Appendix A:
Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report

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Appendix A: Air Quality and Energy Supporting Material

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Pacific Surfacing CalEEMod Notes

Note 1. CO_2 Intensity Factor adjusted to match PG&E 2019 emissions rates, the latest that are publicly available.[1] The intensity factor utilized in the model is 206 pounds of CO2 per megawatt-hour delivered. Other intensity factors (CH4 & N2O) were left on default values.

Note 2. Land uses and sizes are drawn from the site plans for proposed development dated August 7, 2019. Land uses utilized in the emissions model represent the following:

Parking > Parking Lot > 23 x Space = Proposed parking area. Square footage adjusted to match Applicant-provided information dated April 2, 2021.

Parking > Other Non-Asphalt Surfaces > 0.61 x 1000 sqft = Proposed 605 square feet of new sidewalk.

Parking > Other Asphalt Surfaces > 4.42 x 1000 sqft = Balance of project site, paved area for equipment storage.

Recreational > Health Club > 0.64 x 1000 sqft = Proposed 635 square foot employee locker room building.

Recreational > City Park > 0.09 x acre = Proposed 3,872 square feet of landscaping.

Industrial > Unrefrigerated Warehouse-No Rail > 3.00 x 1000sqft = Existing warehouse to be repurposed as contractor warehouse and office. Lot acreage was reduced to zero to remove any grading requirements associated with project construction for this area.

Note 3. Construction activities and equipment list were adjusted to match Applicant-provided information dated April 2, 2021.

Note 4. During the proposed project construction model, all operational emission sources were reduced to zero to separate modeled construction emissions from operational emission results. During the proposed project and existing land uses operational models, all construction emission sources were reduced to zero to separate modeled construction and operational emission results.

Note 5. BAAQMD *Basic Construction Mitigation Measures Recommended For All Proposed Projects* were applied to this project, as they would be required under MM AIR-1 to ensure that the proposed project would result in a less-than-significant impact related to fugitive dust emissions during construction. This includes watering exposed areas at minimum twice per day and limiting construction vehicle speeds to 15 miles per hour on unpaved roads.

MM AIR-2 was applied to the "Mitigated Construction" construction model, which would require the project to ensure that all construction equipment utilized for the proposed project greater than 50 horsepower meet EPA Tier IV Final off-road emission standards.

[1] Pacific Gas & Electric. 2020. Corporate Responsibility and Sustainability Report 2020. Website: https://www.pgecorp.com/corp_responsibility/reports/2020/assets/PGE_CRSR_2020.pdf. Accessed April 7, 2021.

Note 6. According to the Local Transportation Analysis (LTA) prepared by Hexagon Transportation Consultants, Inc. for the proposed project, dated April 6, 2021, the proposed project would generate an estimated 94 daily vehicle trips. According to the LTA, the proposed project would generate vehicle trips from 5 light duty trucks, 9 medium duty trucks, 7 heavy duty trucks, and 5 personal vehicles. All trucks would generate additional personally owned vehicle trips, totally to 94 daily vehicle trips. Therefore, the fleet mix and trip generation for the "Health Club" land use in the emissions model was adjusted to match all personal vehicle trips and the "Unrefrigerated Warehouse-No Rail" land use in the emissions model was adjusted to match light, medium, and heavy-duty truck vehicle trips. See the Fleet Mix Adjustment Sheet in this Appendix for more information.

Unmitigated Project Construction Emissions

Model File: Pacific Surfacing Construction Only - Santa Clara County, Annual
Timestamp: Date: 4/13/2021 7:10 PM

Annual Construction Emissions (tons)

Year	Activity	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
	on site	0.00	0.02	0.00	0.00	0.00	0.00	2.8
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.2
2021	**Site Preparation**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**2.9**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	2.0
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.3
2021	**Grading**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**2.3**
	on site	0.00	0.02	0.00	0.00	0.00	0.00	3.1
	off site	0.00	0.01	0.00	0.00	0.00	0.00	2.2
2021	**Building Construction (Interior)**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**5.3**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	1.6
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.4
2021	**Bioretention Installation**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**2.0**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	0.8
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.1
2021	**Paving**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.9**
	on site	0.03	0.00	0.00	0.00	0.00	0.00	0.1
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2021	**Architectural Coating**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.1**
	Total On Site	**0.03**	**0.07**	**0.00**	**0.00**	**0.00**	**0.00**	**10.47**
	Total Off Site	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**3.18**
						Total amortized over 30 years		**0**

Year	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
on site	0.03	0.07	0.00	0.00	0.00	0.00	10.47
off site	0.00	0.01	0.00	0.00	0.00	0.00	3.18
Year: 2021	**0.03**	**0.08**	**0.00**	**0.01**	**0.00**	**0.00**	**13.7**

Average Daily Construction Emissions (lbs/day)

	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Total Emissions (tons)	0.03	0.08	0.00	0.01	0.00	0.00
Total Emissions (lbs)	69.62	152.92	8.26	13.38	7.66	9.02
Average Daily Emissions (lbs/day)[1]	**2.11**	**4.63**	**0.25**	**0.41**	**0.23**	**0.27**

Notes:
1. Total emissions (lbs) are divided by the total nonoverlapping construction workdays (33 workdays).

Mitigated Project Construction Emissions

Model File: Pacific Surfacing Construction Only - Santa Clara County, Annual
Timestamp: Date: 4/13/2021 7:10 PM

Annual Construction Emissions (tons)

Year	Activity	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
	on site	0.00	0.00	0.00	0.00	0.00	0.00	2.8
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.2
2021	**Site Preparation**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.9**
	on site	0.00	0.00	0.00	0.00	0.00	0.00	2.0
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.3
2021	**Grading**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.3**
	on site	0.00	0.00	0.00	0.00	0.00	0.00	3.1
	off site	0.00	0.01	0.00	0.00	0.00	0.00	2.2
2021	**Building Construction (Interior)**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**5.3**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	1.6
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.4
2021	**Bioretention Installation**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**2.0**
	on site	0.00	0.00	0.00	0.00	0.00	0.00	0.8
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.1
2021	**Paving**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.9**
	on site	0.03	0.00	0.00	0.00	0.00	0.00	0.1
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.0
2021	**Architectural Coating**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.1**
	Total On Site	**0.03**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**10.47**
	Total Off Site	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**3.18**
						Total amortized over 30 years		**0**

Year	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
on site	0.03	0.01	0.00	0.00	0.00	0.00	10.47
off site	0.00	0.01	0.00	0.00	0.00	0.00	3.18
Year: 2021	**0.03**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**13.7**

Average Daily Construction Emissions (lbs/day)

	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Total Emissions (tons)	0.03	0.02	0.00	0.00	0.00	0.00
Total Emissions (lbs)	58.60	33.92	0.50	5.62	0.50	1.86
Average Daily Emissions (lbs/day)[1]	**1.78**	**1.03**	**0.02**	**0.17**	**0.02**	**0.06**

Notes:
1. Total emissions (lbs) are divided by the total nonoverlapping construction workdays (33 workdays).

Operational 2022 Emissions Summary

Proposed Project Operations - Summer and Winter Scenarios

Pacific Surfacing Operation Only - Santa Clara County, Summer

CalEEMod Run: Summer. Date: 4/10/2021 10:00 AM

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Area	0.10	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.00	0.00	0.00	0.00
Mobile	0.21	3.37	0.01	0.64	0.01	0.19
Total	**0.31**	**3.38**	**0.01**	**0.64**	**0.01**	**0.19**

Pacific Surfacing Operation Only - Santa Clara County, Winter

CalEEMod Run: Winter. Date: 4/10/2021 10:01 AM

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Area	0.10	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.00	0.00	0.00	0.00
Mobile	0.20	3.44	0.01	0.64	0.01	0.19
Total	**0.30**	**3.45**	**0.01**	**0.64**	**0.01**	**0.19**

Proposed Project Operations - Maximum Daily Emissions

Pacific Surfacing Operation Only - Santa Clara County

Maximum between Summer and Winter Scenarios

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Existing Total	0.00	0.00	0.00	0.00	0.00	0.00
Proposed Project	0.31	3.45	0.01	0.64	0.01	0.19
CalEEMod Run	Summer	Winter	Winter	Winter	Winter	Winter
Net Proposed Project Emissions	**0.31**	**3.45**	**0.01**	**0.64**	**0.01**	**0.19**

Net Annual Operational 2022 Emissions Summary

Proposed Project Operations - Annual Emissions

Pacific Surfacing Operation Only - Santa Clara County, Annual

CalEEMod Run: Annual. Date: 4/10/2021 9:59 AM

Emissions Source	Tons per Year						Metric Tons per Year		
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	Total CO_2e	Bio-CO_2	NBio-CO_2e
Area	0.02	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	3.9	0.0	3.9
Mobile	0.04	0.62	0.00	0.11	0.00	0.03	228.7	0.0	228.7
Waste	0.00	0.00	0.00	0.00	0.00	0.00	3.3	1.3	1.9
Water	0.00	0.00	0.00	0.00	0.00	0.00	1.4	0.2	1.2
Annual Total	**0.06**	**0.62**	**0.00**	**0.11**	**0.00**	**0.03**	**237.3**	**1.5**	**235.7**
							Amortized Construction Emissions (30 years)		*0*
							Total Operational GHG Emissions ($MTCO_2e$/year)		**236**

Note:

All operational emissions were taken from the Mitigated model results to account for BAAQMD and City requirements. For GHG emissions, only non-biogenic CO2e emissions are included in the project's operational GHG emissions, per BAAQMD's 2017 CEQA Air Quality Guidelines.

Operational Project Emissions

Emissions Source	Tons per Year						Metric Tons per Year
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	NBio-CO_2e
Annual Total	**0.06**	**0.62**	**0.00**	**0.11**	**0.00**	**0.03**	**236.2**

Net Annual Operational 2030 GHG Emissions Summary

Proposed Project Operations - Annual Emissions

Pacific Surfacing 2030 Operation Only - Santa Clara County, Annual

CalEEMod Run: Annual. Date: 4/10/2021 10:04 AM

Emissions Source	Metric Tons per Year		
	Total CO_2e	Bio-CO_2	NBio-CO_2e
Area	0.0	0.0	0.0
Energy	3.9	0.0	3.9
Mobile	206.4	0.0	206.4
Waste	3.3	1.3	1.9
Water	1.4	0.2	1.2
Annual Total	**215.0**	**1.5**	**213.5**
Amortized Construction Emissions (30 years)			*0*
Total Operational GHG Emissions ($MTCO_2e$/year)			**214**

Note:

All operational emissions were taken from the Mitigated model results to account for BAAQMD and City requirements. For GHG emissions, only non-biogenic CO2e emissions are included in the project's operational GHG emissions, per BAAQMD's 2017 CEQA Air Quality Guidelines.

Net Operational Emissions between Existing and Proposed

Emissions Source	Metric Tons per Year (NBio-CO_2e)
Annual Total	**214**

Project Vehicle Trips & Fleet Mix Adjustments

Pacific Surfacing	Daily Trips	Trips/Qty	Land Use	Qty
Daily Passenger Vehicle Trips	52	81.25	"Health Club"	0.64
Daily Light Duty Truck Trips	10			
Daily Medium Duty Truck Trips	18	14.00	"Unrefrigerated Warehouse-No Rail"	3
Daily Heavy Duty Truck Trips	14			
Totals	**94**	**95.25**		

Notes:
"Qty" = corresponding land use size metric used in CalEEMod (e.g., acres or 1,000 square feet).

Table 2
Project Trip Generation Estimates Based on the PSI Operations Plan

			AM Peak Hour			PM Peak Hour		
Trip Generator	Vehicle Type	Daily Trips (Cars + Trucks)	In (Car)	Out (Truck)	Total	In (Truck)	Out (Car)	Total
PSI Truck Fleet [1]	5 Light Duty Trucks	20	5	3	8	3	5	8
	9 Medium Duty Trucks	36	9	5	14	5	9	14
	7 Heavy Duty Trucks	28	7	4	11	4	7	11
Office Employees [2]	5 Personal Vehicles	10	5	0	5	0	5	5
Total Project Trips:		**94**	**26**	**12**	**38**	**12**	**26**	**38**

Notes:
[1] Based on the truck operations plan provided, it is estimated that all the PSI truck drivers would arrive at the site and half the truck drivers would depart the site during the AM peak hour. It is estimated that the opposite would occur during the PM peak hour.
[2] Based on the truck operations plan provided, all the PSI office employees could potentially arrive at the site during the AM peak hour and depart the site during the PM peak hour.

Source: Hexagon Transportation Consultants, Inc. 2021. 1436 State Street Industrial Draft Local Transportation Analysis. April 6.

2022 Operational Fleet Mix - Santa Clara County - CalEEMod Default Fleet Mix Adjustments

Passenger Vehicle Classes	Fleet Mix Proportion	Adjusted Fleet Mix Proportions
LDA	0.610498	0.648230182
LDT1	0.036775	0.0390479
LDT2	0.183084	0.194399613
MDV	0.106123	0.112681993
MCY	0.005312	0.005640311
Total	0.941792	1
Light-Duty Truck Vehicle Classes		
LHD1	0.014413	0.176707861
LHD2	0.005007	0.061387377
Total	0.01942	0.238095238
Medium-Duty Truck Vehicle Classes		
MDH	0.01261	0.428571429
Total	0.01261	0.428571429
Heavy-Duty Truck Vehicle Classes		
HHD	0.021118	0.333333333
Total	0.021118	0.333333333
Total Adjusted Truck Trip Fleet Mix (Should equal 1):		1
Other Vehicle Classes		
OBUS	0.002144	N/A
UBUS	0.001548	N/A
SBUS	0.000627	N/A
MH	0.00074	N/A
Total	0.005059	N/A

2030 Operational Fleet Mix - Santa Clara County - CalEEMod Default Fleet Mix Adjustments

Passenger Vehicle Classes	Fleet Mix Proportion	Adjusted Fleet Mix Proportions
LDA	0.621541	0.659737842
LDT1	0.034056	0.036148914
LDT2	0.180136	0.191206269
MDV	0.101248	0.107470202
MCY	0.005122	0.005436773
Total	0.942103	1
Light-Duty Truck Vehicle Classes		
LHD1	0.011859	0.166887607
LHD2	0.00506	0.071207631
Total	0.016919	0.238095238
Medium-Duty Truck Vehicle Classes		
MDH	0.01311	0.428571429
Total	0.01311	0.428571429
Heavy-Duty Truck Vehicle Classes		
HHD	0.022881	0.333333333
Total	0.022881	0.333333333
Total Adjusted Truck Trip Fleet Mix (Should equal 1):		1
Other Vehicle Classes		
OBUS	0.002221	N/A
UBUS	0.00147	N/A
SBUS	0.000646	N/A
MH	0.000651	N/A
Total	0.004988	N/A

Pacific Gas Electric CO_2 Intensity Factor - 2030 Adjustment

Table 1. PG&E's 2018 Power Content Label

Power Source	Percent of Total Mix
Eligible Renewable	27.4%
Fossil Fuel-Fired	0.0%
Nuclear	41.7%
Large Hydroelectric	30.9%
Other	0.0%
Non-Renewable Total	72.6%
Total	**100%**

Table 2. PG&E's 2018 CO_2 Intensity Factors[2]

Power Source	Individual Intensity Factors (lbs CO_2/MWh)
Eligible Renewable	0
Fossil Fuel-Fired	898
Nuclear	284
Large Hydroelectric	284
Other	N/A
Weighted Average	**206**

Table 3. PG&E's Anticipated 2030 Power Content Label[1]

Power Source	Percent of Total Mix
Eligible Renewable	60%
Fossil Fuel-Fired	12%
Nuclear	16%
Large Hydroelectric	11%
Other	0%
Non-Renewable Total	40%
Total	**100%**

Table 4. PG&E's 2030 CO_2 Intensity Factors[3]

Power Source	Individual Intensity Factors (lbs CO_2/MWh)
Eligible Renewable	0
Fossil Fuel-Fired	898
Nuclear	284
Large Hydroelectric	284
Other	N/A
Weighted Average	**184**

Notes:

[1] Adjustment to 2030 power mix is based on equal proportions of generation sources in 2018. The only factor that has been uniquely adjusted is the change of eligible renewable energy sources total proportion from 27.4% to 60% to comply with Senate Bill 100's 2030 performance goals.

[2] PG&E's total CO_2 emission intensity factor of 206 lbs/MWh and CO2 emission intensity factor specifically for fossil fuel-fired generation sources of 898 lbs/MWh were identified in PG&E's 2020 Corporate Responsibility and Sustainability Report; however, the CO_2 emission intensity factor for other non-renewable sources were unknown. Therefore, the 2019 CO_2 emission intensity factor for all other non-renewable generation sources were identified based on the given overall 206 lbs/MWh and fossil fuel-fired 898 lbs/MWh values and the 2019 power content label using a convex combination equation. PG&E generation sources are identifed in PG&E's Reports as nuclear, hydroelectric, fossil fuel-fired, and elgible renewable. Due to the lack of detailed information, nuclear and hydroelectic source were assumed to be equal, having an unweighted average CO_2 intensity factor of the provided 284 lbs/MWh. Eligible renewable sources were assumed to generate 0 lbs CO2/MWh.

[3] PG&E's 2030 CO_2 emission intensity factor is based on equal proportions of renewable and non-renewable generation sources in 2019, as seen in Table 3. The only factor that was uniquely adjusted was the change of eligible renewable energy sources total proportion from 27.4% to 60% to comply with Senate Bill 100's 2030 performance goals. The CO_2 emission intensity factor is the weighted average using the adjusted renewable generation proportion (see Table 3) and the identified owned source intensity factors for 2019 (see Table 2).

Pacific Surfacing Construction Only

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.00	3,000.00	0
Other Asphalt Surfaces	4.42	1000sqft	0.10	4,420.00	0
Other Non-Asphalt Surfaces	0.61	1000sqft	0.01	605.00	0
Parking Lot	23.00	Space	0.21	29,500.00	0
City Park	0.09	Acre	0.09	3,872.00	0
Health Club	0.64	1000sqft	0.01	635.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment -

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 4

Consumer Products - CalEEMod Note 4

Area Coating - CalEEMod Note 4

Energy Use - CalEEMod Note 4

Water And Wastewater - CalEEMod Note 4

Solid Waste - CalEEMod Note 4

Construction Off-road Equipment Mitigation - CalEEMod Note 5

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	100.00	15.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	NumDays	5.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-20
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	1.07	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	NT24NG	0.07	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	0.32	0.00
tblEnergyUse	T24NG	19.71	0.00
tblEnergyUse	T24NG	3.40	0.00
tblLandUse	LandUseSquareFeet	610.00	605.00
tblLandUse	LandUseSquareFeet	9,200.00	29,500.00
tblLandUse	LandUseSquareFeet	3,920.40	3,872.00
tblLandUse	LandUseSquareFeet	640.00	635.00
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblSolidWaste	SolidWasteGenerationRate	0.01	0.00
tblSolidWaste	SolidWasteGenerationRate	3.65	0.00
tblSolidWaste	SolidWasteGenerationRate	2.82	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	37,851.61	0.00
tblWater	IndoorWaterUseRate	693,750.00	0.00
tblWater	OutdoorWaterUseRate	107,233.32	0.00
tblWater	OutdoorWaterUseRate	23,199.38	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					
2021	0.0348	0.0764	0.0912	1.5000e-004	2.5400e-003	4.1300e-003	6.6700e-003	6.8000e-004	3.8200e-003	4.5000e-003	0.0000	13.5735	13.5735	3.2300e-003	0.0000	13.6542
Maximum	**0.0348**	**0.0764**	**0.0912**	**1.5000e-004**	**2.5400e-003**	**4.1300e-003**	**6.6700e-003**	**6.8000e-004**	**3.8200e-003**	**4.5000e-003**	**0.0000**	**13.5735**	**13.5735**	**3.2300e-003**	**0.0000**	**13.6542**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0348	0.0764	0.0912	1.5000e-004	2.5400e-003	4.1300e-003	6.6700e-003	6.8000e-004	3.8200e-003	4.5000e-003	0.0000	13.5735	13.5735	3.2300e-003	0.0000	13.6542
Maximum	**0.0348**	**0.0764**	**0.0912**	**1.5000e-004**	**2.5400e-003**	**4.1300e-003**	**6.6700e-003**	**6.8000e-004**	**3.8200e-003**	**4.5000e-003**	**0.0000**	**13.5735**	**13.5735**	**3.2300e-003**	**0.0000**	**13.6542**

	ROG	NOx	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)
3	**3-1-2021**	**5-31-2021**	0.0190	0.0190
4	**6-1-2021**	**8-31-2021**	0.0758	0.0758
		Highest	0.0758	0.0758

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/17/2021	5/28/2021	5	10	
2	Grading	Grading	5/31/2021	6/11/2021	5	10	
3	Building Construction (Interior)	Building Construction	6/10/2021	6/30/2021	5	15	
4	Bioretention Installation	Trenching	6/14/2021	6/25/2021	5	10	
5	Paving	Paving	6/28/2021	6/29/2021	5	2	
6	Architectural Coating	Architectural Coating	6/30/2021	6/30/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,454; Non-Residential Outdoor: 1,818; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Bioretention Installation	Concrete/Industrial Saws	0	8.00	81	0.73
Bioretention Installation	Rubber Tired Dozers	0	1.00	247	0.40
Bioretention Installation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	2.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction (Interior)	Cranes	0	4.00	231	0.29
Building Construction (Interior)	Forklifts	2	4.00	89	0.20
Building Construction (Interior)	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Bioretention Installation	Excavators	1	3.00	158	0.38
Bioretention Installation	Skid Steer Loaders	2	3.00	65	0.37
Bioretention Installation	Plate Compactors	2	2.00	8	0.43

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
Bioretention Installation	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Interior)	4	18.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8700e-003	0.0190	0.0226	3.0000e-005		1.1200e-003	1.1200e-003		1.0300e-003	1.0300e-003	0.0000	2.7297	2.7297	8.8000e-004	0.0000	2.7518
Total	**1.8700e-003**	**0.0190**	**0.0226**	**3.0000e-005**	**0.0000**	**1.1200e-003**	**1.1200e-003**	**0.0000**	**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.7297**	**2.7297**	**8.8000e-004**	**0.0000**	**2.7518**

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	8.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	0.0000	0.0000	0.1642
Total	**8.0000e-005**	**5.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1641**	**0.1641**	**0.0000**	**0.0000**	**0.1642**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8700e-003	0.0190	0.0226	3.0000e-005		1.1200e-003	1.1200e-003		1.0300e-003	1.0300e-003	0.0000	2.7297	2.7297	8.8000e-004	0.0000	2.7518
Total	**1.8700e-003**	**0.0190**	**0.0226**	**3.0000e-005**	**0.0000**	**1.1200e-003**	**1.1200e-003**	**0.0000**	**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.7297**	**2.7297**	**8.8000e-004**	**0.0000**	**2.7518**

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	8.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	0.0000	0.0000	0.1642
Total	**8.0000e-005**	**5.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1641**	**0.1641**	**0.0000**	**0.0000**	**0.1642**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4200e-003	0.0133	0.0159	2.0000e-005		7.8000e-004	7.8000e-004		7.3000e-004	7.3000e-004	0.0000	2.0369	2.0369	4.8000e-004	0.0000	2.0489
Total	**1.4200e-003**	**0.0133**	**0.0159**	**2.0000e-005**	**0.0000**	**7.8000e-004**	**7.8000e-004**	**0.0000**	**7.3000e-004**	**7.3000e-004**	**0.0000**	**2.0369**	**2.0369**	**4.8000e-004**	**0.0000**	**2.0489**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	9.2000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2626	0.2626	1.0000e-005	0.0000	0.2628
Total	**1.2000e-004**	**9.0000e-005**	**9.2000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2626**	**0.2626**	**1.0000e-005**	**0.0000**	**0.2628**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4200e-003	0.0133	0.0159	2.0000e-005		7.8000e-004	7.8000e-004		7.3000e-004	7.3000e-004	0.0000	2.0369	2.0369	4.8000e-004	0.0000	2.0489
Total	**1.4200e-003**	**0.0133**	**0.0159**	**2.0000e-005**	**0.0000**	**7.8000e-004**	**7.8000e-004**	**0.0000**	**7.3000e-004**	**7.3000e-004**	**0.0000**	**2.0369**	**2.0369**	**4.8000e-004**	**0.0000**	**2.0489**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	9.2000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2626	0.2626	1.0000e-005	0.0000	0.2628
Total	**1.2000e-004**	**9.0000e-005**	**9.2000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2626**	**0.2626**	**1.0000e-005**	**0.0000**	**0.2628**

3.4 Building Construction (Interior) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3700e-003	0.0231	0.0257	3.0000e-005		1.4700e-003	1.4700e-003		1.3500e-003	1.3500e-003	0.0000	3.0545	3.0545	9.9000e-004	0.0000	3.0792
Total	**2.3700e-003**	**0.0231**	**0.0257**	**3.0000e-005**		**1.4700e-003**	**1.4700e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**3.0545**	**3.0545**	**9.9000e-004**	**0.0000**	**3.0792**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3900e-003	1.4400e-003	1.0000e-005	3.5000e-004	1.0000e-005	3.6000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3599	1.3599	6.0000e-005	0.0000	1.3614
Worker	4.2000e-004	2.9000e-004	3.0900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8863	0.8863	2.0000e-005	0.0000	0.8868
Total	**5.9000e-004**	**5.6800e-003**	**4.5300e-003**	**2.0000e-005**	**1.4200e-003**	**2.0000e-005**	**1.4400e-003**	**3.8000e-004**	**2.0000e-005**	**4.0000e-004**	**0.0000**	**2.2462**	**2.2462**	**8.0000e-005**	**0.0000**	**2.2482**

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	2.3700e-003	0.0231	0.0257	3.0000e-005		1.4700e-003	1.4700e-003		1.3500e-003	1.3500e-003	0.0000	3.0545	3.0545	9.9000e-004	0.0000	3.0792
Total	**2.3700e-003**	**0.0231**	**0.0257**	**3.0000e-005**		**1.4700e-003**	**1.4700e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**3.0545**	**3.0545**	**9.9000e-004**	**0.0000**	**3.0792**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3900e-003	1.4400e-003	1.0000e-005	3.5000e-004	1.0000e-005	3.6000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3599	1.3599	6.0000e-005	0.0000	1.3614
Worker	4.2000e-004	2.9000e-004	3.0900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8863	0.8863	2.0000e-005	0.0000	0.8868
Total	**5.9000e-004**	**5.6800e-003**	**4.5300e-003**	**2.0000e-005**	**1.4200e-003**	**2.0000e-005**	**1.4400e-003**	**3.8000e-004**	**2.0000e-005**	**4.0000e-004**	**0.0000**	**2.2462**	**2.2462**	**8.0000e-005**	**0.0000**	**2.2482**

3.5 Bioretention Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1000e-004	8.4300e-003	0.0119	2.0000e-005		3.7000e-004	3.7000e-004		3.5000e-004	3.5000e-004	0.0000	1.6101	1.6101	5.0000e-004	0.0000	1.6227
Total	**8.1000e-004**	**8.4300e-003**	**0.0119**	**2.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.6101**	**1.6101**	**5.0000e-004**	**0.0000**	**1.6227**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.4900e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4268	0.4268	1.0000e-005	0.0000	0.4270
Total	**2.0000e-004**	**1.4000e-004**	**1.4900e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4268**	**0.4268**	**1.0000e-005**	**0.0000**	**0.4270**

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	8.1000e-004	8.4300e-003	0.0119	2.0000e-005		3.7000e-004	3.7000e-004		3.5000e-004	3.5000e-004	0.0000	1.6101	1.6101	5.0000e-004	0.0000	1.6227
Total	**8.1000e-004**	**8.4300e-003**	**0.0119**	**2.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.6101**	**1.6101**	**5.0000e-004**	**0.0000**	**1.6227**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.4900e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4268	0.4268	1.0000e-005	0.0000	0.4270
Total	**2.0000e-004**	**1.4000e-004**	**1.4900e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4268**	**0.4268**	**1.0000e-005**	**0.0000**	**0.4270**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9000e-004	5.8900e-003	6.4000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	0.8361	0.8361	2.6000e-004	0.0000	0.8427
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-003**	**5.8900e-003**	**6.4000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.6000e-004**	**0.0000**	**0.8427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0657
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0657**	**0.0657**	**0.0000**	**0.0000**	**0.0657**

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	5.9000e-004	5.8900e-003	6.4000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	0.8361	0.8361	2.6000e-004	0.0000	0.8427
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-003**	**5.8900e-003**	**6.4000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.6000e-004**	**0.0000**	**0.8427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0657
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0657**	**0.0657**	**0.0000**	**0.0000**	**0.0657**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1000e-004	7.6000e-004	9.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
Total	**0.0263**	**7.6000e-004**	**9.1000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.1277**	**0.1277**	**1.0000e-005**	**0.0000**	**0.1279**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0131	0.0131	0.0000	0.0000	0.0131
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0131**	**0.0131**	**0.0000**	**0.0000**	**0.0131**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1000e-004	7.6000e-004	9.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
Total	**0.0263**	**7.6000e-004**	**9.1000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.1277**	**0.1277**	**1.0000e-005**	**0.0000**	**0.1279**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0131	0.0131	0.0000	0.0000	0.0131
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0131**	**0.0131**	**0.0000**	**0.0000**	**0.0131**

Pacific Surfacing Mitigated Construction

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.00	3,000.00	0
Other Asphalt Surfaces	4.42	1000sqft	0.10	4,420.00	0
Other Non-Asphalt Surfaces	0.61	1000sqft	0.01	605.00	0
Parking Lot	23.00	Space	0.21	29,500.00	0
City Park	0.09	Acre	0.09	3,872.00	0
Health Club	0.64	1000sqft	0.01	635.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment -

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 3

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 4

Consumer Products - CalEEMod Note 4

Area Coating - CalEEMod Note 4

Energy Use - CalEEMod Note 4

Water And Wastewater - CalEEMod Note 4

Solid Waste - CalEEMod Note 4

Construction Off-road Equipment Mitigation - CalEEMod Note 5

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	100.00	15.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	NumDays	5.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-17
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-17
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-17
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.14	0.00

tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	1.07	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	NT24NG	0.07	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	0.32	0.00
tblEnergyUse	T24NG	19.71	0.00
tblEnergyUse	T24NG	3.40	0.00
tblLandUse	LandUseSquareFeet	610.00	605.00
tblLandUse	LandUseSquareFeet	9,200.00	29,500.00
tblLandUse	LandUseSquareFeet	3,920.40	3,872.00
tblLandUse	LandUseSquareFeet	640.00	635.00
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblSolidWaste	SolidWasteGenerationRate	0.01	0.00
tblSolidWaste	SolidWasteGenerationRate	3.65	0.00
tblSolidWaste	SolidWasteGenerationRate	2.82	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	16.74	0.00

tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	37,851.61	0.00
tblWater	IndoorWaterUseRate	693,750.00	0.00
tblWater	OutdoorWaterUseRate	107,233.32	0.00
tblWater	OutdoorWaterUseRate	23,199.38	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					
2021	0.0348	0.0764	0.0912	1.5000e-004	2.5400e-003	4.1300e-003	6.6700e-003	6.8000e-004	3.8200e-003	4.5000e-003	0.0000	13.5735	13.5735	3.2300e-003	0.0000	13.6542
Maximum	**0.0348**	**0.0764**	**0.0912**	**1.5000e-004**	**2.5400e-003**	**4.1300e-003**	**6.6700e-003**	**6.8000e-004**	**3.8200e-003**	**4.5000e-003**	**0.0000**	**13.5735**	**13.5735**	**3.2300e-003**	**0.0000**	**13.6542**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0293	0.0170	0.0958	1.5000e-004	2.5400e-003	2.5000e-004	2.7900e-003	6.8000e-004	2.5000e-004	9.3000e-004	0.0000	13.5735	13.5735	3.2300e-003	0.0000	13.6542
Maximum	**0.0293**	**0.0170**	**0.0958**	**1.5000e-004**	**2.5400e-003**	**2.5000e-004**	**2.7900e-003**	**6.8000e-004**	**2.5000e-004**	**9.3000e-004**	**0.0000**	**13.5735**	**13.5735**	**3.2300e-003**	**0.0000**	**13.6542**

	ROG	NOx	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	15.88	77.78	-5.10	0.00	0.00	93.95	58.17	0.00	93.46	79.33	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)
3	3-1-2021	5-31-2021	0.0190	0.0020
4	6-1-2021	8-31-2021	0.0758	0.0348
		Highest	0.0758	0.0348

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/17/2021	5/28/2021	5	10	
2	Grading	Grading	5/31/2021	6/11/2021	5	10	
3	Building Construction (Interior)	Building Construction	6/10/2021	6/30/2021	5	15	
4	Bioretention Installation	Trenching	6/14/2021	6/25/2021	5	10	
5	Paving	Paving	6/28/2021	6/29/2021	5	2	
6	Architectural Coating	Architectural Coating	6/30/2021	6/30/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,454; Non-Residential Outdoor: 1,818; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	2.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Building Construction (Interior)	Cranes	0	4.00	231	0.29
Building Construction (Interior)	Forklifts	2	4.00	89	0.20
Building Construction (Interior)	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Bioretention Installation	Concrete/Industrial Saws	0	8.00	81	0.73
Bioretention Installation	Excavators	1	3.00	158	0.38
Bioretention Installation	Plate Compactors	2	2.00	8	0.43
Bioretention Installation	Rubber Tired Dozers	0	1.00	247	0.40
Bioretention Installation	Skid Steer Loaders	2	3.00	65	0.37
Bioretention Installation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	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
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Interior)	4	18.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bioretention Installation	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8700e-003	0.0190	0.0226	3.0000e-005		1.1200e-003	1.1200e-003		1.0300e-003	1.0300e-003	0.0000	2.7297	2.7297	8.8000e-004	0.0000	2.7518
Total	**1.8700e-003**	**0.0190**	**0.0226**	**3.0000e-005**	**0.0000**	**1.1200e-003**	**1.1200e-003**	**0.0000**	**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.7297**	**2.7297**	**8.8000e-004**	**0.0000**	**2.7518**

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	8.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	0.0000	0.0000	0.1642
Total	**8.0000e-005**	**5.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1641**	**0.1641**	**0.0000**	**0.0000**	**0.1642**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8000e-004	1.6500e-003	0.0234	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.7297	2.7297	8.8000e-004	0.0000	2.7518
Total	**3.8000e-004**	**1.6500e-003**	**0.0234**	**3.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**2.7297**	**2.7297**	**8.8000e-004**	**0.0000**	**2.7518**

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	8.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	0.0000	0.0000	0.1642
Total	**8.0000e-005**	**5.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1641**	**0.1641**	**0.0000**	**0.0000**	**0.1642**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4200e-003	0.0133	0.0159	2.0000e-005		7.8000e-004	7.8000e-004		7.3000e-004	7.3000e-004	0.0000	2.0369	2.0369	4.8000e-004	0.0000	2.0489
Total	**1.4200e-003**	**0.0133**	**0.0159**	**2.0000e-005**	**0.0000**	**7.8000e-004**	**7.8000e-004**	**0.0000**	**7.3000e-004**	**7.3000e-004**	**0.0000**	**2.0369**	**2.0369**	**4.8000e-004**	**0.0000**	**2.0489**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	9.2000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2626	0.2626	1.0000e-005	0.0000	0.2628
Total	**1.2000e-004**	**9.0000e-005**	**9.2000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2626**	**0.2626**	**1.0000e-005**	**0.0000**	**0.2628**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	1.1600e-003	0.0165	2.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.0369	2.0369	4.8000e-004	0.0000	2.0489
Total	**2.7000e-004**	**1.1600e-003**	**0.0165**	**2.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.0369**	**2.0369**	**4.8000e-004**	**0.0000**	**2.0489**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	9.2000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2626	0.2626	1.0000e-005	0.0000	0.2628
Total	**1.2000e-004**	**9.0000e-005**	**9.2000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2626**	**0.2626**	**1.0000e-005**	**0.0000**	**0.2628**

3.4 Building Construction (Interior) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3700e-003	0.0231	0.0257	3.0000e-005		1.4700e-003	1.4700e-003		1.3500e-003	1.3500e-003	0.0000	3.0545	3.0545	9.9000e-004	0.0000	3.0792
Total	**2.3700e-003**	**0.0231**	**0.0257**	**3.0000e-005**		**1.4700e-003**	**1.4700e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**3.0545**	**3.0545**	**9.9000e-004**	**0.0000**	**3.0792**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3900e-003	1.4400e-003	1.0000e-005	3.5000e-004	1.0000e-005	3.6000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3599	1.3599	6.0000e-005	0.0000	1.3614
Worker	4.2000e-004	2.9000e-004	3.0900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8863	0.8863	2.0000e-005	0.0000	0.8868
Total	**5.9000e-004**	**5.6800e-003**	**4.5300e-003**	**2.0000e-005**	**1.4200e-003**	**2.0000e-005**	**1.4400e-003**	**3.8000e-004**	**2.0000e-005**	**4.0000e-004**	**0.0000**	**2.2462**	**2.2462**	**8.0000e-005**	**0.0000**	**2.2482**

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	4.3000e-004	1.8500e-003	0.0263	3.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.0545	3.0545	9.9000e-004	0.0000	3.0792
Total	**4.3000e-004**	**1.8500e-003**	**0.0263**	**3.0000e-005**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**3.0545**	**3.0545**	**9.9000e-004**	**0.0000**	**3.0792**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3900e-003	1.4400e-003	1.0000e-005	3.5000e-004	1.0000e-005	3.6000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3599	1.3599	6.0000e-005	0.0000	1.3614
Worker	4.2000e-004	2.9000e-004	3.0900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8863	0.8863	2.0000e-005	0.0000	0.8868
Total	**5.9000e-004**	**5.6800e-003**	**4.5300e-003**	**2.0000e-005**	**1.4200e-003**	**2.0000e-005**	**1.4400e-003**	**3.8000e-004**	**2.0000e-005**	**4.0000e-004**	**0.0000**	**2.2462**	**2.2462**	**8.0000e-005**	**0.0000**	**2.2482**

3.5 Bioretention Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1000e-004	8.4300e-003	0.0119	2.0000e-005		3.7000e-004	3.7000e-004		3.5000e-004	3.5000e-004	0.0000	1.6101	1.6101	5.0000e-004	0.0000	1.6227
Total	**8.1000e-004**	**8.4300e-003**	**0.0119**	**2.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.6101**	**1.6101**	**5.0000e-004**	**0.0000**	**1.6227**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.4900e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4268	0.4268	1.0000e-005	0.0000	0.4270
Total	**2.0000e-004**	**1.4000e-004**	**1.4900e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4268**	**0.4268**	**1.0000e-005**	**0.0000**	**0.4270**

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	4.1000e-004	5.5000e-003	0.0138	2.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.6101	1.6101	5.0000e-004	0.0000	1.6227
Total	**4.1000e-004**	**5.5000e-003**	**0.0138**	**2.0000e-005**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**1.6101**	**1.6101**	**5.0000e-004**	**0.0000**	**1.6227**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.4900e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4268	0.4268	1.0000e-005	0.0000	0.4270
Total	**2.0000e-004**	**1.4000e-004**	**1.4900e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4268**	**0.4268**	**1.0000e-005**	**0.0000**	**0.4270**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9000e-004	5.8900e-003	6.4000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	0.8361	0.8361	2.6000e-004	0.0000	0.8427
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-003**	**5.8900e-003**	**6.4000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.6000e-004**	**0.0000**	**0.8427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0657
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0657**	**0.0657**	**0.0000**	**0.0000**	**0.0657**

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	1.6000e-004	7.6000e-004	7.1300e-003	1.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.8361	0.8361	2.6000e-004	0.0000	0.8427
Paving	4.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.7000e-004**	**7.6000e-004**	**7.1300e-003**	**1.0000e-005**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.8361**	**0.8361**	**2.6000e-004**	**0.0000**	**0.8427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0657
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0657**	**0.0657**	**0.0000**	**0.0000**	**0.0657**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1000e-004	7.6000e-004	9.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
Total	**0.0263**	**7.6000e-004**	**9.1000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.1277**	**0.1277**	**1.0000e-005**	**0.0000**	**0.1279**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0131	0.0131	0.0000	0.0000	0.0131
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0131**	**0.0131**	**0.0000**	**0.0000**	**0.0131**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-005	6.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
Total	**0.0262**	**6.0000e-005**	**9.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.1277**	**0.1277**	**1.0000e-005**	**0.0000**	**0.1279**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0131	0.0131	0.0000	0.0000	0.0131
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0131**	**0.0131**	**0.0000**	**0.0000**	**0.0131**

Pacific Surfacing Operation Only

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.00	3,000.00	0
Other Non-Asphalt Surfaces	0.61	1000sqft	0.01	605.00	0
Other Asphalt Surfaces	4.42	1000sqft	0.10	4,420.00	0
Parking Lot	23.00	Space	0.21	29,500.00	0
Health Club	0.64	1000sqft	0.01	635.00	0
City Park	0.09	Acre	0.09	3,872.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Demolition -

Vehicle Trips - CalEEMod Note 6

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Construction Phase - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Grading -

Consumer Products -

Area Coating -

Fleet Mix - CalEEMod Note 6

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.33
tblFleetMix	LDA	0.61	0.65
tblFleetMix	LDA	0.61	0.00
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.18
tblFleetMix	LHD2	5.0070e-003	0.00
tblFleetMix	LHD2	5.0070e-003	0.06
tblFleetMix	MCY	5.3120e-003	5.6403e-003
tblFleetMix	MCY	5.3120e-003	0.00
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	7.4000e-004	0.00
tblFleetMix	MH	7.4000e-004	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.43
tblFleetMix	OBUS	2.1440e-003	0.00
tblFleetMix	OBUS	2.1440e-003	0.00
tblFleetMix	SBUS	6.2700e-004	0.00
tblFleetMix	SBUS	6.2700e-004	0.00
tblFleetMix	UBUS	1.5480e-003	0.00
tblFleetMix	UBUS	1.5480e-003	0.00
tblLandUse	LandUseSquareFeet	610.00	605.00
tblLandUse	LandUseSquareFeet	9,200.00	29,500.00

tblLandUse	LandUseSquareFeet	640.00	635.00
tblLandUse	LandUseSquareFeet	3,920.40	3,872.00
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	20.87	81.25
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	14.00
tblVehicleTrips	SU_TR	26.73	81.25
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	14.00
tblVehicleTrips	WD_TR	32.93	81.25
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	14.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Energy	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	3.8938	3.8938	3.7000e-004	1.0000e-004	3.9323
Mobile	0.0358	0.6234	0.3562	2.4200e-003	0.1115	2.0800e-003	0.1136	0.0310	1.9800e-003	0.0330	0.0000	228.4787	228.4787	7.8700e-003	0.0000	228.6754
Waste						0.0000	0.0000		0.0000	0.0000	1.3154	0.0000	1.3154	0.0777	0.0000	3.2588
Water						0.0000	0.0000		0.0000	0.0000	0.2321	0.4126	0.6447	0.0239	5.7000e-004	1.4134
Total	**0.0550**	**0.6247**	**0.3576**	**2.4300e-003**	**0.1115**	**2.1800e-003**	**0.1137**	**0.0310**	**2.0800e-003**	**0.0331**	**1.5475**	**232.7857**	**234.3331**	**0.1099**	**6.7000e-004**	**237.2805**

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	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Energy	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	3.8938	3.8938	3.7000e-004	1.0000e-004	3.9323
Mobile	0.0358	0.6234	0.3562	2.4200e-003	0.1115	2.0800e-003	0.1136	0.0310	1.9800e-003	0.0330	0.0000	228.4787	228.4787	7.8700e-003	0.0000	228.6754
Waste						0.0000	0.0000		0.0000	0.0000	1.3154	0.0000	1.3154	0.0777	0.0000	3.2588
Water						0.0000	0.0000		0.0000	0.0000	0.2321	0.4126	0.6447	0.0239	5.7000e-004	1.4134
Total	**0.0550**	**0.6247**	**0.3576**	**2.4300e-003**	**0.1115**	**2.1800e-003**	**0.1137**	**0.0310**	**2.0800e-003**	**0.0331**	**1.5475**	**232.7857**	**234.3331**	**0.1099**	**6.7000e-004**	**237.2805**

	ROG	NOx	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**

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	0.0358	0.6234	0.3562	2.4200e-003	0.1115	2.0800e-003	0.1136	0.0310	1.9800e-003	0.0330	0.0000	228.4787	228.4787	7.8700e-003	0.0000	228.6754
Unmitigated	0.0358	0.6234	0.3562	2.4200e-003	0.1115	2.0800e-003	0.1136	0.0310	1.9800e-003	0.0330	0.0000	228.4787	228.4787	7.8700e-003	0.0000	228.6754

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	52.00	52.00	52.00	145,212	145,212
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	42.00	42.00	42.00	131,446	131,446
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	94.00	94.00	94.00	276,658	276,658

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
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Health Club	0.648230	0.039048	0.194400	0.112682	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005640	0.000000	0.000000
Other Non-Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Parking Lot	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.176708	0.061387	0.428571	0.333333	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Other Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.4444	2.4444	3.4000e-004	7.0000e-005	2.4742
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.4444	2.4444	3.4000e-004	7.0000e-005	2.4742
NaturalGas Mitigated	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4494	1.4494	3.0000e-005	3.0000e-005	1.4580
NaturalGas Unmitigated	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4494	1.4494	3.0000e-005	3.0000e-005	1.4580

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					
City Park	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
Health Club	16751.3	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8939	0.8939	2.0000e-005	2.0000e-005	0.8992
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5555	0.5555	1.0000e-005	1.0000e-005	0.5588
Total		**1.5000e-004**	**1.3300e-003**	**1.1200e-003**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**1.4494**	**1.4494**	**3.0000e-005**	**3.0000e-005**	**1.4581**

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					
City Park	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
Health Club	16751.3	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8939	0.8939	2.0000e-005	2.0000e-005	0.8992
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5555	0.5555	1.0000e-005	1.0000e-005	0.5588
Total		**1.5000e-004**	**1.3300e-003**	**1.1200e-003**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**1.4494**	**1.4494**	**3.0000e-005**	**3.0000e-005**	**1.4581**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	5245.1	0.4901	7.0000e-005	1.0000e-005	0.4961
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10325	0.9648	1.4000e-004	3.0000e-005	0.9765
Unrefrigerated Warehouse-No Rail	10590	0.9895	1.4000e-004	3.0000e-005	1.0016
Total		**2.4444**	**3.5000e-004**	**7.0000e-005**	**2.4742**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	5245.1	0.4901	7.0000e-005	1.0000e-005	0.4961
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10325	0.9648	1.4000e-004	3.0000e-005	0.9765
Unrefrigerated Warehouse-No Rail	10590	0.9895	1.4000e-004	3.0000e-005	1.0016
Total		**2.4444**	**3.5000e-004**	**7.0000e-005**	**2.4742**

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	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Unmitigated	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Total	**0.0191**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**0.0000**	**0.0000**	**6.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Total	**0.0191**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**0.0000**	**0.0000**	**6.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6447	0.0239	5.7000e-004	1.4134
Unmitigated	0.6447	0.0239	5.7000e-004	1.4134

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.107233	0.0351	0.0000	0.0000	0.0355
Health Club	0.0378516 / 0.0231004	0.0387	1.2400e-003	3.0000e-005	0.0786
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.69375 / 0	0.5709	0.0227	5.4000e-004	1.2994
Total		**0.6447**	**0.0239**	**5.7000e-004**	**1.4134**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.107233	0.0351	0.0000	0.0000	0.0355
Health Club	0.0378516 / 0.023100[illegible]	0.0387	1.2400e-003	3.0000e-005	0.0786
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.69375 / 0	0.5709	0.0227	5.4000e-004	1.2994
Total		**0.6447**	**0.0239**	**5.7000e-004**	**1.4134**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.3154	0.0777	0.0000	3.2588
Unmitigated	1.3154	0.0777	0.0000	3.2588

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Health Club	3.65	0.7409	0.0438	0.0000	1.8356
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.82	0.5724	0.0338	0.0000	1.4182
Total		**1.3154**	**0.0777**	**0.0000**	**3.2588**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Health Club	3.65	0.7409	0.0438	0.0000	1.8356
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.82	0.5724	0.0338	0.0000	1.4182
Total		**1.3154**	**0.0777**	**0.0000**	**3.2588**

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

Pacific Surfacing Operation Only

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.00	3,000.00	0
Other Non-Asphalt Surfaces	0.61	1000sqft	0.01	605.00	0
Other Asphalt Surfaces	4.42	1000sqft	0.10	4,420.00	0
Parking Lot	23.00	Space	0.21	29,500.00	0
Health Club	0.64	1000sqft	0.01	635.00	0
City Park	0.09	Acre	0.09	3,872.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Vehicle Trips - CalEEMod Note 6

Construction Phase - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Fleet Mix - CalEEMod Note 6

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.33
tblFleetMix	LDA	0.61	0.65
tblFleetMix	LDA	0.61	0.00
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.18
tblFleetMix	LHD2	5.0070e-003	0.00
tblFleetMix	LHD2	5.0070e-003	0.06
tblFleetMix	MCY	5.3120e-003	5.6403e-003
tblFleetMix	MCY	5.3120e-003	0.00
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	7.4000e-004	0.00
tblFleetMix	MH	7.4000e-004	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.43
tblFleetMix	OBUS	2.1440e-003	0.00
tblFleetMix	OBUS	2.1440e-003	0.00
tblFleetMix	SBUS	6.2700e-004	0.00
tblFleetMix	SBUS	6.2700e-004	0.00
tblFleetMix	UBUS	1.5480e-003	0.00
tblFleetMix	UBUS	1.5480e-003	0.00
tblLandUse	LandUseSquareFeet	610.00	605.00
tblLandUse	LandUseSquareFeet	9,200.00	29,500.00

tblLandUse	LandUseSquareFeet	640.00	635.00
tblLandUse	LandUseSquareFeet	3,920.40	3,872.00
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	20.87	81.25
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	14.00
tblVehicleTrips	SU_TR	26.73	81.25
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	14.00
tblVehicleTrips	WD_TR	32.93	81.25
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	14.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Energy	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067
Mobile	0.2052	3.3706	1.9703	0.0136	0.6328	0.0114	0.6442	0.1752	0.0108	0.1860		1,413.6695	1,413.6695	0.0469		1,414.8427
Total	**0.3108**	**3.3779**	**1.9797**	**0.0136**	**0.6328**	**0.0119**	**0.6447**	**0.1752**	**0.0114**	**0.1866**		**1,422.4311**	**1,422.4311**	**0.0471**	**1.6000e-004**	**1,423.6567**

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	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Energy	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067
Mobile	0.2052	3.3706	1.9703	0.0136	0.6328	0.0114	0.6442	0.1752	0.0108	0.1860		1,413.6695	1,413.6695	0.0469		1,414.8427
Total	**0.3108**	**3.3779**	**1.9797**	**0.0136**	**0.6328**	**0.0119**	**0.6447**	**0.1752**	**0.0114**	**0.1866**		**1,422.4311**	**1,422.4311**	**0.0471**	**1.6000e-004**	**1,423.6567**

	ROG	NOx	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**

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	0.2052	3.3706	1.9703	0.0136	0.6328	0.0114	0.6442	0.1752	0.0108	0.1860		1,413.6695	1,413.6695	0.0469		1,414.8427
Unmitigated	0.2052	3.3706	1.9703	0.0136	0.6328	0.0114	0.6442	0.1752	0.0108	0.1860		1,413.6695	1,413.6695	0.0469		1,414.8427

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	52.00	52.00	52.00	145,212	145,212
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	42.00	42.00	42.00	131,446	131,446
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	94.00	94.00	94.00	276,658	276,658

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
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Health Club	0.648230	0.039048	0.194400	0.112682	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005640	0.000000	0.000000
Other Non-Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Parking Lot	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.176708	0.061387	0.428571	0.333333	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Other Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067
NaturalGas Unmitigated	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067

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					
City Park	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
Health Club	45.894	4.9000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3993	5.3993	1.0000e-004	1.0000e-004	5.4314
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	28.5205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**8.0000e-004**	**7.3000e-003**	**6.1300e-003**	**5.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**		**8.7547**	**8.7547**	**1.6000e-004**	**1.6000e-004**	**8.8067**

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					
City Park	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
Health Club	0.045894	4.9000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3993	5.3993	1.0000e-004	1.0000e-004	5.4314
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	0.0285205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**8.0000e-004**	**7.3000e-003**	**6.1300e-003**	**5.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**		**8.7547**	**8.7547**	**1.6000e-004**	**1.6000e-004**	**8.8067**

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	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Unmitigated	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0902					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Total	**0.1049**	**3.0000e-005**	**3.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.9500e-003**	**6.9500e-003**	**2.0000e-005**		**7.4100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0902					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Total	**0.1049**	**3.0000e-005**	**3.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.9500e-003**	**6.9500e-003**	**2.0000e-005**		**7.4100e-003**

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

Pacific Surfacing Operation Only

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.00	3,000.00	0
Other Non-Asphalt Surfaces	0.61	1000sqft	0.01	605.00	0
Other Asphalt Surfaces	4.42	1000sqft	0.10	4,420.00	0
Parking Lot	23.00	Space	0.21	29,500.00	0
Health Club	0.64	1000sqft	0.01	635.00	0
City Park	0.09	Acre	0.09	3,872.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Vehicle Trips - CalEEMod Note 6

Construction Phase - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Fleet Mix - CalEEMod Note 6

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.33
tblFleetMix	LDA	0.61	0.65
tblFleetMix	LDA	0.61	0.00
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.18
tblFleetMix	LHD2	5.0070e-003	0.00
tblFleetMix	LHD2	5.0070e-003	0.06
tblFleetMix	MCY	5.3120e-003	5.6403e-003
tblFleetMix	MCY	5.3120e-003	0.00
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	7.4000e-004	0.00
tblFleetMix	MH	7.4000e-004	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.43
tblFleetMix	OBUS	2.1440e-003	0.00
tblFleetMix	OBUS	2.1440e-003	0.00
tblFleetMix	SBUS	6.2700e-004	0.00
tblFleetMix	SBUS	6.2700e-004	0.00
tblFleetMix	UBUS	1.5480e-003	0.00
tblFleetMix	UBUS	1.5480e-003	0.00
tblLandUse	LandUseSquareFeet	610.00	605.00
tblLandUse	LandUseSquareFeet	9,200.00	29,500.00

tblLandUse	LandUseSquareFeet	640.00	635.00
tblLandUse	LandUseSquareFeet	3,920.40	3,872.00
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	20.87	81.25
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	14.00
tblVehicleTrips	SU_TR	26.73	81.25
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	14.00
tblVehicleTrips	WD_TR	32.93	81.25
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	14.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Energy	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067
Mobile	0.1992	3.4410	2.0443	0.0132	0.6328	0.0116	0.6443	0.1752	0.0110	0.1862		1,370.2602	1,370.2602	0.0492		1,371.4894
Total	**0.3049**	**3.4483**	**2.0537**	**0.0132**	**0.6328**	**0.0121**	**0.6449**	**0.1752**	**0.0116**	**0.1867**		**1,379.0218**	**1,379.0218**	**0.0494**	**1.6000e-004**	**1,380.3034**

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	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Energy	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067
Mobile	0.1992	3.4410	2.0443	0.0132	0.6328	0.0116	0.6443	0.1752	0.0110	0.1862		1,370.2602	1,370.2602	0.0492		1,371.4894
Total	**0.3049**	**3.4483**	**2.0537**	**0.0132**	**0.6328**	**0.0121**	**0.6449**	**0.1752**	**0.0116**	**0.1867**		**1,379.0218**	**1,379.0218**	**0.0494**	**1.6000e-004**	**1,380.3034**

	ROG	NOx	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**

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	0.1992	3.4410	2.0443	0.0132	0.6328	0.0116	0.6443	0.1752	0.0110	0.1862		1,370.2602	1,370.2602	0.0492		1,371.4894
Unmitigated	0.1992	3.4410	2.0443	0.0132	0.6328	0.0116	0.6443	0.1752	0.0110	0.1862		1,370.2602	1,370.2602	0.0492		1,371.4894

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	52.00	52.00	52.00	145,212	145,212
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	42.00	42.00	42.00	131,446	131,446
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	94.00	94.00	94.00	276,658	276,658

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
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Health Club	0.648230	0.039048	0.194400	0.112682	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005640	0.000000	0.000000
Other Non-Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Parking Lot	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.176708	0.061387	0.428571	0.333333	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Other Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067
NaturalGas Unmitigated	8.0000e-004	7.3000e-003	6.1300e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004		8.7547	8.7547	1.7000e-004	1.6000e-004	8.8067

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					
City Park	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
Health Club	45.894	4.9000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3993	5.3993	1.0000e-004	1.0000e-004	5.4314
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	28.5205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**8.0000e-004**	**7.3000e-003**	**6.1300e-003**	**5.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**		**8.7547**	**8.7547**	**1.6000e-004**	**1.6000e-004**	**8.8067**

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					
City Park	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
Health Club	0.045894	4.9000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3993	5.3993	1.0000e-004	1.0000e-004	5.4314
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	0.0285205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**8.0000e-004**	**7.3000e-003**	**6.1300e-003**	**5.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**		**8.7547**	**8.7547**	**1.6000e-004**	**1.6000e-004**	**8.8067**

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	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Unmitigated	0.1049	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0902					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Total	**0.1049**	**3.0000e-005**	**3.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.9500e-003**	**6.9500e-003**	**2.0000e-005**		**7.4100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0902					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.9500e-003	6.9500e-003	2.0000e-005		7.4100e-003
Total	**0.1049**	**3.0000e-005**	**3.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.9500e-003**	**6.9500e-003**	**2.0000e-005**		**7.4100e-003**

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

Pacific Surfacing 2030 Operation Only

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.00	3,000.00	0
Other Non-Asphalt Surfaces	0.61	1000sqft	0.01	605.00	0
Other Asphalt Surfaces	4.42	1000sqft	0.10	4,420.00	0
Parking Lot	23.00	Space	0.21	29,500.00	0
Health Club	0.64	1000sqft	0.01	635.00	0
City Park	0.09	Acre	0.09	3,872.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Vehicle Trips - CalEEMod Note 6

Construction Phase - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Fleet Mix - CalEEMod Note 6

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.33
tblFleetMix	LDA	0.62	0.66
tblFleetMix	LDA	0.62	0.00
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT1	0.03	0.00
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.17
tblFleetMix	LHD2	5.0600e-003	0.00
tblFleetMix	LHD2	5.0600e-003	0.07
tblFleetMix	MCY	5.1220e-003	5.4368e-003
tblFleetMix	MCY	5.1220e-003	0.00
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	6.5100e-004	0.00
tblFleetMix	MH	6.5100e-004	0.00
tblFleetMix	MHD	0.01	0.00

tblFleetMix	MHD	0.01	0.43
tblFleetMix	OBUS	2.2210e-003	0.00
tblFleetMix	OBUS	2.2210e-003	0.00
tblFleetMix	SBUS	6.4600e-004	0.00
tblFleetMix	SBUS	6.4600e-004	0.00
tblFleetMix	UBUS	1.4700e-003	0.00
tblFleetMix	UBUS	1.4700e-003	0.00
tblLandUse	LandUseSquareFeet	610.00	605.00
tblLandUse	LandUseSquareFeet	9,200.00	29,500.00
tblLandUse	LandUseSquareFeet	640.00	635.00
tblLandUse	LandUseSquareFeet	3,920.40	3,872.00
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	20.87	81.25
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.68	14.00
tblVehicleTrips	SU_TR	26.73	81.25
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.68	14.00
tblVehicleTrips	WD_TR	32.93	81.25
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	1.68	14.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Energy	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	3.8938	3.8938	3.7000e-004	1.0000e-004	3.9323
Mobile	0.0237	0.4163	0.2449	2.1700e-003	0.1116	1.0700e-003	0.1127	0.0310	1.0100e-003	0.0320	0.0000	206.2593	206.2593	5.7000e-003	0.0000	206.4020
Waste						0.0000	0.0000		0.0000	0.0000	1.3154	0.0000	1.3154	0.0777	0.0000	3.2588
Water						0.0000	0.0000		0.0000	0.0000	0.2321	0.4126	0.6447	0.0239	5.7000e-004	1.4134
Total	**0.0429**	**0.4176**	**0.2463**	**2.1800e-003**	**0.1116**	**1.1700e-003**	**0.1128**	**0.0310**	**1.1100e-003**	**0.0321**	**1.5475**	**210.5663**	**212.1138**	**0.1077**	**6.7000e-004**	**215.0070**

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	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Energy	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	3.8938	3.8938	3.7000e-004	1.0000e-004	3.9323
Mobile	0.0237	0.4163	0.2449	2.1700e-003	0.1116	1.0700e-003	0.1127	0.0310	1.0100e-003	0.0320	0.0000	206.2593	206.2593	5.7000e-003	0.0000	206.4020
Waste						0.0000	0.0000		0.0000	0.0000	1.3154	0.0000	1.3154	0.0777	0.0000	3.2588
Water						0.0000	0.0000		0.0000	0.0000	0.2321	0.4126	0.6447	0.0239	5.7000e-004	1.4134
Total	**0.0429**	**0.4176**	**0.2463**	**2.1800e-003**	**0.1116**	**1.1700e-003**	**0.1128**	**0.0310**	**1.1100e-003**	**0.0321**	**1.5475**	**210.5663**	**212.1138**	**0.1077**	**6.7000e-004**	**215.0070**

	ROG	NOx	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

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	0.0237	0.4163	0.2449	2.1700e-003	0.1116	1.0700e-003	0.1127	0.0310	1.0100e-003	0.0320	0.0000	206.2593	206.2593	5.7000e-003	0.0000	206.4020
Unmitigated	0.0237	0.4163	0.2449	2.1700e-003	0.1116	1.0700e-003	0.1127	0.0310	1.0100e-003	0.0320	0.0000	206.2593	206.2593	5.7000e-003	0.0000	206.4020

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	52.00	52.00	52.00	145,212	145,212
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	42.00	42.00	42.00	131,446	131,446
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	94.00	94.00	94.00	276,658	276,658

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
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Health Club	0.659738	0.036149	0.191206	0.107470	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005437	0.000000	0.000000
Other Non-Asphalt Surfaces	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Parking Lot	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.166888	0.071208	0.428571	0.333333	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Other Asphalt Surfaces	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.4444	2.4444	3.4000e-004	7.0000e-005	2.4742
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.4444	2.4444	3.4000e-004	7.0000e-005	2.4742
NaturalGas Mitigated	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4494	1.4494	3.0000e-005	3.0000e-005	1.4580
NaturalGas Unmitigated	1.5000e-004	1.3300e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4494	1.4494	3.0000e-005	3.0000e-005	1.4580

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					
City Park	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
Health Club	16751.3	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8939	0.8939	2.0000e-005	2.0000e-005	0.8992
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5555	0.5555	1.0000e-005	1.0000e-005	0.5588
Total		**1.5000e-004**	**1.3300e-003**	**1.1200e-003**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**1.4494**	**1.4494**	**3.0000e-005**	**3.0000e-005**	**1.4581**

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					
City Park	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
Health Club	16751.3	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8939	0.8939	2.0000e-005	2.0000e-005	0.8992
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	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	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5555	0.5555	1.0000e-005	1.0000e-005	0.5588
Total		**1.5000e-004**	**1.3300e-003**	**1.1200e-003**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**1.4494**	**1.4494**	**3.0000e-005**	**3.0000e-005**	**1.4581**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	5245.1	0.4901	7.0000e-005	1.0000e-005	0.4961
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10325	0.9648	1.4000e-004	3.0000e-005	0.9765
Unrefrigerated Warehouse-No Rail	10590	0.9895	1.4000e-004	3.0000e-005	1.0016
Total		**2.4444**	**3.5000e-004**	**7.0000e-005**	**2.4742**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	5245.1	0.4901	7.0000e-005	1.0000e-005	0.4961
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10325	0.9648	1.4000e-004	3.0000e-005	0.9765
Unrefrigerated Warehouse-No Rail	10590	0.9895	1.4000e-004	3.0000e-005	1.0016
Total		**2.4444**	**3.5000e-004**	**7.0000e-005**	**2.4742**

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	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Unmitigated	0.0191	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Total	**0.0191**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**0.0000**	**0.0000**	**6.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.0000e-004
Total	**0.0191**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.7000e-004**	**5.7000e-004**	**0.0000**	**0.0000**	**6.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6447	0.0239	5.7000e-004	1.4134
Unmitigated	0.6447	0.0239	5.7000e-004	1.4134

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.107233	0.0351	0.0000	0.0000	0.0355
Health Club	0.0378516 / 0.023199	0.0387	1.2400e-003	3.0000e-005	0.0786
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.69375 / 0	0.5709	0.0227	5.4000e-004	1.2994
Total		**0.6447**	**0.0239**	**5.7000e-004**	**1.4134**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.107233	0.0351	0.0000	0.0000	0.0355
Health Club	0.0378516 / 0.023199	0.0387	1.2400e-003	3.0000e-005	0.0786
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.69375 / 0	0.5709	0.0227	5.4000e-004	1.2994
Total		**0.6447**	**0.0239**	**5.7000e-004**	**1.4134**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.3154	0.0777	0.0000	3.2588
Unmitigated	1.3154	0.0777	0.0000	3.2588

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Health Club	3.65	0.7409	0.0438	0.0000	1.8356
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.82	0.5724	0.0338	0.0000	1.4182
Total		**1.3154**	**0.0777**	**0.0000**	**3.2588**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Health Club	3.65	0.7409	0.0438	0.0000	1.8356
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.82	0.5724	0.0338	0.0000	1.4182
Total		**1.3154**	**0.0777**	**0.0000**	**3.2588**

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

Pacific Surfacing Project
Air Dispersion Modeling and Health Risk Assessment Methodology

Model Assumptions and Methodology

The BAAQMD has developed a set of guidelines[1] that recommends using the American Meteorological Society and Environmental Protection Agency Regulatory Model (AERMOD) air dispersion model to estimate emission concentrations for use in identifying the cancer risk and hazard index associated with sensitive receptor exposure to project construction emissions. The following modeling parameters were employed using AERMOD, Version 19191, to estimate DPM and $PM_{2.5}$ emission concentrations that were used in the associated cancer risk and hazard calculations.

AERMOD Modeling Parameters

1. Sensitive receptors (e.g., schools, daycare facilities, hospitals, care facilities, residences) that are located in the project vicinity are represented in the model with discrete cartesian receptors. The closest sensitive receptor to the project site is a single-family residence, approximately 65 feet southeast of the project site. A nested cartesian grid was also placed in AERMOD with the following spacing parameters:
   - 20 meters spacing from the project site boundaries to 200 meters from the project site;
   - 50 meters spacing between 200 and 500 meters from the project site; and
   - 250 meters spacing to between 500 and 2,000 meters from the project site.
2. AERMOD's non-default regulatory dispersion option was selected. Among the dispersion control options available, the Fast All Sources option was selected.
3. The Urban dispersion coefficient was used as greater than 50 percent of the surrounding three kilometers is developed.
4. The UTM coordinates used to initially locate the project site are 10 S, 585,703 meters easting and 4,134,320 meters northing.
5. Construction emissions were represented in the model using two separate area sources. For the emissions occurring from on-site construction activities, one polygon area source was placed across the entire project site. For off-site heavy-duty vehicle operation, one line area source was placed on State Street within 1,000 feet northeast of the project site, consistent with the Local Transportation Analysis prepared for the project. Off-site emissions were adjusted to only account for off-site emissions that would occur within 1,000 feet of the project site (see Off-Site $PM_{2.5}$ Exhaust Adjustment Sheet of this Appendix). As shown therein, each line area source was assigned an emission rate equal to its proportion of the off-site emissions based on the length of the respective line area source divided by the combined length of all line area source(s).
6. Variable emission factors were selected to represent the operating hours of construction activities for the project. The project applicant indicated that operating hours would not exceed 8 hours per day, 5 days per week. Therefore, the variable emission factor applied in AERMOD

[1] Bay Area Air Quality Management District (BAAQMD). 2020. BAAQMD Health Risk Assessment Modeling Protocol. December. Website: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed April 13, 2021.

consisted of a factor of 3.0 for 8 working hours Monday through Friday and 0.0 for nonworking hours Monday through Friday and for all hours Saturday and Sunday.

7. Meteorological data from the Moffett Federal Airfield Air Monitoring Station, Station ID 23244. This station was selected as it is the closest monitoring station to the project site, and it resembles physical site characteristics and elevation generally representative of the project site. The Moffett Federal Airfield Air Monitoring Station provides preprocessed meteorological data covering the years 2009-2014. The model used all years of available meteorological data.

Cancer Risk Calculations

The BAAQMD has developed a set of guidelines for estimating cancer risks resulting from exposure to toxic air contaminants (TAC).[2,3] These guidelines require the use of Hotspots Analysis and Reporting Program (HARP2) software to identify the cancer risk associated with DPM generated during construction activities. The HARP2 risk scenario inputs used to calculate cancer risk during project construction are as follows:

1. The analysis type used in HARP2 was "Cancer Risk."
2. The receptor type used in HARP2 was "Individual Resident."
3. The Exposure Duration used in HARP2 was "User Defined (Tier 2)." A 3-year horizon with a start age of 3rd Trimester was selected for this input.
4. The Intake Rate Percentile used in HARP2 was "Risk Management Policy (RMP) - *Inhalation Only*."
5. The "Apply Molecular Weight Adjustment Factor" factor was selected.
6. Inhalation only was the pathway selected for evaluation in HARP2.
7. The fraction of time at residence factor was selected for age bins greater than or equal to 16 years and age bins less than 16 years on the Inhalation scenario tab in HARP2.
8. The Tier 2 breathing rates and the Tier 2 fraction of time at residence factors were selected on the Inhalation scenario tab in HARP2.

$PM_{2.5}$ exhaust emissions were used in AERMOD as a surrogate pollutant to estimate concentrations of diesel particulate matter (DPM) emissions during project construction. Table 1 and Table 2 summarize the cancer risk and hazard index results for project construction at the maximally impacted receptors (MIR), a single-family residence approximately 70 feet south of the project site with and without implementation of MM AIR-2, which requires the use of Tier 4 engines for all construction equipment equal to or greater than 50 horsepower.

[2] Bay Area Air Quality Management District (BAAQMD). 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines. December. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en. Accessed April 13, 2021.

[3] Bay Area Air Quality Management District (BAAQMD). 2020. BAAQMD Health Risk Assessment Modeling Protocol. August. Website: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed April 13, 2021.

Table 1: Estimated Cancer Risks and Chronic Non-Cancer Hazards Without Implementation of MM AIR-2

HARP2 Scenario	Risk Sum (from HARP2)	Cancer Risk (risk per million)[1]	Chronic Non-Cancer Hazard Index[2]	TAC Concentration (from AERMOD)[3]
3 Year, Cancer Risk, High End, Inhalation, FAH 3 to 70, 3rd Trimester to 70	1.1494e-05	11.49	0.007	0.04
Thresholds of Significance		**10**	**1**	**0.3**
Exceeds Individual Source Threshold?		**Yes**	**No**	**No**

Notes:
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the reference exposure level of 5 µg/m^3.
[3] TAC concentration taken from AERMOD is always at the MIR identified during the original construction air dispersion model (a single-family residence approximately 70 feet southeast of the project site).
REL = reference exposure level
MIR = maximally impacted sensitive receptor
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 15, 2021.

Table 2: Estimated Cancer Risks and Chronic Non-Cancer Hazards With Implementation of MM AIR-2

HARP2 Scenario	Risk Sum (from HARP2)	Cancer Risk (risk per million)[1]	Chronic Non-Cancer Hazard Index[2]	TAC Concentration (from AERMOD)[3]
3 Year, Cancer Risk, High End, Inhalation, FAH 3 to 70, 3rd Trimester to 70	4.6293e-06	4.63	0.003	<0.1
Thresholds of Significance		**10**	**1**	**0.3**
Exceeds Individual Source Threshold?		**No**	**No**	**No**

Notes:
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the reference exposure level of 5 µg/m^3.
[3] TAC concentration taken from AERMOD is always at the MIR identified during the original construction air dispersion model (a single-family residence approximately 70 feet southeast of the project site).
REL = reference exposure level
MIR = maximally impacted sensitive receptor
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 15, 2021.

Project Construction Emissions

Annual Construction Emissions (tons/year)
(as taken from CalEEMod)

	$PM_{2.5}$ (Exhaust)
Onsite	0.00103
Offsite	0.00000
Site Preparation	**0.00103**
Onsite	0.00073
Offsite	0.00000
Grading	**0.00073**
Onsite	0.00135
Offsite	0.00002
Building Construction (Interior)	**0.00137**
Onsite	0.00035
Offsite	0.00000
Bioretention Installation	**0.00035**
Onsite	0.00030
Offsite	0.00000
Paving	**0.00030**
Onsite	0.00005
Offsite	0.00000
Architectural Coating	**0.00005**
Total Onsite	**0.00381**
Total Offsite	**0.00002**

Exhaust $PM_{2.5}$ AERMOD Inputs

Construction Hours	**264.00**	**(8 hours/day, 33 workdays)**
Elapsed Hours	**792.00**	
Variable Factor	**3.00**	
On-Site Emissions	**7.62**	**pounds**
	3,456.37	**grams**
	4.364E+00	**grams/hours**
	1.212E-03	**grams/sec**
Off-Site Emissions	**0.04**	**pounds**
	18.14	**grams**
	2.291E-02	**grams/hour**
	6.364E-06	**grams/sec**

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	$PM_{2.5}$ (Exhaust) Emission Rate (g/sec)
State Street	0.2	100.00%	**1.743E-07**
Totals	*0.2*	*100.00%*	*1.743E-07*

Notes:
[1] Conversion factor of 453.592 grams/pound was used to convert daily emissions expressed in pounds to daily emissions expressed in grams.
[2] Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site.

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Off-Site Hauling & Vendor Trips

Phase Name	Days	Vendor Trip Number (Daily)	Hauling Trip Number (Total)	Vendor Trip Length	Hauling Trip Length
Site Preparation	10	0	0	7.3	20
Grading	10	0	0	7.3	20
Building Construction (Interior)	15	7	0	7.3	20
Bioretention Installation	10	0	0	7.3	20
Paving	2	0	0	7.3	20
Architectural Coating	1	0	0	7.3	20
	Totals	**105**	**0**		

Diesel-Fueled Vehicle Results

	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	105	766.5
Hauling Trucks	0	0
Total VMT		**766.5**

AERMOD 1,000-ft Radius Adjustment

	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	105	21.0
Hauling Trucks	0	0
Total VMT		**21.0**

Proportion of off-site emissions occuring within 1,000 of project site:	**2.74%**

Mitigated Project Construction Emissions

Annual Construction Emissions (tons/year)
(as taken from CalEEMod)

	$PM_{2.5}$ (Exhaust)
Onsite	0.00005
Offsite	0.00000
Site Preparation	**0.00005**
Onsite	0.00004
Offsite	0.00000
Grading	**0.00004**
Onsite	0.00006
Offsite	0.00002
Building Construction (Interior)	**0.00008**
Onsite	0.00005
Offsite	0.00000
Bioretention Installation	**0.00005**
Onsite	0.00003
Offsite	0.00000
Paving	**0.00003**
Onsite	0.00000
Offsite	0.00000
Architectural Coating	**0.00000**
Total Onsite	**2.30E-04**
Total Offsite	**2.00E-05**

Exhaust $PM_{2.5}$ AERMOD Inputs

Construction Hours	**264.00**	**(8 hours/day, 33 workdays)**
Elapsed Hours	**792.00**	
Variable Factor	**3.00**	
On-Site Emissions	**0.46**	**pounds**
	208.65	**grams**
	2.634E-01	**grams/hours**
	7.318E-05	**grams/sec**
Off-Site Emissions	**0.04**	**pounds**
	18.14	**grams**
	2.291E-02	**grams/hour**
	6.364E-06	**grams/sec**

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	$PM_{2.5}$ (Exhaust) Emission Rate (g/sec)
State Street	0.2	100.00%	**1.743E-07**
Totals	*0.2*	*100.00%*	*1.743E-07*

Notes:
[1] Conversion factor of 453.592 grams/pound was used to convert daily emissions expressed in pounds to daily emissions expressed in grams.
[2] Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site.

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Off-Site Hauling & Vendor Trips

Phase Name	Days	Vendor Trip Number (Daily)	Hauling Trip Number (Total)	Vendor Trip Length	Hauling Trip Length
Site Preparation	10	0	0	7.3	20
Grading	10	0	0	7.3	20
Building Construction (Interior)	15	7	0	7.3	20
Bioretention Installation	10	0	0	7.3	20
Paving	2	0	0	7.3	20
Architectural Coating	1	0	0	7.3	20
	Totals	**105**	**0**		

Diesel-Fueled Vehicle Results

	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	105	766.5
Hauling Trucks	0	0
Total VMT		**766.5**

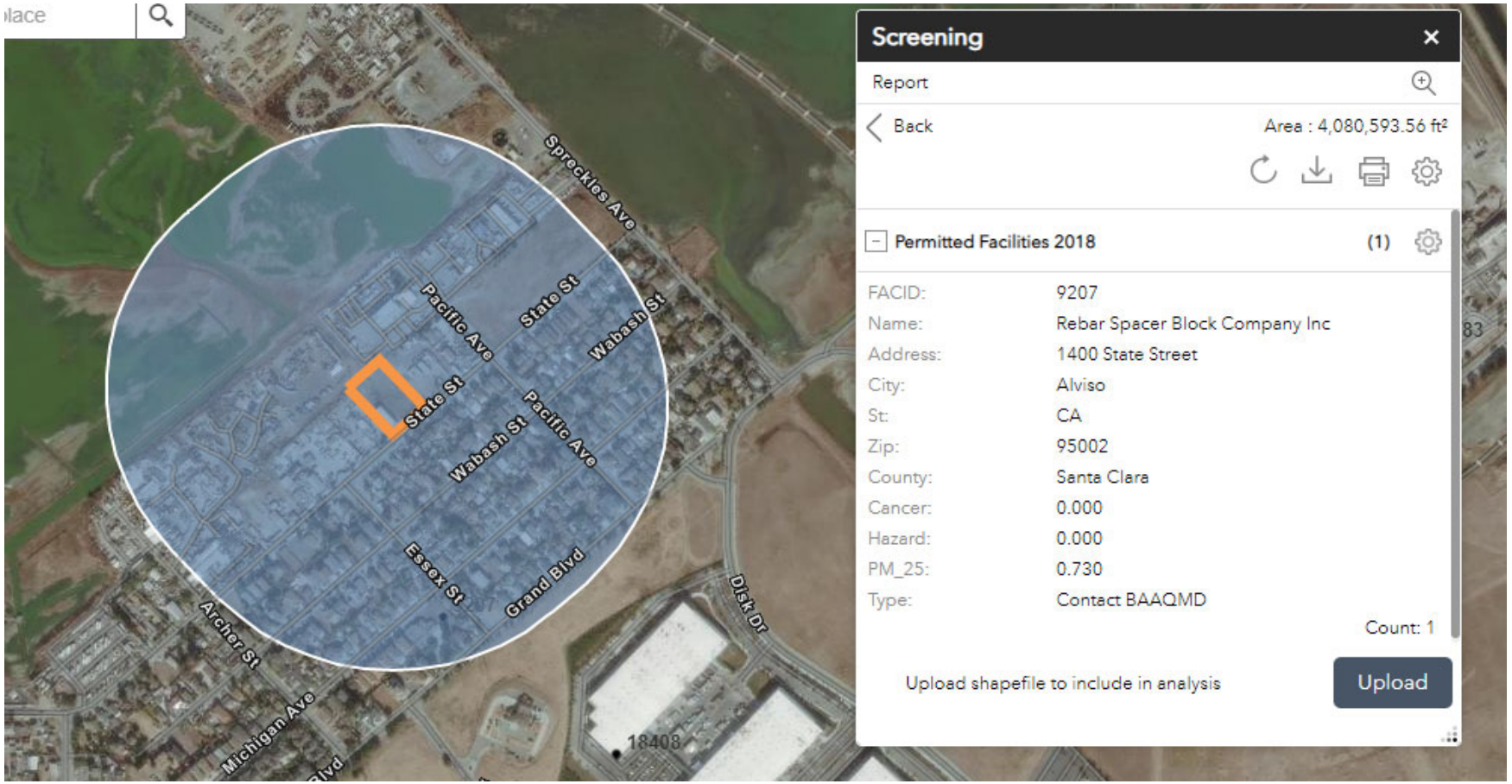
AERMOD 1,000-ft Radius Adjustment

	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	105	21.0
Hauling Trucks	0	0
Total VMT		**21.0**

Proportion of off-site emissions occuring within 1,000 of project site:	**2.74%**

Existing Stationary Sources within 1,000 Feet of the Project

Lat, Long Project Site: 37.43087°, -121.970266°
Lat, Long MIR: 37.430364°, -121.969952°



Stationary Source 1 out of 1

Stationary Source: Rebar Spacer Block Company, Inc.
Facility ID: 9207
Approximate distance from project site: 150 ft
Approximate distance from MIR: 180 ft

Health Risk at MIR
Cancer (per million): 6.777
Hazard: 0.002
PM 2.5 (ug/m3): 0.000

As calculated using BAAQMD's Health Risk Calculator (see below):

Total Cancer Risk	6.777	per 1,000,000
Total Chronic Hazard	0.002	
Total PM2.5 Concentration	0.000	µg/m^3

As shown on BAAQMD Stationary Source Map:

Rebar Spacer Block Company Inc

Facility ID	9207
Name	Rebar Spacer Block Company Inc
Address	1400 State Street
City	Alviso
St	CA
Zip	95002
County	Santa Clara
Cancer (per million)	0.000
Hazard	0.000
PM_2.5 (ug/m3)	0.730
Type	Contact BAAQMD
Latitude	37.428
Longitude	-121.969

Stationary Source 1 out of 1
Supporting Information

BAAQMD Provided Facility Information:

```
BAY AREA AIR QUALITY MANAGEMENT DISTRICT                Printed: JUL 29, 2020
DETAIL POLLUTANTS - ABATED
MOST RECENT P/O APPROVED (2020)

Rebar Spacer Block Company Inc  (P# 9207)

   S#  SOURCE NAME
MATERIAL             SOURCE CODE
   THROUGHPUT              DATE  POLLUTANT                    CODE  LBS/DAY
-------------------------------------------------------------------------------
    1  Concrete Batch Mixer System
                       G4028083
                                Particulates (part not spe  1990  5.84E-01
    2  Cement Silo
                       G4067065
                                Particulates (part not spe  1990  3.46E-03
    3  Concrete Batch Mixer
                       G4028083
                                Particulates (part not spe  1990  4.27E-03

  PLANT TOTAL:
  lbs/day  Pollutant

 5.92E-01  Particulates (part not spec elsewhere) (1990)
```

Total PM2.5 content: 7.09E-03 lbs/day

Note: No ARB speciation profile exists for pollutant code "1990;" therefore, Asphalt Concrete Batch Mixer Plant (Uncontrolled) was used to represent the source codes G4028083 and Cement Production was used to represent the source code G4067065, as shown below.

Concrete Batch Mixer System (G4028083):
5.84E-01 lbs/day
PM2.5 weight fraction: 0.0084
PM2.5 content:
4.91E-03 lbs/day

Cement Silo (G4067065):
3.46E-03 lbs/day
PM2.5 weight fraction: 0.62
PM2.5 content:
2.15E-03 lbs/day

Concrete Batch Mixer (G4028083):
4.72E-03 lbs/day
PM2.5 weight fraction: 0.0084
PM2.5 content:
3.96E-05 lbs/day

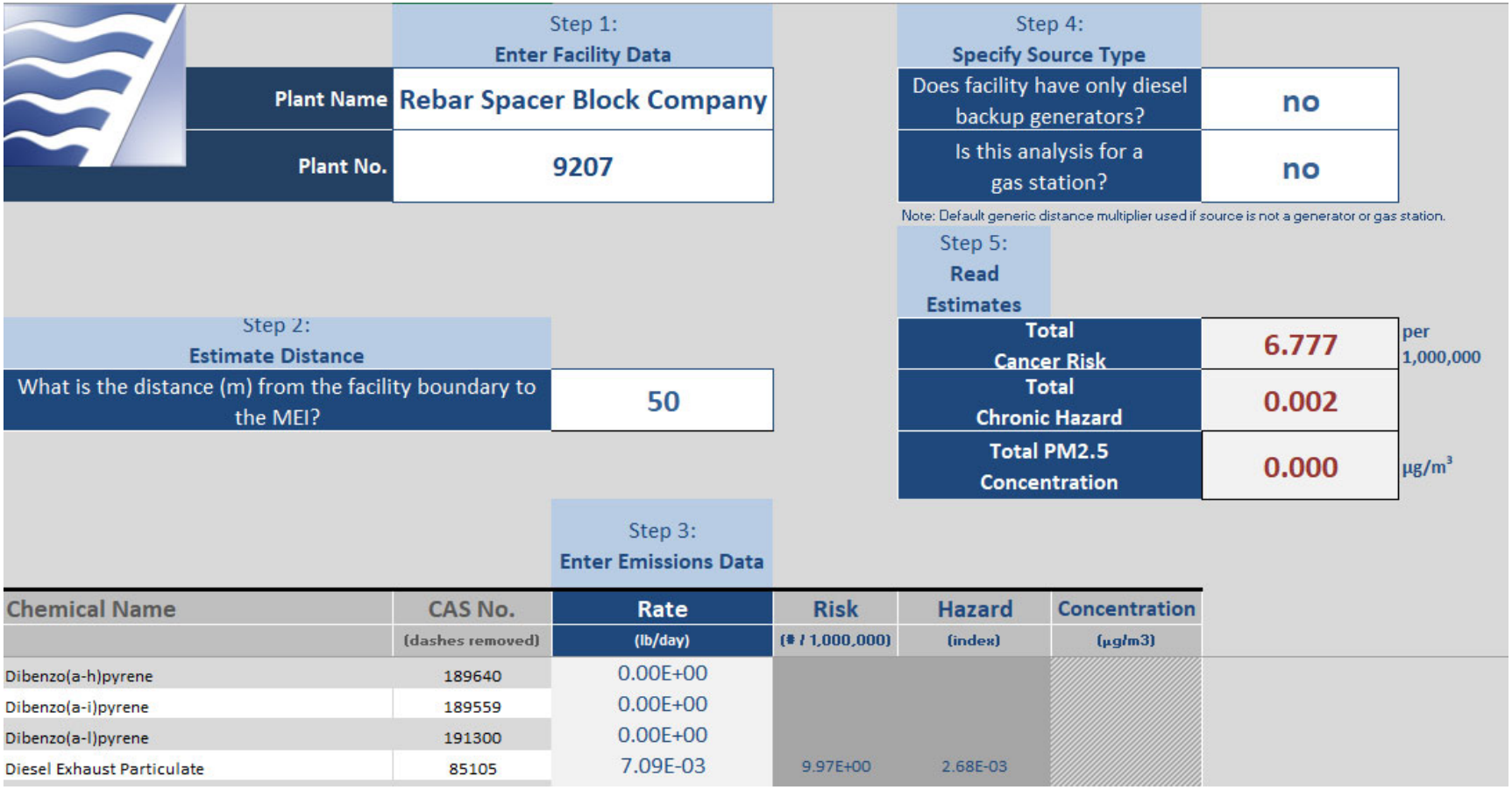
ARB PM Profiles:

PM PROFILE NUMBER	PM PROFILE NAME	WEIGHT FRACTION OF PM2.5/TPM
3421	ASPHALT CONCRETE BATCH MIX PLANT (UNCONTROLLED)	0.0084

PM PROFILE NUMBER	PM PROFILE NAME	WEIGHT FRACTION OF PM2.5/TPM
343	CEMENT PRODUCTION	0.62

Stationary Source 1 out of 1
Supporting Information

BAAQMD Cancer Risk Calculator:



Step 1: Enter Facility Data

Plant Name	Rebar Spacer Block Company
Plant No.	9207

Step 4: Specify Source Type

Does facility have only diesel backup generators?	no
Is this analysis for a gas station?	no

Note: Default generic distance multiplier used if source is not a generator or gas station.

Step 2: Estimate Distance

What is the distance (m) from the facility boundary to the MEI?	50

Step 5: Read Estimates

Total Cancer Risk	6.777	per 1,000,000
Total Chronic Hazard	0.002	
Total PM2.5 Concentration	0.000	µg/m³

Step 3: Enter Emissions Data

Chemical Name	CAS No. (dashes removed)	Rate (lb/day)	Risk (# / 1,000,000)	Hazard (index)	Concentration (µg/m3)
Dibenzo(a-h)pyrene	189640	0.00E+00			
Dibenzo(a-i)pyrene	189559	0.00E+00			
Dibenzo(a-l)pyrene	191300	0.00E+00			
Diesel Exhaust Particulate	85105	7.09E-03	9.97E+00	2.68E-03	

Control Pathway

AERMOD

Dispersion Options

Titles

C:\Lakes\AERMOD View\Pacific Surfacing DPM\Pacific Surfacing DPM.isc

Dispersion Options

☐ Regulatory Default ☑ Non-Default Options

☑ Elevated Terrain
☐ No Stack-Tip Downwash (NOSTD)
☐ Run in Screening Mode
☐ Conversion of NOx to NO2 (OLM or PVMRM)
☐ No Checks for Non-Sequential Met Data
☑ Fast All Sources (FASTALL)
☐ Fast Area Sources (FASTAREA)
☐ Optimized Area Source Plume Depletion
☐ Gas Deposition

BETA Options:

☐ Capped and Horizontal Stack Releases
☐ Adjusted Friction Velocity (u*) in AERMET (ADJ_U*)
☐ Low Wind Options

☐ SCIM (Sampled Chronological Input Model)
☐ Ignore Urban Night / Daytime Transition (NOURBTRAN)

Dispersion Coefficient

Urban
Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM2.5

Averaging Time Options

Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

☐ Yes ☑ No

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: Pacific Surfacing DPM.err

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: ONSITE (Project Site)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
1.31	3.33	2.80E-7		4	591094.16	4143218.61
		2.80E-7			591149.50	4143159.53
		2.80E-7			591111.85	4143123.33
		2.80E-7			591054.64	4143181.38

Line Area Sources

Source Type: LINE AREA

Source: OFFSITE (Truck Traffic - State Street 1,000 ft)

Length of Side [m]	Emission Rate [g/ s]	Initial Vertical Dimension [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
9.00	4.95E-11	2.11	591118.23	4143118.35	0.86	2.27
			591406.79	4143382.59	1.25	2.27

Area Sources Generated from Line Sources

Line Source ID	Area Source ID	X Coordinate [m]	Y Coordinate [m]	Release Height [m]	Length of Side [m]	Angle [deg]	Base Elevation [m]	Initial Sigma Z [m]
OFFSITE	A0000001	591121.26	4143115.03	2.27	78.25	317.52	0.86	2.11
	A0000002	591178.98	4143167.88	2.27	78.25	317.52	0.87	2.11
	A0000003	591236.69	4143220.73	2.27	78.25	317.52	0.57	2.11
	A0000004	591294.40	4143273.57	2.27	78.25	317.52	1.18	2.11
	A0000005	591352.11	4143326.42	2.27	78.25	317.52	1.30	2.11

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	591093.66	4143062.25		1.14	
2	591095.83	4143047.56		1.12	
3	591104.39	4143074.14		1.18	
4	591115.38	4143061.49		1.09	
5	591116.66	4143085.77		1.16	
6	591129.31	4143093.95		1.21	
7	591139.16	4143107.88		1.31	
8	591151.87	4143116.35		1.39	
9	591161.37	4143127.66		1.32	
10	591171.95	4143137.31		1.37	
11	591186.90	4143125.80		1.25	
12	591185.62	4143144.21		1.42	
13	591196.74	4143156.48		1.53	
14	591206.97	4143168.49		1.50	
15	591217.70	4143178.84		1.42	
16	591217.06	4143156.73		1.54	
17	591230.96	4143189.34		1.55	
18	591239.55	4143195.62		1.40	
19	591269.20	4143222.55		1.21	
20	591286.34	4143242.40		1.16	
21	591297.47	4143251.42		1.45	
22	591295.82	4143226.91		1.26	
23	591308.30	4143238.49		1.48	
24	591310.10	4143260.29		1.46	
25	591320.03	4143248.11		1.63	
26	591321.08	4143270.22		1.55	
27	591331.36	4143277.11		1.71	
28	591355.25	4143299.94		1.57	
29	591364.98	4143311.26		1.38	
30	591370.99	4143320.99		1.32	

31	591374.53	4143299.05	1.53
32	591385.90	4143333.24	1.40
33	591409.06	4143351.74	1.47
34	591422.60	4143361.07	1.58
35	591400.19	4143341.67	1.51
36	591052.51	4143030.35	1.20

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	591054.59	4143181.39	FENCEPRI	1.20	
2	591094.17	4143218.65	FENCEPRI	1.31	
3	591149.52	4143159.54	FENCEPRI	1.44	
4	591111.85	4143123.26	FENCEPRI	0.99	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: C:\Users\lpark\Desktop\COMPLETED PROJECTS\5377.0001 Pacific Surfacing\HRA\745090 (1)\745090.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\lpark\Desktop\COMPLETED PROJECTS\5377.0001 Pacific Surfacing\HRA\745090 (1)\745090.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 8.00 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2009			OAKLAND/WSO AP
Upper Air		2009			

Data Period

Data Period to Process

Start Date: 1/1/2009 Start Hour: 1 End Date: 1/2/2014 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Pacific Surfacing DPM\Pacific Surfacing DPM.isc

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.08042	ug/m^3	R1	591093.66	4143062.25	1.14	0.00	1.14	
PERIOD		0.06597	ug/m^3	R2	591095.83	4143047.56	1.12	0.00	1.12	
PERIOD		0.12048	ug/m^3	R3	591104.39	4143074.14	1.18	0.00	1.18	
PERIOD		0.10540	ug/m^3	R4	591115.38	4143061.49	1.09	0.00	1.09	
PERIOD		0.17984	ug/m^3	R5	591116.66	4143085.77	1.16	0.00	1.16	
PERIOD		0.21505	ug/m^3	R6	591129.31	4143093.95	1.21	0.00	1.21	
PERIOD		0.24601	ug/m^3	R7	591139.16	4143107.88	1.31	0.00	1.31	
PERIOD		0.19376	ug/m^3	R8	591151.87	4143116.35	1.39	0.00	1.39	
PERIOD		0.13956	ug/m^3	R9	591161.37	4143127.66	1.32	0.00	1.32	
PERIOD		0.07757	ug/m^3	R10	591171.95	4143137.31	1.37	0.00	1.37	
PERIOD		0.04778	ug/m^3	R11	591186.90	4143125.80	1.25	0.00	1.25	
PERIOD		0.03799	ug/m^3	R12	591185.62	4143144.21	1.42	0.00	1.42	
PERIOD		0.02097	ug/m^3	R13	591196.74	4143156.48	1.53	0.00	1.53	
PERIOD		0.01334	ug/m^3	R14	591206.97	4143168.49	1.50	0.00	1.50	
PERIOD		0.00931	ug/m^3	R15	591217.70	4143178.84	1.42	0.00	1.42	
PERIOD		0.01275	ug/m^3	R16	591217.06	4143156.73	1.54	0.00	1.54	
PERIOD		0.00658	ug/m^3	R17	591230.96	4143189.34	1.55	0.00	1.55	
PERIOD		0.00542	ug/m^3	R18	591239.55	4143195.62	1.40	0.00	1.40	
PERIOD		0.00289	ug/m^3	R19	591269.20	4143222.55	1.21	0.00	1.21	
PERIOD		0.00203	ug/m^3	R20	591286.34	4143242.40	1.16	0.00	1.16	

Sensitive Receptor Summary

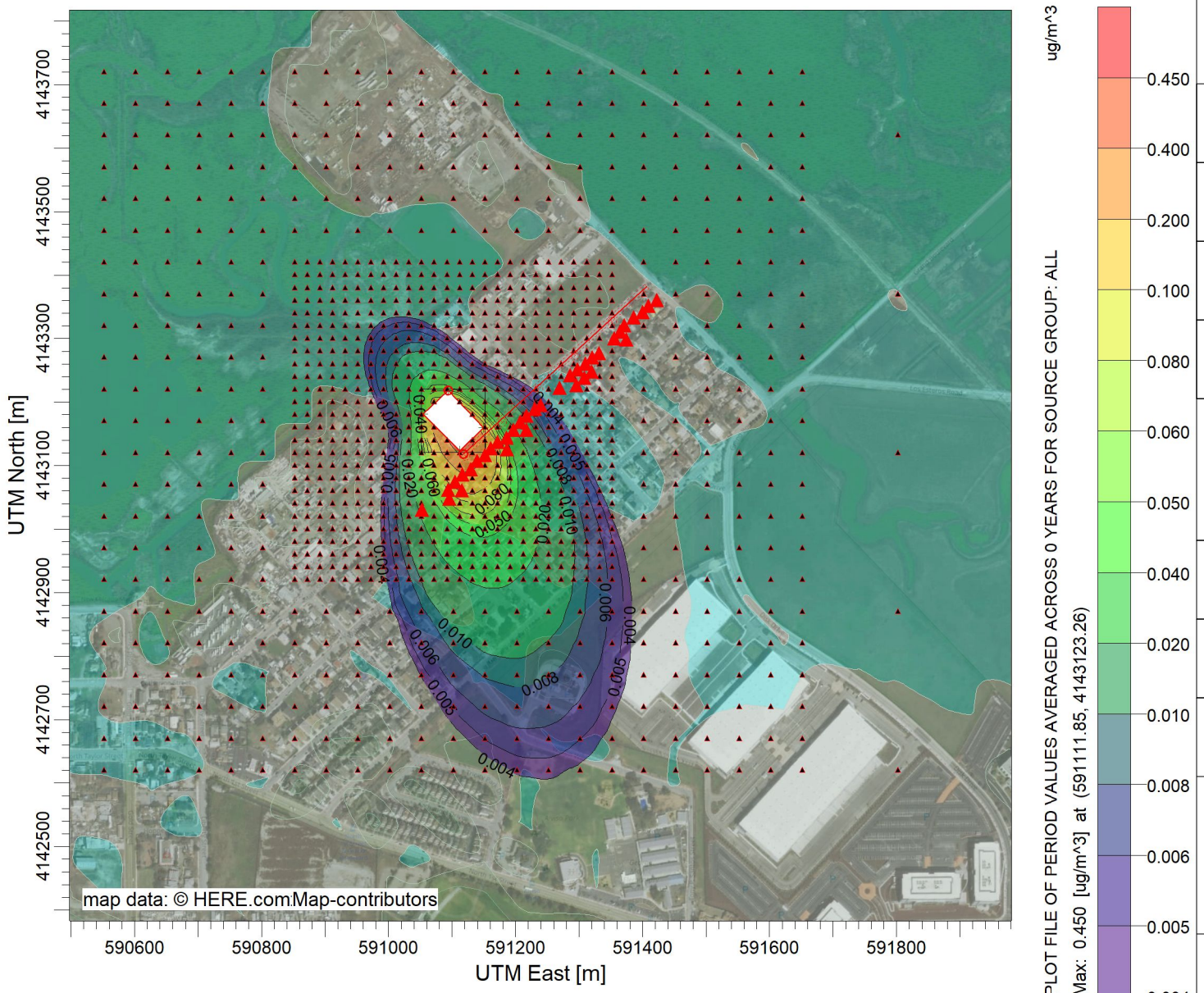
C:\Lakes\AERMOD View\Pacific Surfacing DPM\Pacific Surfacing DPM.isc

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.00172	ug/m^3	R21	591297.47	4143251.42	1.45	0.00	1.45	
PERIOD		0.00221	ug/m^3	R22	591295.82	4143226.91	1.26	0.00	1.26	
PERIOD		0.00181	ug/m^3	R23	591308.30	4143238.49	1.48	0.00	1.48	
PERIOD		0.00145	ug/m^3	R24	591310.10	4143260.29	1.46	0.00	1.46	
PERIOD		0.00153	ug/m^3	R25	591320.03	4143248.11	1.63	0.00	1.63	
PERIOD		0.00124	ug/m^3	R26	591321.08	4143270.22	1.55	0.00	1.55	
PERIOD		0.00110	ug/m^3	R27	591331.36	4143277.11	1.71	0.00	1.71	
PERIOD		0.00082	ug/m^3	R28	591355.25	4143299.94	1.57	0.00	1.57	
PERIOD		0.00072	ug/m^3	R29	591364.98	4143311.26	1.38	0.00	1.38	
PERIOD		0.00066	ug/m^3	R30	591370.99	4143320.99	1.32	0.00	1.32	
PERIOD		0.00076	ug/m^3	R31	591374.53	4143299.05	1.53	0.00	1.53	
PERIOD		0.00057	ug/m^3	R32	591385.90	4143333.24	1.40	0.00	1.40	
PERIOD		0.00046	ug/m^3	R33	591409.06	4143351.74	1.47	0.00	1.47	
PERIOD		0.00041	ug/m^3	R34	591422.60	4143361.07	1.58	0.00	1.58	
PERIOD		0.00051	ug/m^3	R35	591400.19	4143341.67	1.51	0.00	1.51	
PERIOD		0.02236	ug/m^3	R36	591052.51	4143030.35	1.20	0.00	1.20	

PROJECT TITLE:

C:\Lakes\AERMOD View\Pacific Surfacing DPM\Pacific Surfacing DPM.isc



COMMENTS:

SOURCES:

2

RECEPTORS:

1380

OUTPUT TYPE:

Concentration

MAX:

0.450 ug/m^3

COMPANY NAME:

MODELER:

DATE:

8/19/2021

SCALE: 1:9,769

0 0.3 km

PROJECT NO.:

Control Pathway

Dispersion Options

Titles

C:\Lakes\AERMOD View\Mitigated Pacific Surfacing DPM\Mitigated DPM

Dispersion Options

☐ Regulatory Default ☒ Non-Default Options

☒ Elevated Terrain
☐ No Stack-Tip Downwash (NOSTD)
☐ Run in Screening Mode
☐ Conversion of NOx to NO2 (OLM or PVMRM)
☐ No Checks for Non-Sequential Met Data
☒ Fast All Sources (FASTALL)
☐ Fast Area Sources (FASTAREA)
☐ Optimized Area Source Plume Depletion
☐ Gas Deposition

BETA Options:

☐ Capped and Horizontal Stack Releases
☐ Adjusted Friction Velocity (u*) in AERMET (ADJ_U*)
☐ Low Wind Options

☐ SCIM (Sampled Chronological Input Model)
☐ Ignore Urban Night / Daytime Transition (NOURBTRAN)

Dispersion Coefficient

Urban
Population:
Name (Optional):
Roughness Length:

Output Type

☒ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM2.5

Averaging Time Options

Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☒ Period ☐ Annual

Exponential Decay

☐ Yes ☒ No

Terrain Height Options

☐ Flat ☒ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☒ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: Mitigated Pacific Surfacing DPM.err

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: ONSITE (Project Site)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
1.31	3.33	1.69E-8		4	591094.16	4143218.61
		1.69E-8			591149.50	4143159.53
		1.69E-8			591111.85	4143123.33
		1.69E-8			591054.64	4143181.38

Line Area Sources

Source Type: LINE AREA

Source: OFFSITE (Truck Traffic - State Street 1,000 ft)

Length of Side [m]	Emission Rate [g/ s]	Initial Vertical Dimension [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
9.00	4.95E-11	2.11	591118.23	4143118.35	0.86	2.27
			591406.79	4143382.59	1.25	2.27

Area Sources Generated from Line Sources

Line Source ID	Area Source ID	X Coordinate [m]	Y Coordinate [m]	Release Height [m]	Length of Side [m]	Angle [deg]	Base Elevation [m]	Initial Sigma Z [m]
OFFSITE	A0000001	591121.26	4143115.03	2.27	78.25	317.52	0.86	2.11
	A0000002	591178.98	4143167.88	2.27	78.25	317.52	0.87	2.11
	A0000003	591236.69	4143220.73	2.27	78.25	317.52	0.57	2.11
	A0000004	591294.40	4143273.57	2.27	78.25	317.52	1.18	2.11
	A0000005	591352.11	4143326.42	2.27	78.25	317.52	1.30	2.11

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	591093.66	4143062.25		1.14	
2	591095.83	4143047.56		1.12	
3	591104.39	4143074.14		1.18	
4	591115.38	4143061.49		1.09	
5	591116.66	4143085.77		1.16	
6	591129.31	4143093.95		1.21	
7	591139.16	4143107.88		1.31	
8	591151.87	4143116.35		1.39	
9	591161.37	4143127.66		1.32	
10	591171.95	4143137.31		1.37	
11	591186.90	4143125.80		1.25	
12	591185.62	4143144.21		1.42	
13	591196.74	4143156.48		1.53	
14	591206.97	4143168.49		1.50	
15	591217.70	4143178.84		1.42	
16	591217.06	4143156.73		1.54	
17	591230.96	4143189.34		1.55	
18	591239.55	4143195.62		1.40	
19	591269.20	4143222.55		1.21	
20	591286.34	4143242.40		1.16	
21	591297.47	4143251.42		1.45	
22	591295.82	4143226.91		1.26	
23	591308.30	4143238.49		1.48	
24	591310.10	4143260.29		1.46	
25	591320.03	4143248.11		1.63	
26	591321.08	4143270.22		1.55	
27	591331.36	4143277.11		1.71	
28	591355.25	4143299.94		1.57	
29	591364.98	4143311.26		1.38	
30	591370.99	4143320.99		1.32	

31	591374.53	4143299.05	1.53	
32	591385.90	4143333.24	1.40	
33	591409.06	4143351.74	1.47	
34	591422.60	4143361.07	1.58	
35	591400.19	4143341.67	1.51	
36	591052.51	4143030.35	1.20	

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	591054.59	4143181.39	FENCEPRI	1.20	
2	591094.17	4143218.65	FENCEPRI	1.31	
3	591149.52	4143159.54	FENCEPRI	1.44	
4	591111.85	4143123.26	FENCEPRI	0.99	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: C:\Users\lpark\Desktop\5377.0001 Pacific Surfacing\HRA\745090 (1)\745090.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\lpark\Desktop\5377.0001 Pacific Surfacing\HRA\745090 (1)\745090.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 8.00 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2009			Moffett Airfield
Upper Air		2009			OAKLAND/WSO AP

Data Period

Data Period to Process

Start Date: 1/1/2009 Start Hour: 1 End Date: 1/2/2014 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Mitigated Pacific Surfacing DPM\Mitigated DPM

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.00486	ug/m^3	R1	591093.66	4143062.25	1.14	0.00	1.14	
PERIOD		0.00398	ug/m^3	R2	591095.83	4143047.56	1.12	0.00	1.12	
PERIOD		0.00728	ug/m^3	R3	591104.39	4143074.14	1.18	0.00	1.18	
PERIOD		0.00637	ug/m^3	R4	591115.38	4143061.49	1.09	0.00	1.09	
PERIOD		0.01086	ug/m^3	R5	591116.66	4143085.77	1.16	0.00	1.16	
PERIOD		0.01300	ug/m^3	R6	591129.31	4143093.95	1.21	0.00	1.21	
PERIOD		0.01487	ug/m^3	R7	591139.16	4143107.88	1.31	0.00	1.31	
PERIOD		0.01172	ug/m^3	R8	591151.87	4143116.35	1.39	0.00	1.39	
PERIOD		0.00845	ug/m^3	R9	591161.37	4143127.66	1.32	0.00	1.32	
PERIOD		0.00470	ug/m^3	R10	591171.95	4143137.31	1.37	0.00	1.37	
PERIOD		0.00290	ug/m^3	R11	591186.90	4143125.80	1.25	0.00	1.25	
PERIOD		0.00231	ug/m^3	R12	591185.62	4143144.21	1.42	0.00	1.42	
PERIOD		0.00129	ug/m^3	R13	591196.74	4143156.48	1.53	0.00	1.53	
PERIOD		0.00083	ug/m^3	R14	591206.97	4143168.49	1.50	0.00	1.50	
PERIOD		0.00058	ug/m^3	R15	591217.70	4143178.84	1.42	0.00	1.42	
PERIOD		0.00078	ug/m^3	R16	591217.06	4143156.73	1.54	0.00	1.54	
PERIOD		0.00042	ug/m^3	R17	591230.96	4143189.34	1.55	0.00	1.55	
PERIOD		0.00035	ug/m^3	R18	591239.55	4143195.62	1.40	0.00	1.40	
PERIOD		0.00019	ug/m^3	R19	591269.20	4143222.55	1.21	0.00	1.21	
PERIOD		0.00014	ug/m^3	R20	591286.34	4143242.40	1.16	0.00	1.16	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Mitigated Pacific Surfacing DPM\Mitigated DPM

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.00013	ug/m^3	R21	591297.47	4143251.42	1.45	0.00	1.45	
PERIOD		0.00015	ug/m^3	R22	591295.82	4143226.91	1.26	0.00	1.26	
PERIOD		0.00012	ug/m^3	R23	591308.30	4143238.49	1.48	0.00	1.48	
PERIOD		0.00011	ug/m^3	R24	591310.10	4143260.29	1.46	0.00	1.46	
PERIOD		0.00011	ug/m^3	R25	591320.03	4143248.11	1.63	0.00	1.63	
PERIOD		0.00009	ug/m^3	R26	591321.08	4143270.22	1.55	0.00	1.55	
PERIOD		0.00008	ug/m^3	R27	591331.36	4143277.11	1.71	0.00	1.71	
PERIOD		0.00007	ug/m^3	R28	591355.25	4143299.94	1.57	0.00	1.57	
PERIOD		0.00006	ug/m^3	R29	591364.98	4143311.26	1.38	0.00	1.38	
PERIOD		0.00006	ug/m^3	R30	591370.99	4143320.99	1.32	0.00	1.32	
PERIOD		0.00006	ug/m^3	R31	591374.53	4143299.05	1.53	0.00	1.53	
PERIOD		0.00005	ug/m^3	R32	591385.90	4143333.24	1.40	0.00	1.40	
PERIOD		0.00004	ug/m^3	R33	591409.06	4143351.74	1.47	0.00	1.47	
PERIOD		0.00003	ug/m^3	R34	591422.60	4143361.07	1.58	0.00	1.58	
PERIOD		0.00005	ug/m^3	R35	591400.19	4143341.67	1.51	0.00	1.51	
PERIOD		0.00135	ug/m^3	R36	591052.51	4143030.35	1.20	0.00	1.20	

PROJECT TITLE:

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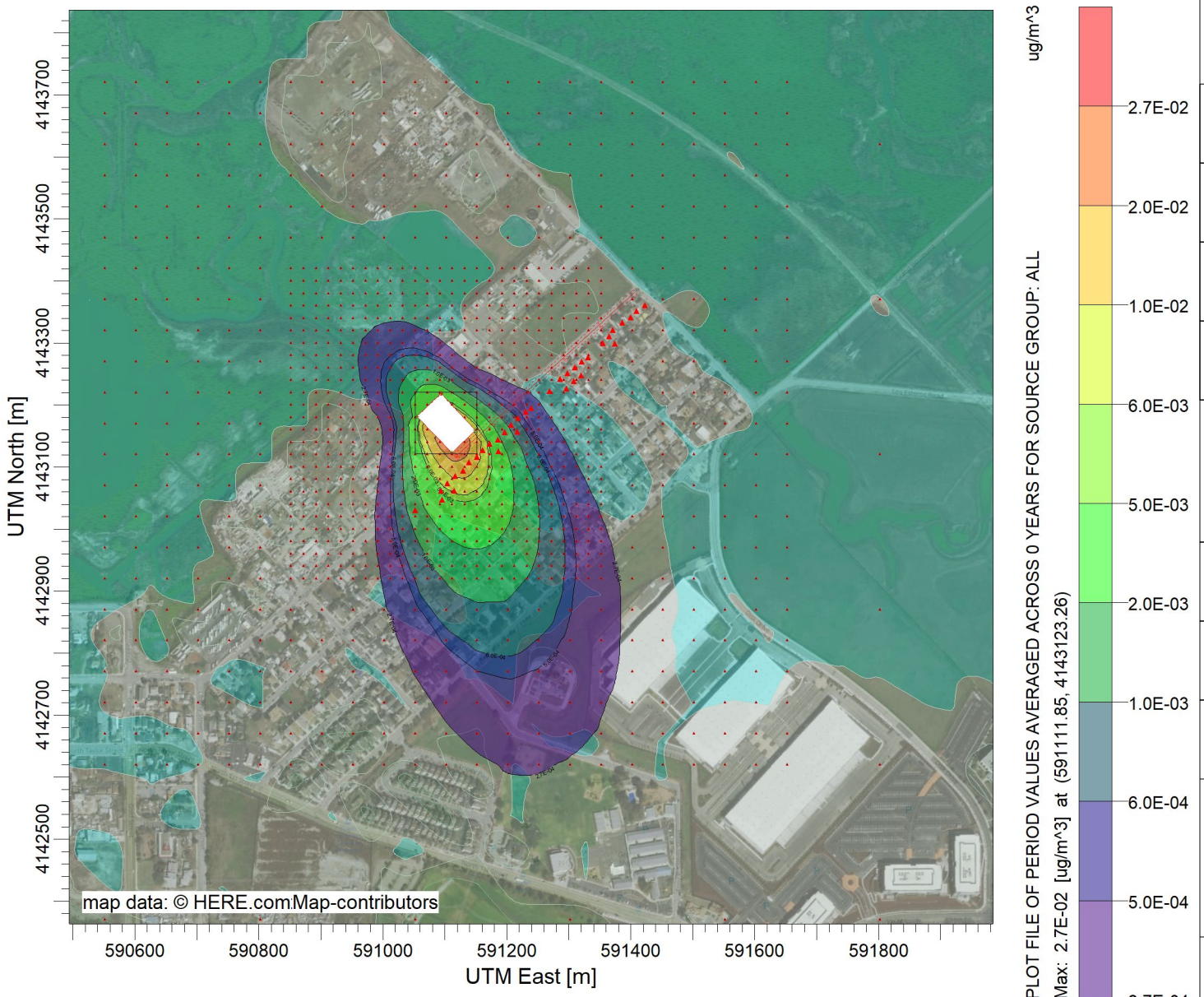

COMMENTS:

SOURCES:

2

RECEPTORS:

1380

OUTPUT TYPE:

Concentration

MAX:

2.7E-02 ug/m^3

COMPANY NAME:

MODELER:

DATE:

4/16/2021

SCALE: 1:10,034

0 0.3 km

PROJECT NO.:

Project Energy Use Summary

Summary of Energy Use During Construction		(Annually)
Construction vehicle fuel	307	gallons (gasoline, diesel)
Construction equipment fuel	1,080	gallons (diesel)
Total construction fuel	1,387	gallons (gasoline, diesel)
Construction office electricity	1,161	kilowatt hours

Summary of Energy Use During Operations		(Annually)
Operation vehicle fuel	11,098	gallons (gasoline, diesel)
Operation natural gas	27,161	kilo-British Thermal Units
Operation electricity	26,160	kilowatt hours

Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). 2021. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory/e8886ef5f608fced1b46d4dcec986174077c5235. Accessed march 26, 2021.

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Source: EMFAC2021 (v1.0.0) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

										Calculations	
Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT (mi/day)	Trips	Fuel_Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
Santa Clara	2022	HHDT	Aggregate	Aggregate	Gasoline	3.8273666	105.1913484	105.1913	0.029875	3.521064864	370.3855608
Santa Clara	2022	HHDT	Aggregate	Aggregate	Diesel	8126.6301	984491.3077	984491.3	172.7694	5.698297787	5609924.64
Santa Clara	2022	LDA	Aggregate	Aggregate	Gasoline	604047.78	22374249.93	22374250	770.6798	29.03183779	649565594.5
Santa Clara	2022	LDA	Aggregate	Aggregate	Diesel	1988.8469	60930.0916	60930.09	1.417567	42.9821521	2618906.464
Santa Clara	2022	LDT1	Aggregate	Aggregate	Gasoline	54974.085	1779154.38	1779154	72.49959	24.5402006	43660805.39
Santa Clara	2022	LDT1	Aggregate	Aggregate	Diesel	28.886015	444.5777523	444.5778	0.018196	24.43207636	10861.95759
Santa Clara	2022	LDT2	Aggregate	Aggregate	Gasoline	274728.48	9911729.948	9911730	426.099	23.26156677	230562368
Santa Clara	2022	LDT2	Aggregate	Aggregate	Diesel	933.78803	35569.22943	35569.23	1.120199	31.75261132	1129415.917
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Gasoline	19023.539	692949.1823	692949.2	74.46913	9.305187	6448021.722
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Diesel	9466.8975	364941.2883	364941.3	23.12978	15.77798649	5758038.717
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Gasoline	2479.1193	89333.80071	89333.8	10.71214	8.339492697	744998.5786
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Diesel	4276.1747	167672.0053	167672	12.86069	13.03755433	2186032.879
Santa Clara	2022	MHDT	Aggregate	Aggregate	Gasoline	1426.5351	69284.18236	69284.18	14.90196	4.649334453	322125.3361
Santa Clara	2022	MHDT	Aggregate	Aggregate	Diesel	10189.551	428042.2812	428042.3	51.15007	8.368360975	3582012.321

Worker
Sum of VMT*FE (Column BI) 927547952.2
Total VMT 34162078.15
Weighted Average FE 27.15139132

Vendor
Sum of VMT*FE (Column BI) 24651524.58
Total VMT 2796819.239
Weighted Average FE 8.814128649

Haul
Sum of VMT*FE (Column BI) 5610295.026
Total VMT 984596.4991
Weighted Average FE 5.698065178

Pacific Surfacing Project Construction Assumptions

On-site Construction

Source: CalEEMod Output

Pacific Surfacing Construction Only - Santa Clara County, Annual

Date: 4/13/2021 7:10 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Site Preparation	Site Preparation	5/17/2021	5/28/2021	5	10
	Grading	Grading	5/31/2021	6/11/2021	5	10
	Building Construction (Interior)	Building Construction	6/10/2021	6/30/2021	5	15
	Bioretention Installation	Trenching	6/14/2021	6/25/2021	5	10
	Paving	Paving	6/28/2021	6/29/2021	5	2
	Architectural Coating	Architectural Coating	6/30/2021	6/30/2021	5	1

Trips and VMT	Phase Name	Trips per Day	Total Trips							Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Vendor Vel	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Site Preparation	5	0	0	10.8	7.3	20	LD_Mix	10	50	0	0	540	0	0	19.89	0.00	0.00
	Grading	8	0	0	10.8	7.3	20	LD_Mix	10	80	0	0	864	0	0	31.82	0.00	0.00
	Building Construction (Interior)	18	7	0	10.8	7.3	20	LD_Mix	15	270	105	0	2,916	767	0	107.40	86.96	0.00
	Bioretention Installation	13	0	0	10.8	7.3	20	LD_Mix	10	130	0	0	1,404	0	0	51.71	0.00	0.00
	Paving	10	0	0	10.8	7.3	20	LD_Mix	2	20	0	0	216	0	0	7.96	0.00	0.00
	Architectural Coating	4	0	0	10.8	7.3	20	LD_Mix	1	4	0	0	43	0	0	1.59	0.00	0.00

On-site Total Construction VMT (miles)

6,750

On-Site Total Fuel Consumption (gallons)

307

Construction Equipment Fuel Calculation

On-site

Source: CalEEMod Output

Pacific Surfacing Construction Only - Santa Clara County, Annual

Date: 4/13/2021 7:10 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Site Preparation	Site Preparation	5/17/2021	5/28/2021	5	10
	Grading	Grading	5/31/2021	6/11/2021	5	10
	Building Construction (Interior)	Building Construction	6/10/2021	6/30/2021	5	15
	Bioretention Installation	Trenching	6/14/2021	6/25/2021	5	10
	Paving	Paving	6/28/2021	6/29/2021	5	2
	Architectural Coating	Architectural Coating	6/30/2021	6/30/2021	5	1

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Site Preparation	Tractors/Loaders/Backhoes	2	8	97	0.37	10	5,742.40	287.12
	Grading	Concrete/Industrial Saws	1	2	81	0.73	10	1,182.60	59.13
	Grading	Tractors/Loaders/Backhoes	2	4	97	0.37	10	2,871.20	143.56
	Building Construction (Interior)	Forklifts	2	4	89	0.2	15	2,136.00	106.80
	Building Construction (Interior)	Tractors/Loaders/Backhoes	2	4	97	0.37	15	4,306.80	215.34
	Bioretention Installation	Excavators	1	3	158	0.38	10	1,801.20	90.06
	Bioretention Installation	Plate Compactors	2	2	8	0.43	10	137.60	6.88
	Bioretention Installation	Skid Steer Loaders	2	3	65	0.37	10	1,443.00	72.15
	Paving	Cement and Mortar Mixers	1	6	9	0.56	2	60.48	3.02
	Paving	Pavers	1	7	130	0.42	2	764.40	38.22
	Paving	Rollers	1	7	80	0.38	2	425.60	21.28
	Paving	Tractors/Loaders/Backhoes	1	7	97	0.37	2	502.46	25.12
	Architectural Coating	Air Compressors	1	6	78	0.48	1	224.64	11.23
							Construction Equipment Fuel Consumption		**1,079.92 gallons**

Notes:

Equipment assumptions are provided in the CalEEMod output files.

Fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

South Coast Air Quality Management District. 1993. Air Quality Handbook, Table A9-3E.

Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed October 30, 2020.

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Typical Construction Trailer - Santa Clara County

Date: 4/14/2021 4:47 PM

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	1.2228	1.7000e-004	3.0000e-005	1.2375
Total		**1.2228**	**1.7000e-004**	**3.0000e-005**	**1.2375**

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual	12,838	kWh/yr
Total Over Construction	**1,161**	**kWh**

Total Construction Schedule

Start	5/17/2021
End	6/30/2021
Total Calendar Days	33
Years	0.09

Proposed Operation Fuel Calculation

California Air Resource Board (ARB). 2021. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory/e8886ef5f608fced1b46d4dcec986174077c5235. Accessed April 14, 2021.

Source: EMFAC2021 (v1.0.0) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given | *Calculations*

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Santa Clara	2022	HHDT	Aggregate	Aggregate	Gasoline	3.82736662	105.191348	0.029874868	3.521065	370.3855608
Santa Clara	2022	HHDT	Aggregate	Aggregate	Diesel	8126.63008	984491.308	172.7693681	5.698298	5609924.64
Santa Clara	2022	LDA	Aggregate	Aggregate	Gasoline	604047.779	22374249.9	770.6797651	29.03184	649565594.5
Santa Clara	2022	LDA	Aggregate	Aggregate	Diesel	1988.84691	60930.0916	1.41756726	42.98215	2618906.464
Santa Clara	2022	LDT1	Aggregate	Aggregate	Gasoline	54974.0845	1779154.38	72.49958587	24.5402	43660805.39
Santa Clara	2022	LDT1	Aggregate	Aggregate	Diesel	28.8860153	444.577752	0.018196479	24.43208	10861.95759
Santa Clara	2022	LDT2	Aggregate	Aggregate	Gasoline	274728.482	9911729.95	426.0989832	23.26157	230562368
Santa Clara	2022	LDT2	Aggregate	Aggregate	Diesel	933.788033	35569.2294	1.120198558	31.75261	1129415.917
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Gasoline	19023.5394	692949.182	74.4691302	9.305187	6448021.722
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Diesel	9466.89746	364941.288	23.12977568	15.77799	5758038.717
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Gasoline	2479.11932	89333.8007	10.71213849	8.339493	744998.5786
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Diesel	4276.17469	167672.005	12.86069465	13.03755	2186032.879
Santa Clara	2022	MCY	Aggregate	Aggregate	Gasoline	27595.0892	162923.968	3.978227427	40.95391	6672373.49
Santa Clara	2022	MDV	Aggregate	Aggregate	Gasoline	150747.251	5216511.84	272.3946347	19.15057	99899162.28
Santa Clara	2022	MDV	Aggregate	Aggregate	Diesel	2337.32844	86668.8473	3.560366809	24.34267	2109751.465
Santa Clara	2022	MH	Aggregate	Aggregate	Gasoline	2642.08408	23105.2829	5.236123593	4.41267	101955.9773
Santa Clara	2022	MH	Aggregate	Aggregate	Diesel	940.800797	9155.20964	0.974427112	9.395479	86017.58154
Santa Clara	2022	MHDT	Aggregate	Aggregate	Gasoline	1426.53505	69284.1824	14.90195706	4.649334	322125.3361
Santa Clara	2022	MHDT	Aggregate	Aggregate	Diesel	10189.5513	428042.281	51.15007377	8.368361	3582012.321
Santa Clara	2022	OBUS	Aggregate	Aggregate	Gasoline	470.923365	21653.2951	4.597789582	4.709501	101976.2176
Santa Clara	2022	OBUS	Aggregate	Aggregate	Diesel	852.167884	61336.6811	7.913579909	7.750813	475409.1694
Santa Clara	2022	SBUS	Aggregate	Aggregate	Gasoline	160.413892	7959.43023	0.81188995	9.803583	78030.93219
Santa Clara	2022	SBUS	Aggregate	Aggregate	Diesel	662.516235	15413.7114	1.896411367	8.127831	125280.043
Santa Clara	2022	UBUS	Aggregate	Aggregate	Gasoline	45.8110441	4784.03659	0.542783988	8.813887	42165.95657
Santa Clara	2022	UBUS	Aggregate	Aggregate	Diesel	435.647489	48716.1345	5.280294089	9.226027	449456.3602
									Vehicles	
									Sum of VMT*FE	**1062341056**
									Total VMT	**42617125.83**
									Weighted Average FE	**24.92756223** **miles/gallon**

Total VMT
Source: CalEEMod Output
Pacific Surfacing Operation Only
Date: 4/10/2021 9:59 AM

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	52.00	52.00	52.00	145,212	145,212
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	42.00	42.00	42.00	131,446	131,446
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	94.00	94.00	94.00	276,658	276,658

	Annual VMT (miles)	Fuel Consumption	
Total VMT	276,658	**11,098**	**gallons per year**

Operation Natural Gas Use

Source: CalEEMod Output

Pacific Surfacing Operation Only

Date: 4/10/2021 9:59 AM

kBTU/yr = kilo-British Thermal Units/year

CF = cubic feet

	Natural Gas Use
Health Club	16751
Warehouse	10410

Total **27,161 kBTU/yr**

	NaturalGas Use	ROG	NOx	CO	SO2
Land Use	kBTU/yr				
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	16751.3	9.0000e-005	8.2000e-004	6.9000e-004	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000
Total		**1.5000e-004**	**1.3300e-003**	**1.1200e-003**	**0.0000**

Operation Electricity Use

Source: CalEEMod Output

Pacific Surfacing Operation Only

Date: 4/10/2021 9:59 AM

Project Electricity Use

kWh/yr = kilowatt hours per year

Land Use	Electricity Use (kWh/yr)
Health Club	5245.1
Warehouse	10590
Parking Lot	10325

Total **26,160 kWh/yr**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Health Club	5245.1	0.4901	7.0000e-005	1.0000e-005	0.4961
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10325	0.9648	1.4000e-004	3.0000e-005	0.9765
Unrefrigerated Warehouse-No Rail	10590	0.9895	1.4000e-004	3.0000e-005	1.0016
Total		2.4444	3.5000e-004	7.0000e-005	2.4742

Typical Construction Trailer - Santa Clara County

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Carbon intensity adjusted for actual value per PG&E sustainability report.

Land Use - Upper range of typical single-wide mobile office trailer = 720 square feet.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CO2IntensityFactor	641.35	210

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	1.2228	1.7000e-004	3.0000e-005	1.2375
Total		**1.2228**	**1.7000e-004**	**3.0000e-005**	**1.2375**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	1.2228	1.7000e-004	3.0000e-005	1.2375
Total		**1.2228**	**1.7000e-004**	**3.0000e-005**	**1.2375**

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