

Appendix E

Greenhouse Gas Emissions Modeling Results

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**200 Portage Avenue GHG
Bay Area AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	36.00	Space	0.00	14,400.00	0
Condo/Townhouse High Rise	91.00	Dwelling Unit	4.86	194,128.00	260

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2030
Utility Company	City of Palo Alto Utilities Department				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPAU electricity has been 100% carbon neutral since 2013; <https://www.cityofpaloalto.org/Departments/Utilities/Sustainability/Carbon-Neutral-Electricity-and-Natural-Gas>

Land Use - Residential square footage based on applicant provided data. Surface parking square footage based on CalEEMod defaults.

Construction Phase - Based on applicant provided construction schedule of 18 months and 6 days a week.

Off-road Equipment - Based on applicant provided construction equipment.

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200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Hauling trip length based on applicant provided information of 16 miles to Zanker Recycling. Number of hauling trips based on applicant provided data.

Demolition - Based on applicant provided information.

Grading - Based on applicant provided information for 2,000 cubic yards of export and 1,500 cubic yards of import.

Architectural Coating - BAAQMD Regulation 8 Rule 3, used Non-Flat Coating and Traffic Marking Coatings

Vehicle Trips - Based on W-Trans trip generation rate (655 total daily trips / 91 dwelling units).

Woodstoves - BAAQMD Regulation 6 Rule 3, No woodburning devices

Area Coating - BAAQMD Regulation 8 Rule 3, used Non-Flat Coating and Traffic Marking Coatings

Energy Use - All-electric pursuant to the City's All-Electric Mandate and 2019 Energy Reach Code Ordinances:

https://www.cityofpaloalto.org/files/assets/public/development-services/green-building-files/2020-all-electric-mandate-summary_final03.31.2020.pdf?t=58748.46

Water And Wastewater - The Regional Water Quality Control Plant is 100% aerobic, no septic tank on site or facultative lagoons on wastewater treatment plant.

Construction Off-road Equipment Mitigation - Pursuant to Palo Alto Comprehensive Plan Polich N-5.5 and Comprehensive Plan EIR Mitigation Measure AIR-2a, comply with BAAQMD Basic Construction Mitigation Measures. All equipment will be equipped with DPFs according to applicant provided information.

Area Mitigation -

Energy Mitigation - Pursuant to Section 150.1(b)14 of the 2019 Building Energy Efficiency Standards, residential uses under three stories must install PV solar panels that generate an amount of electricity equal to expected electricity usage.

Water Mitigation - Pursuant to CalGreen 20 percent reduction in indoor water use.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	150	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	150
tblAreaMitigation	UseLowVOCPaintParkingValue	100	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	150
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstructionPhase	NumDays	18.00	160.00
tblConstructionPhase	NumDays	230.00	170.00
tblConstructionPhase	NumDays	20.00	50.00
tblConstructionPhase	NumDays	8.00	15.00

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	18.00	60.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	NT24E	3,054.10	6,209.10
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	70.89	1,602.68
tblEnergyUse	T24NG	5,226.68	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	13.65	0.00
tblFireplaces	NumberNoFireplace	3.64	0.00
tblFireplaces	NumberWood	15.47	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	91,000.00	194,128.00
tblLandUse	LotAcreage	0.32	0.00
tblLandUse	LotAcreage	1.42	4.86
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripLength	20.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblVehicleTrips	WD_TR	5.44	7.20

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

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tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	1.82	0.00
tblWoodstoves	NumberNoncatalytic	1.82	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.1336	1.3331	1.5119	2.7100e-003	0.1401	0.0618	0.2019	0.0478	0.0569	0.1047	0.0000	241.0433	241.0433	0.0653	4.3300e-003	243.9660
2023	1.4033	1.4018	2.0185	3.4300e-003	0.0549	0.0708	0.1257	0.0147	0.0678	0.0826	0.0000	299.6937	299.6937	0.0491	3.5100e-003	301.9652
Maximum	1.4033	1.4018	2.0185	3.4300e-003	0.1401	0.0708	0.2019	0.0478	0.0678	0.1047	0.0000	299.6937	299.6937	0.0653	4.3300e-003	301.9652

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					
2022	0.1336	1.3331	1.5119	2.7100e-003	0.0779	9.8800e-003	0.0878	0.0255	9.1300e-003	0.0346	0.0000	241.0431	241.0431	0.0653	4.3300e-003	243.9658
2023	1.4033	1.4018	2.0185	3.4300e-003	0.0549	0.0110	0.0659	0.0147	0.0106	0.0253	0.0000	299.6934	299.6934	0.0491	3.5100e-003	301.9649
Maximum	1.4033	1.4018	2.0185	3.4300e-003	0.0779	0.0110	0.0878	0.0255	0.0106	0.0346	0.0000	299.6934	299.6934	0.0653	4.3300e-003	301.9649

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	31.88	84.23	53.06	35.64	84.23	68.01	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2022	8-31-2022	0.8371	0.8371
2	9-1-2022	11-30-2022	0.4483	0.4483
3	12-1-2022	2-28-2023	0.4562	0.4562
4	3-1-2023	5-31-2023	0.8883	0.8883
5	6-1-2023	8-31-2023	0.9554	0.9554
6	9-1-2023	9-30-2023	0.2988	0.2988
		Highest	0.9554	0.9554

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.9010	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1963	0.2115	1.8780	3.9600e-003	0.4981	2.6400e-003	0.5007	0.1331	2.4600e-003	0.1355	0.0000	385.6362	385.6362	0.0234	0.0177	391.4968
Waste						0.0000	0.0000		0.0000	0.0000	8.4972	0.0000	8.4972	0.5022	0.0000	21.0515
Water						0.0000	0.0000		0.0000	0.0000	2.0977	0.0000	2.0977	7.2200e-003	4.5600e-003	3.6376
Total	1.0973	0.2193	2.5523	4.0000e-003	0.4981	6.3900e-003	0.5045	0.1331	6.2100e-003	0.1393	10.5949	386.7406	397.3355	0.5338	0.0223	417.3166

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9010	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1963	0.2115	1.8780	3.9600e-003	0.4981	2.6400e-003	0.5007	0.1331	2.4600e-003	0.1355	0.0000	385.6362	385.6362	0.0234	0.0177	391.4968
Waste						0.0000	0.0000		0.0000	0.0000	8.4972	0.0000	8.4972	0.5022	0.0000	21.0515
Water						0.0000	0.0000		0.0000	0.0000	1.6782	0.0000	1.6782	5.7800e-003	3.6500e-003	2.9101
Total	1.0973	0.2193	2.5523	4.0000e-003	0.4981	6.3900e-003	0.5045	0.1331	6.2100e-003	0.1393	10.1754	386.7406	396.9159	0.5324	0.0214	416.5890

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.96	0.00	0.11	0.27	4.09	0.17

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2022	7/28/2022	6	50	
2	Site Preparation	Site Preparation	7/29/2022	8/3/2022	6	5	
3	Grading	Grading	8/4/2022	8/20/2022	6	15	

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

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4	Trenching	Trenching	8/22/2022	11/22/2022	6	80
5	Building Construction	Building Construction	11/23/2022	6/8/2023	6	170
6	Architectural Coating	Architectural Coating	4/18/2023	10/20/2023	6	160
7	Paving	Paving	10/21/2023	12/29/2023	6	60

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 22.5

Acres of Paving: 0

Residential Indoor: 393,109; Residential Outdoor: 131,036; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 864 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Forklifts	1	8.00	89	0.20
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	6	8.00	65	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	4	8.00	78	0.48
Paving	Cement and Mortar Mixers	0	0.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	10	25.00	0.00	364.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	438.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	15.00	0.00	0.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	72.00	12.00	20.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	14.00	0.00	0.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	10.80	7.30	16.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use DPF for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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					0.0394	0.0000	0.0394	5.9600e-003	0.0000	5.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.4744	0.4892	8.2000e-004		0.0217	0.0217		0.0199	0.0199	0.0000	72.0632	72.0632	0.0233	0.0000	72.6459
Total	0.0443	0.4744	0.4892	8.2000e-004	0.0394	0.0217	0.0610	5.9600e-003	0.0199	0.0259	0.0000	72.0632	72.0632	0.0233	0.0000	72.6459

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	7.1000e-004	0.0257	5.8100e-003	9.0000e-005	2.4600e-003	2.3000e-004	2.6900e-003	6.8000e-004	2.2000e-004	8.9000e-004	0.0000	9.2182	9.2182	3.0000e-004	1.4600e-003	9.6608
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	1.7200e-003	1.2400e-003	0.0150	4.0000e-005	4.9400e-003	3.0000e-005	4.9700e-003	1.3100e-003	2.0000e-005	1.3400e-003	0.0000	3.9720	3.9720	1.2000e-004	1.1000e-004	4.0092
Total	2.4300e-003	0.0270	0.0208	1.3000e-004	7.4000e-003	2.6000e-004	7.6600e-003	1.9900e-003	2.4000e-004	2.2300e-003	0.0000	13.1901	13.1901	4.2000e-004	1.5700e-003	13.6700

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3.2 Demolition - 2022

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					0.0177	0.0000	0.0177	2.6800e-003	0.0000	2.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.4744	0.4892	8.2000e-004		3.2500e-003	3.2500e-003		2.9900e-003	2.9900e-003	0.0000	72.0631	72.0631	0.0233	0.0000	72.6458
Total	0.0443	0.4744	0.4892	8.2000e-004	0.0177	3.2500e-003	0.0210	2.6800e-003	2.9900e-003	5.6700e-003	0.0000	72.0631	72.0631	0.0233	0.0000	72.6458

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	7.1000e-004	0.0257	5.8100e-003	9.0000e-005	2.4600e-003	2.3000e-004	2.6900e-003	6.8000e-004	2.2000e-004	8.9000e-004	0.0000	9.2182	9.2182	3.0000e-004	1.4600e-003	9.6608
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	1.7200e-003	1.2400e-003	0.0150	4.0000e-005	4.9400e-003	3.0000e-005	4.9700e-003	1.3100e-003	2.0000e-005	1.3400e-003	0.0000	3.9720	3.9720	1.2000e-004	1.1000e-004	4.0092
Total	2.4300e-003	0.0270	0.0208	1.3000e-004	7.4000e-003	2.6000e-004	7.6600e-003	1.9900e-003	2.4000e-004	2.2300e-003	0.0000	13.1901	13.1901	4.2000e-004	1.5700e-003	13.6700

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0164	0.0000	0.0164	8.4200e-003	0.0000	8.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9200e-003	0.0304	0.0201	4.0000e-005		1.4900e-003	1.4900e-003		1.3700e-003	1.3700e-003	0.0000	3.2421	3.2421	1.0500e-003	0.0000	3.2683
Total	2.9200e-003	0.0304	0.0201	4.0000e-005	0.0164	1.4900e-003	0.0179	8.4200e-003	1.3700e-003	9.7900e-003	0.0000	3.2421	3.2421	1.0500e-003	0.0000	3.2683

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	4.8000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1271	0.1271	0.0000	0.0000	0.1283
Total	5.0000e-005	4.0000e-005	4.8000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1271	0.1271	0.0000	0.0000	0.1283

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

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					7.3700e-003	0.0000	7.3700e-003	3.7900e-003	0.0000	3.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9200e-003	0.0304	0.0201	4.0000e-005		2.2000e-004	2.2000e-004		2.1000e-004	2.1000e-004	0.0000	3.2421	3.2421	1.0500e-003	0.0000	3.2683
Total	2.9200e-003	0.0304	0.0201	4.0000e-005	7.3700e-003	2.2000e-004	7.5900e-003	3.7900e-003	2.1000e-004	4.0000e-003	0.0000	3.2421	3.2421	1.0500e-003	0.0000	3.2683

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	4.8000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1271	0.1271	0.0000	0.0000	0.1283
Total	5.0000e-005	4.0000e-005	4.8000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1271	0.1271	0.0000	0.0000	0.1283

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					0.0573	0.0000	0.0573	0.0261	0.0000	0.0261	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1700	0.0863	2.1000e-004		6.9900e-003	6.9900e-003		6.4300e-003	6.4300e-003	0.0000	18.4526	18.4526	5.9700e-003	0.0000	18.6018
Total	0.0150	0.1700	0.0863	2.1000e-004	0.0573	6.9900e-003	0.0643	0.0261	6.4300e-003	0.0326	0.0000	18.4526	18.4526	5.9700e-003	0.0000	18.6018

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	8.6000e-004	0.0310	6.9900e-003	1.1000e-004	2.9600e-003	2.7000e-004	3.2300e-003	8.2000e-004	2.6000e-004	1.0700e-003	0.0000	11.0922	11.0922	3.6000e-004	1.7600e-003	11.6248
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	2.7000e-004	1.9000e-004	2.3300e-003	1.0000e-005	7.7000e-004	0.0000	7.7000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.6196	0.6196	2.0000e-005	2.0000e-005	0.6254
Total	1.1300e-003	0.0312	9.3200e-003	1.2000e-004	3.7300e-003	2.7000e-004	4.0000e-003	1.0200e-003	2.6000e-004	1.2800e-003	0.0000	11.7118	11.7118	3.8000e-004	1.7800e-003	12.2502

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					0.0258	0.0000	0.0258	0.0118	0.0000	0.0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1700	0.0863	2.1000e-004		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	18.4526	18.4526	5.9700e-003	0.0000	18.6018
Total	0.0150	0.1700	0.0863	2.1000e-004	0.0258	1.0500e-003	0.0268	0.0118	9.6000e-004	0.0127	0.0000	18.4526	18.4526	5.9700e-003	0.0000	18.6018

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	8.6000e-004	0.0310	6.9900e-003	1.1000e-004	2.9600e-003	2.7000e-004	3.2300e-003	8.2000e-004	2.6000e-004	1.0700e-003	0.0000	11.0922	11.0922	3.6000e-004	1.7600e-003	11.6248
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	2.7000e-004	1.9000e-004	2.3300e-003	1.0000e-005	7.7000e-004	0.0000	7.7000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.6196	0.6196	2.0000e-005	2.0000e-005	0.6254
Total	1.1300e-003	0.0312	9.3200e-003	1.2000e-004	3.7300e-003	2.7000e-004	4.0000e-003	1.0200e-003	2.6000e-004	1.2800e-003	0.0000	11.7118	11.7118	3.8000e-004	1.7800e-003	12.2502

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.4103	0.6185	9.1000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	80.0132	80.0132	0.0259	0.0000	80.6602
Total	0.0426	0.4103	0.6185	9.1000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	80.0132	80.0132	0.0259	0.0000	80.6602

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	1.6500e-003	1.1900e-003	0.0144	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	2.0000e-005	1.2800e-003	0.0000	3.8131	3.8131	1.2000e-004	1.1000e-004	3.8488
Total	1.6500e-003	1.1900e-003	0.0144	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	2.0000e-005	1.2800e-003	0.0000	3.8131	3.8131	1.2000e-004	1.1000e-004	3.8488

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Trenching - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.4103	0.6185	9.1000e-004		3.1900e-003	3.1900e-003		2.9400e-003	2.9400e-003	0.0000	80.0131	80.0131	0.0259	0.0000	80.6601
Total	0.0426	0.4103	0.6185	9.1000e-004		3.1900e-003	3.1900e-003		2.9400e-003	2.9400e-003	0.0000	80.0131	80.0131	0.0259	0.0000	80.6601

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	1.6500e-003	1.1900e-003	0.0144	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	2.0000e-005	1.2800e-003	0.0000	3.8131	3.8131	1.2000e-004	1.1000e-004	3.8488
Total	1.6500e-003	1.1900e-003	0.0144	4.0000e-005	4.7400e-003	3.0000e-005	4.7700e-003	1.2600e-003	2.0000e-005	1.2800e-003	0.0000	3.8131	3.8131	1.2000e-004	1.1000e-004	3.8488

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0198	0.1747	0.2202	3.1000e-004		9.5900e-003	9.5900e-003		8.9100e-003	8.9100e-003	0.0000	26.3487	26.3487	7.8700e-003	0.0000	26.5454
Total	0.0198	0.1747	0.2202	3.1000e-004		9.5900e-003	9.5900e-003		8.9100e-003	8.9100e-003	0.0000	26.3487	26.3487	7.8700e-003	0.0000	26.5454

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.8000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1013	0.1013	0.0000	2.0000e-005	0.1062
Vendor	4.4000e-004	0.0114	3.3200e-003	4.0000e-005	1.3400e-003	1.2000e-004	1.4600e-003	3.9000e-004	1.1000e-004	5.0000e-004	0.0000	4.2014	4.2014	9.0000e-005	6.2000e-004	4.3894
Worker	3.3600e-003	2.4200e-003	0.0293	8.0000e-005	9.6700e-003	5.0000e-005	9.7200e-003	2.5700e-003	5.0000e-005	2.6200e-003	0.0000	7.7787	7.7787	2.4000e-004	2.2000e-004	7.8516
Total	3.8100e-003	0.0141	0.0327	1.2000e-004	0.0110	1.7000e-004	0.0112	2.9700e-003	1.6000e-004	3.1300e-003	0.0000	12.0814	12.0814	3.3000e-004	8.6000e-004	12.3471

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0198	0.1747	0.2202	3.1000e-004		1.4400e-003	1.4400e-003		1.3400e-003	1.3400e-003	0.0000	26.3486	26.3486	7.8700e-003	0.0000	26.5454
Total	0.0198	0.1747	0.2202	3.1000e-004		1.4400e-003	1.4400e-003		1.3400e-003	1.3400e-003	0.0000	26.3486	26.3486	7.8700e-003	0.0000	26.5454

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.8000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1013	0.1013	0.0000	2.0000e-005	0.1062
Vendor	4.4000e-004	0.0114	3.3200e-003	4.0000e-005	1.3400e-003	1.2000e-004	1.4600e-003	3.9000e-004	1.1000e-004	5.0000e-004	0.0000	4.2014	4.2014	9.0000e-005	6.2000e-004	4.3894
Worker	3.3600e-003	2.4200e-003	0.0293	8.0000e-005	9.6700e-003	5.0000e-005	9.7200e-003	2.5700e-003	5.0000e-005	2.6200e-003	0.0000	7.7787	7.7787	2.4000e-004	2.2000e-004	7.8516
Total	3.8100e-003	0.0141	0.0327	1.2000e-004	0.0110	1.7000e-004	0.0112	2.9700e-003	1.6000e-004	3.1300e-003	0.0000	12.0814	12.0814	3.3000e-004	8.6000e-004	12.3471

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0724	0.6448	0.8767	1.2300e-003		0.0324	0.0324		0.0301	0.0301	0.0000	105.4779	105.4779	0.0314	0.0000	106.2622
Total	0.0724	0.6448	0.8767	1.2300e-003		0.0324	0.0324		0.0301	0.0301	0.0000	105.4779	105.4779	0.0314	0.0000	106.2622

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	9.0000e-004	2.3000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3858	0.3858	1.0000e-005	6.0000e-005	0.4043
Vendor	8.7000e-004	0.0363	0.0114	1.7000e-004	5.3500e-003	2.1000e-004	5.5700e-003	1.5500e-003	2.0000e-004	1.7500e-003	0.0000	16.1075	16.1075	3.3000e-004	2.3800e-003	16.8258
Worker	0.0125	8.5800e-003	0.1086	3.3000e-004	0.0387	2.0000e-004	0.0389	0.0103	1.8000e-004	0.0105	0.0000	30.3209	30.3209	8.7000e-004	8.3000e-004	30.5906
Total	0.0134	0.0458	0.1202	5.0000e-004	0.0442	4.2000e-004	0.0446	0.0119	3.9000e-004	0.0123	0.0000	46.8142	46.8142	1.2100e-003	3.2700e-003	47.8207

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0724	0.6448	0.8767	1.2300e-003		4.8700e-003	4.8700e-003		4.5200e-003	4.5200e-003	0.0000	105.4778	105.4778	0.0314	0.0000	106.2620
Total	0.0724	0.6448	0.8767	1.2300e-003		4.8700e-003	4.8700e-003		4.5200e-003	4.5200e-003	0.0000	105.4778	105.4778	0.0314	0.0000	106.2620

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	9.0000e-004	2.3000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3858	0.3858	1.0000e-005	6.0000e-005	0.4043
Vendor	8.7000e-004	0.0363	0.0114	1.7000e-004	5.3500e-003	2.1000e-004	5.5700e-003	1.5500e-003	2.0000e-004	1.7500e-003	0.0000	16.1075	16.1075	3.3000e-004	2.3800e-003	16.8258
Worker	0.0125	8.5800e-003	0.1086	3.3000e-004	0.0387	2.0000e-004	0.0389	0.0103	1.8000e-004	0.0105	0.0000	30.3209	30.3209	8.7000e-004	8.3000e-004	30.5906
Total	0.0134	0.0458	0.1202	5.0000e-004	0.0442	4.2000e-004	0.0446	0.0119	3.9000e-004	0.0123	0.0000	46.8142	46.8142	1.2100e-003	3.2700e-003	47.8207

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0818	0.5559	0.7727	1.2700e-003		0.0302	0.0302		0.0302	0.0302	0.0000	108.9388	108.9388	6.5200e-003	0.0000	109.1018
Total	1.2985	0.5559	0.7727	1.2700e-003		0.0302	0.0302		0.0302	0.0302	0.0000	108.9388	108.9388	6.5200e-003	0.0000	109.1018

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	2.8700e-003	1.9600e-003	0.0248	7.0000e-005	8.8500e-003	5.0000e-005	8.9000e-003	2.3500e-003	4.0000e-005	2.4000e-003	0.0000	6.9362	6.9362	2.0000e-004	1.9000e-004	6.9979
Total	2.8700e-003	1.9600e-003	0.0248	7.0000e-005	8.8500e-003	5.0000e-005	8.9000e-003	2.3500e-003	4.0000e-005	2.4000e-003	0.0000	6.9362	6.9362	2.0000e-004	1.9000e-004	6.9979

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0818	0.5559	0.7727	1.2700e-003		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	108.9387	108.9387	6.5200e-003	0.0000	109.1016
Total	1.2985	0.5559	0.7727	1.2700e-003		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	108.9387	108.9387	6.5200e-003	0.0000	109.1016

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	2.8700e-003	1.9600e-003	0.0248	7.0000e-005	8.8500e-003	5.0000e-005	8.9000e-003	2.3500e-003	4.0000e-005	2.4000e-003	0.0000	6.9362	6.9362	2.0000e-004	1.9000e-004	6.9979
Total	2.8700e-003	1.9600e-003	0.0248	7.0000e-005	8.8500e-003	5.0000e-005	8.9000e-003	2.3500e-003	4.0000e-005	2.4000e-003	0.0000	6.9362	6.9362	2.0000e-004	1.9000e-004	6.9979

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.1529	0.2188	3.4000e-004		7.6500e-003	7.6500e-003		7.0400e-003	7.0400e-003	0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0155	0.1529	0.2188	3.4000e-004		7.6500e-003	7.6500e-003		7.0400e-003	7.0400e-003	0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832

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	6.1000e-004	4.2000e-004	5.3200e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9100e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4863	1.4863	4.0000e-005	4.0000e-005	1.4995
Total	6.1000e-004	4.2000e-004	5.3200e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9100e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4863	1.4863	4.0000e-005	4.0000e-005	1.4995

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.1529	0.2188	3.4000e-004		1.1500e-003	1.1500e-003		1.0600e-003	1.0600e-003	0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0155	0.1529	0.2188	3.4000e-004		1.1500e-003	1.1500e-003		1.0600e-003	1.0600e-003	0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832

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	6.1000e-004	4.2000e-004	5.3200e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9100e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4863	1.4863	4.0000e-005	4.0000e-005	1.4995
Total	6.1000e-004	4.2000e-004	5.3200e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9100e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4863	1.4863	4.0000e-005	4.0000e-005	1.4995

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.1963	0.2115	1.8780	3.9600e-003	0.4981	2.6400e-003	0.5007	0.1331	2.4600e-003	0.1355	0.0000	385.6362	385.6362	0.0234	0.0177	391.4968
Unmitigated	0.1963	0.2115	1.8780	3.9600e-003	0.4981	2.6400e-003	0.5007	0.1331	2.4600e-003	0.1355	0.0000	385.6362	385.6362	0.0234	0.0177	391.4968

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	655.20	446.81	372.19	1,351,120	1,351,120
Parking Lot	0.00	0.00	0.00		
Total	655.20	446.81	372.19	1,351,120	1,351,120

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse High Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse High Rise	801972	0.0000	0.0000	0.0000	0.0000
Parking Lot	5040	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse High Rise	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive 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	0.9010	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307
Unmitigated	0.9010	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1217					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7591					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0202	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307
Total	0.9010	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1217					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7591					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0202	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307
Total	0.9010	7.7700e-003	0.6742	4.0000e-005		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003	0.0000	1.1044	1.1044	1.0500e-003	0.0000	1.1307

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.6782	5.7800e-003	3.6500e-003	2.9101
Unmitigated	2.0977	7.2200e-003	4.5600e-003	3.6376

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse High Rise	5.92902 / 3.73786	2.0977	7.2200e-003	4.5600e-003	3.6376
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.0977	7.2200e-003	4.5600e-003	3.6376

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse High Rise	4.74321 / 3.73786	1.6782	5.7800e-003	3.6500e-003	2.9101
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.6782	5.7800e-003	3.6500e-003	2.9101

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.4972	0.5022	0.0000	21.0515
Unmitigated	8.4972	0.5022	0.0000	21.0515

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse High Rise	41.86	8.4972	0.5022	0.0000	21.0515
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		8.4972	0.5022	0.0000	21.0515

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse High Rise	41.86	8.4972	0.5022	0.0000	21.0515
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		8.4972	0.5022	0.0000	21.0515

9.0 Operational Offroad

200 Portage Avenue GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
