019).

For O_3-related health endpoints, emergency room visits for asthma was estimated to be 0.087 incidence per year for all studied age groups combined, 0.016 incidence per year of respiratory-related hospital admissions, and less than 0.02 incidence per year of mortality; the amount of estimated incremental health effects incidence is less than 0.0001% of the baseline number of health effects incidences in the study area.

A key finding from the IBEC HIA was that the for $PM_{2.5}$-related health endpoints, due to the very small changes in ambient $PM_{2.5}$ concentrations as modeled by CMAQ, all of the estimated incremental health incidences were negative values. The IBEC HIA stated that this further confirms that the modeled $PM_{2.5}$ concentrations are within the model's margin of error, no meaningful conclusions can be reached on the specific health effects that may be caused by the proposed project O_3 precursor and $PM_{2.5}$ emissions, and health impacts may in fact be zero, and they would still be well within the models' margin of error (City of Inglewood 2019).

It is also important to note that while these results conclude that the project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity is also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for $PM_{2.5}$. For example, as discussed in the San Jose Airport HIA, "the USEPA has also stated that results from various studies have shown the importance of considering particle size, composition, and particle source in determining the health impacts of PM. Further, USEPA found that studies have reported that particles from industrial sources and from coal combustion appear to be the most significant contributors to PM-related mortality, consistent with the findings by Rohr and Wyzga and others. This is particularly important to note here, as the majority of PM emissions generated from the Project are from entrained roadway dust, and not from combustion. Therefore, by not considering the relative toxicity of PM components, the results presented here are conservative." (City of San Jose 2019).

As explained in the SJVAPCD brief and noted previously, running the PGM used for predicting O_3 attainment with the emissions solely from an individual project like the Friant Ranch project or the proposed project is not likely to yield valid information given the relative scale involved. The five examples discussed herein support the SJVAPCD's brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the PGM and BenMAP approach are substantial provided that the estimated project-generated incidences represent a very small percent of the number of background incidences, potentially within the models' margin of error.

5 Evaluation of the Proposed Project's Health Effects

Based on the evaluation of methods available provided in Section 4, this evaluation does not attempt to quantify health effects, but builds upon the discussion provided in Sections 2 and 3 to disclose potential health effects

associated with the proposed project. As explained in Section 2, the EPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts (like SCAQMD) have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for the AAQS. Accordingly, elevated levels of criteria air pollutants as a result of a proposed project's emissions could cause adverse health effects associated with these pollutants.

In this case, construction of the proposed project is estimated to exceed SCAQMD thresholds for VOC and NO_x before and after mitigation is incorporated. The net change in emissions associated with operation of the proposed project and the Existing Scenario is estimated to exceed SCAQMD thresholds for VOC, CO, and PM_{10} before and after mitigation is incorporated. As shown in Table 2 (Section 2), the SCAB is designated as a nonattainment area for O_3 under the NAAQS and the CAAQS and PM_{10} for the CAAQS.

As discussed in Section 3, health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019i). VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 AAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative because of the lack of quantitative methods to assess this impact. Nonetheless, because VOC and NO_x emissions associated with proposed project construction and/or operation would exceed the SCAQMD mass daily construction threshold, it could minimally contribute to regional O_3 concentrations and the associated health effects.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (see Section 3; CARB 2019i). Health impacts that result from NO_2 and NO_x include respiratory irritation. Although the proposed project construction would generate NO_x emissions that would exceed the SCAQMD mass daily thresholds, it is unlikely that construction of the proposed project would contribute to exceedances of the NAAQS and CAAQS for NO_2 because the SCAB is designated as in attainment of the NAAQS and CAAQS for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Nonetheless, because there are nearby receptors that could be affected by off-road construction equipment (primary source of NO_x), the proposed project could result in potential health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (See Section 3; CARB 2019i). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots were discussed in Section 3.2.4 Impacts Analysis, of the PEIR/PEIS and are determined to be a less-than-significant impact. Operation of the proposed project would generate CO emissions that would exceed the SCAQMD threshold, the project's CO emissions could result in potential health effects associated with this pollutant.

Operation of the proposed project would exceed the SCAQMD threshold for PM_{10}. As such, the proposed project would potentially contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct the

SCAB from coming into attainment for these pollutants. Because the proposed project has the potential to contribute particulate matter during operation, the proposed project could result in associated health effects.

In summary, because construction and/or operation of the proposed project could result in exceedances of the SCAQMD significance thresholds for VOC, NO_x, CO, and PM_{10}, the proposed project would potentially result in health effects associated with those pollutants, as explained in Section 3. Because construction of the proposed project would not exceed SCAQMD thresholds, operation of the proposed project would not exceed the SCAQMD thresholds for SO_x and $PM_{2.5}$, and because the SCAQMD thresholds are based on levels that the SCAB can accommodate without affecting the attainment date for the AAQS and the AAQS are established to protect public health and welfare, the proposed project is not anticipated to result in health effects associated with SO_x or $PM_{2.5}$. Notably, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions associated with the proposed Specific Plan project, which cannot be estimated with a high-level of accuracy and assumes full buildout by 2040, which may never occur.

6 References

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