

Appendix B

Air Quality and Greenhouse Gas Assessment

Environmental Assessment

Permanent Fire Station 5 Rebuild Project

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Annual

Santa Rosa Fire Station 5
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	10.76	1000sqft	1.05	10,760.00	0
Parking Lot	46.00	1000sqft	1.06	46,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	98.81	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Modeler: Erica. Updated CO2 intensity per Sonoma clean power 2018 levels.

Land Use - Project land use information from 3/4 data request response. Gov office building includes landscaping as part of lot acreage.

Construction Phase - Shortened Demo phase. Added extra building phase for foundation and vertical construction. 25% of construction time to foundation, 75% to vertical. Added trenching phase.

Trips and VMT - Changed grading trip hauling length to 25 from 20.

Grading - CY of 8,000 cut, plus 250 CY of wood chips from stumps/trees.

Vehicle Trips - Updated per W Trans Appendix G write up w/daily rate for community room addition from existing conditions.

Energy Use - T24 standards adjusted downwards to reflect increased efficiency between 2016-2019 standards (CEC, 2017). NG was 0 per applicant's data request response to use electricity. Electricity rate was increased x1.27 for increased electricity in lieu of NG.

Water And Wastewater - Updated outdoor water use w/applicant annual approximation.

Construction Off-road Equipment Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Per applicant's project description, converted 200kW to 268 HP. Hours/day for testing. Hours/year include testing for maintenance.

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	50.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	6.00	10.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	6.11	7.76
tblEnergyUse	T24NG	16.31	0.00
tblGrading	AcresOfGrading	5.00	3.00
tblGrading	MaterialExported	0.00	8,250.00
tblLandUse	LotAcreage	0.25	1.05
tblProjectCharacteristics	CO2IntensityFactor	641.35	98.81
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblVehicleTrips	ST_TR	0.00	4.74
tblVehicleTrips	SU_TR	0.00	4.74
tblVehicleTrips	WD_TR	68.93	4.74
tblWater	OutdoorWaterUseRate	1,310,128.59	360,000.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2023	3-31-2023	0.4996	0.4996
2	4-1-2023	6-30-2023	0.5245	0.5245
3	7-1-2023	9-30-2023	0.5302	0.5302
		Highest	0.5302	0.5302

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	0.0516	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	10.1160	10.1160	2.9700e-003	6.1000e-004	10.3732
Mobile	9.9000e-003	0.0436	0.0999	3.6000e-004	0.0325	3.0000e-004	0.0329	8.7300e-003	2.8000e-004	9.0100e-003	0.0000	33.2900	33.2900	1.2100e-003	0.0000	33.3202
Stationary	0.0550	0.1537	0.1402	2.6000e-004		8.0900e-003	8.0900e-003		8.0900e-003	8.0900e-003	0.0000	25.5134	25.5134	3.5800e-003	0.0000	25.6028
Waste						0.0000	0.0000		0.0000	0.0000	2.0319	0.0000	2.0319	0.1201	0.0000	5.0340
Water						0.0000	0.0000		0.0000	0.0000	0.6782	0.5749	1.2530	0.0698	1.6800e-003	3.4991
Total	0.1165	0.1973	0.2406	6.2000e-004	0.0325	8.3900e-003	0.0409	8.7300e-003	8.3700e-003	0.0171	2.7101	69.4953	72.2054	0.1977	2.2900e-003	77.8305

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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	0.0516	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	10.1160	10.1160	2.9700e-003	6.1000e-004	10.3732
Mobile	9.9000e-003	0.0436	0.0999	3.6000e-004	0.0325	3.0000e-004	0.0329	8.7300e-003	2.8000e-004	9.0100e-003	0.0000	33.2900	33.2900	1.2100e-003	0.0000	33.3202
Stationary	0.0550	0.1537	0.1402	2.6000e-004		8.0900e-003	8.0900e-003		8.0900e-003	8.0900e-003	0.0000	25.5134	25.5134	3.5800e-003	0.0000	25.6028
Waste						0.0000	0.0000		0.0000	0.0000	2.0319	0.0000	2.0319	0.1201	0.0000	5.0340
Water						0.0000	0.0000		0.0000	0.0000	0.6782	0.5749	1.2530	0.0698	1.6800e-003	3.4991
Total	0.1165	0.1973	0.2406	6.2000e-004	0.0325	8.3900e-003	0.0409	8.7300e-003	8.3700e-003	0.0171	2.7101	69.4953	72.2054	0.1977	2.2900e-003	77.8305

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/2/2023	5	1	
2	Site Preparation	Site Preparation	1/3/2023	1/5/2023	5	3	
3	Grading	Grading	1/6/2023	1/19/2023	5	10	
4	Utility Trenching	Trenching	1/20/2023	2/2/2023	5	10	
5	Paving	Paving	2/3/2023	2/16/2023	5	10	
6	Building Construction 1	Building Construction	2/17/2023	4/27/2023	5	50	Foundation
7	Building Construction 2	Building Construction	4/28/2023	11/23/2023	5	150	Vertical
8	Architectural Coating	Architectural Coating	11/25/2023	12/8/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,140; Non-Residential Outdoor: 5,380; Striped Parking Area: 2,760 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction 1	Cranes	1	8.00	231	0.29
Building Construction 1	Forklifts	2	7.00	89	0.20
Building Construction 1	Generator Sets	1	8.00	84	0.74
Building Construction 1	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 1	Welders	3	8.00	46	0.45
Building Construction 2	Cranes	1	8.00	231	0.29
Building Construction 2	Forklifts	2	7.00	89	0.20
Building Construction 2	Generator Sets	1	8.00	84	0.74
Building Construction 2	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 2	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,031.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Utility Trenching			0.00	0.00	10.80	7.30				
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 1	8	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2	8	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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	7.4000e-004	7.1600e-003	6.7300e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.2000e-004	3.2000e-004	0.0000	1.0543	1.0543	2.7000e-004	0.0000	1.0610
Total	7.4000e-004	7.1600e-003	6.7300e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.2000e-004	3.2000e-004	0.0000	1.0543	1.0543	2.7000e-004	0.0000	1.0610

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3.2 Demolition - 2023

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-005	1.0000e-005	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0402	0.0402	0.0000	0.0000	0.0403
Total	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0402	0.0402	0.0000	0.0000	0.0403

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	7.4000e-004	7.1600e-003	6.7300e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.2000e-004	3.2000e-004	0.0000	1.0543	1.0543	2.7000e-004	0.0000	1.0610
Total	7.4000e-004	7.1600e-003	6.7300e-003	1.0000e-005		3.4000e-004	3.4000e-004		3.2000e-004	3.2000e-004	0.0000	1.0543	1.0543	2.7000e-004	0.0000	1.0610

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3.2 Demolition - 2023

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-005	1.0000e-005	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0402	0.0402	0.0000	0.0000	0.0403
Total	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0402	0.0402	0.0000	0.0000	0.0403

3.3 Site Preparation - 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					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	2.3900e-003	8.1000e-004	3.2000e-003	2.6000e-004	7.5000e-004	1.0100e-003	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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3.3 Site Preparation - 2023

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	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0743	0.0743	0.0000	0.0000	0.0743
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0743	0.0743	0.0000	0.0000	0.0743

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					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	1.0700e-003	8.1000e-004	1.8800e-003	1.2000e-004	7.5000e-004	8.7000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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3.3 Site Preparation - 2023

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	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0743	0.0743	0.0000	0.0000	0.0743
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0743	0.0743	0.0000	0.0000	0.0743

3.4 Grading - 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					
Fugitive Dust					0.0322	0.0000	0.0322	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6700e-003	0.0723	0.0435	1.0000e-004		3.0200e-003	3.0200e-003		2.7800e-003	2.7800e-003	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1252
Total	6.6700e-003	0.0723	0.0435	1.0000e-004	0.0322	3.0200e-003	0.0352	0.0168	2.7800e-003	0.0196	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1252

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3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1200e-003	0.0972	0.0316	4.6000e-004	0.0109	1.9000e-004	0.0111	2.9900e-003	1.8000e-004	3.1700e-003	0.0000	45.0862	45.0862	2.0600e-003	0.0000	45.1376
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	1.3000e-004	9.0000e-005	9.5000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3094	0.3094	1.0000e-005	0.0000	0.3096
Total	3.2500e-003	0.0973	0.0326	4.6000e-004	0.0113	1.9000e-004	0.0115	3.1000e-003	1.8000e-004	3.2800e-003	0.0000	45.3956	45.3956	2.0700e-003	0.0000	45.4472

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					0.0145	0.0000	0.0145	7.5600e-003	0.0000	7.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6700e-003	0.0723	0.0435	1.0000e-004		3.0200e-003	3.0200e-003		2.7800e-003	2.7800e-003	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1251
Total	6.6700e-003	0.0723	0.0435	1.0000e-004	0.0145	3.0200e-003	0.0175	7.5600e-003	2.7800e-003	0.0103	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1251

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3.5 Utility Trenching - 2023

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
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
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 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	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	1.3900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.7900e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179

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3.6 Paving - 2023

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	1.3000e-004	1.4200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4641	0.4641	1.0000e-005	0.0000	0.4644
Total	2.0000e-004	1.3000e-004	1.4200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4641	0.4641	1.0000e-005	0.0000	0.4644

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	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	1.3900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.7900e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178

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3.6 Paving - 2023

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	1.3000e-004	1.4200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4641	0.4641	1.0000e-005	0.0000	0.4644
Total	2.0000e-004	1.3000e-004	1.4200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4641	0.4641	1.0000e-005	0.0000	0.4644

3.7 Building Construction 1 - 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	0.0428	0.3406	0.3554	6.3000e-004		0.0153	0.0153		0.0147	0.0147	0.0000	51.9255	51.9255	9.8200e-003	0.0000	52.1710
Total	0.0428	0.3406	0.3554	6.3000e-004		0.0153	0.0153		0.0147	0.0147	0.0000	51.9255	51.9255	9.8200e-003	0.0000	52.1710

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3.7 Building Construction 1 - 2023

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	5.0000e-004	0.0172	4.9400e-003	6.0000e-005	1.4800e-003	2.0000e-005	1.5000e-003	4.3000e-004	2.0000e-005	4.5000e-004	0.0000	5.6161	5.6161	2.3000e-004	0.0000	5.6219
Worker	1.5400e-003	9.8000e-004	0.0109	4.0000e-005	4.5400e-003	3.0000e-005	4.5700e-003	1.2100e-003	3.0000e-005	1.2300e-003	0.0000	3.5584	3.5584	7.0000e-005	0.0000	3.5602
Total	2.0400e-003	0.0181	0.0158	1.0000e-004	6.0200e-003	5.0000e-005	6.0700e-003	1.6400e-003	5.0000e-005	1.6800e-003	0.0000	9.1745	9.1745	3.0000e-004	0.0000	9.1821

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	0.0428	0.3406	0.3554	6.3000e-004		0.0153	0.0153		0.0147	0.0147	0.0000	51.9255	51.9255	9.8200e-003	0.0000	52.1710
Total	0.0428	0.3406	0.3554	6.3000e-004		0.0153	0.0153		0.0147	0.0147	0.0000	51.9255	51.9255	9.8200e-003	0.0000	52.1710

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3.7 Building Construction 1 - 2023

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	5.0000e-004	0.0172	4.9400e-003	6.0000e-005	1.4800e-003	2.0000e-005	1.5000e-003	4.3000e-004	2.0000e-005	4.5000e-004	0.0000	5.6161	5.6161	2.3000e-004	0.0000	5.6219
Worker	1.5400e-003	9.8000e-004	0.0109	4.0000e-005	4.5400e-003	3.0000e-005	4.5700e-003	1.2100e-003	3.0000e-005	1.2300e-003	0.0000	3.5584	3.5584	7.0000e-005	0.0000	3.5602
Total	2.0400e-003	0.0181	0.0158	1.0000e-004	6.0200e-003	5.0000e-005	6.0700e-003	1.6400e-003	5.0000e-005	1.6800e-003	0.0000	9.1745	9.1745	3.0000e-004	0.0000	9.1821

3.8 Building Construction 2 - 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	0.1285	1.0218	1.0661	1.8800e-003		0.0460	0.0460		0.0441	0.0441	0.0000	155.7766	155.7766	0.0295	0.0000	156.5130
Total	0.1285	1.0218	1.0661	1.8800e-003		0.0460	0.0460		0.0441	0.0441	0.0000	155.7766	155.7766	0.0295	0.0000	156.5130

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3.8 Building Construction 2 - 2023

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	1.5000e-003	0.0515	0.0148	1.8000e-004	4.4300e-003	6.0000e-005	4.4900e-003	1.2800e-003	6.0000e-005	1.3400e-003	0.0000	16.8483	16.8483	7.0000e-004	0.0000	16.8658
Worker	4.6100e-003	2.9400e-003	0.0327	1.2000e-004	0.0136	9.0000e-005	0.0137	3.6300e-003	8.0000e-005	3.7000e-003	0.0000	10.6753	10.6753	2.1000e-004	0.0000	10.6805
Total	6.1100e-003	0.0544	0.0475	3.0000e-004	0.0181	1.5000e-004	0.0182	4.9100e-003	1.4000e-004	5.0400e-003	0.0000	27.5235	27.5235	9.1000e-004	0.0000	27.5463

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	0.1285	1.0218	1.0661	1.8800e-003		0.0460	0.0460		0.0441	0.0441	0.0000	155.7764	155.7764	0.0295	0.0000	156.5129
Total	0.1285	1.0218	1.0661	1.8800e-003		0.0460	0.0460		0.0441	0.0441	0.0000	155.7764	155.7764	0.0295	0.0000	156.5129

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3.8 Building Construction 2 - 2023

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	1.5000e-003	0.0515	0.0148	1.8000e-004	4.4300e-003	6.0000e-005	4.4900e-003	1.2800e-003	6.0000e-005	1.3400e-003	0.0000	16.8483	16.8483	7.0000e-004	0.0000	16.8658
Worker	4.6100e-003	2.9400e-003	0.0327	1.2000e-004	0.0136	9.0000e-005	0.0137	3.6300e-003	8.0000e-005	3.7000e-003	0.0000	10.6753	10.6753	2.1000e-004	0.0000	10.6805
Total	6.1100e-003	0.0544	0.0475	3.0000e-004	0.0181	1.5000e-004	0.0182	4.9100e-003	1.4000e-004	5.0400e-003	0.0000	27.5235	27.5235	9.1000e-004	0.0000	27.5463

3.9 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	0.0657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	0.0667	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785

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3.9 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	4.0000e-005	4.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1547	0.1547	0.0000	0.0000	0.1548
Total	7.0000e-005	4.0000e-005	4.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1547	0.1547	0.0000	0.0000	0.1548

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	0.0657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	0.0667	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785

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3.9 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	4.0000e-005	4.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1547	0.1547	0.0000	0.0000	0.1548
Total	7.0000e-005	4.0000e-005	4.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1547	0.1547	0.0000	0.0000	0.1548

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive 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	9.9000e-003	0.0436	0.0999	3.6000e-004	0.0325	3.0000e-004	0.0329	8.7300e-003	2.8000e-004	9.0100e-003	0.0000	33.2900	33.2900	1.2100e-003	0.0000	33.3202
Unmitigated	9.9000e-003	0.0436	0.0999	3.6000e-004	0.0325	3.0000e-004	0.0329	8.7300e-003	2.8000e-004	9.0100e-003	0.0000	33.2900	33.2900	1.2100e-003	0.0000	33.3202

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	51.00	51.00	51.00	87,463	87,463
Parking Lot	0.00	0.00	0.00		
Total	51.00	51.00	51.00	87,463	87,463

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
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	209605	9.3944	2.7600e-003	5.7000e-004	9.6333
Parking Lot	16100	0.7216	2.1000e-004	4.0000e-005	0.7400
Total		10.1160	2.9700e-003	6.1000e-004	10.3733

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	209605	9.3944	2.7600e-003	5.7000e-004	9.6333
Parking Lot	16100	0.7216	2.1000e-004	4.0000e-005	0.7400
Total		10.1160	2.9700e-003	6.1000e-004	10.3733

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive 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	0.0516	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003
Unmitigated	0.0516	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.5700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003
Total	0.0516	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Annual

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	6.5700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003
Total	0.0516	0.0000	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.2530	0.0698	1.6800e-003	3.4991
Unmitigated	1.2530	0.0698	1.6800e-003	3.4991

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	2.13758 / 0.36	1.2530	0.0698	1.6800e-003	3.4991
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.2530	0.0698	1.6800e-003	3.4991

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	2.13758 / 0.36	1.2530	0.0698	1.6800e-003	3.4991
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.2530	0.0698	1.6800e-003	3.4991

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.0319	0.1201	0.0000	5.0340
Unmitigated	2.0319	0.1201	0.0000	5.0340

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	10.01	2.0319	0.1201	0.0000	5.0340
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.0319	0.1201	0.0000	5.0340

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	10.01	2.0319	0.1201	0.0000	5.0340
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.0319	0.1201	0.0000	5.0340

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	24	250	268	0.73	Diesel

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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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 300 HP)	0.0550	0.1537	0.1402	2.6000e-004		8.0900e-003	8.0900e-003		8.0900e-003	8.0900e-003	0.0000	25.5134	25.5134	3.5800e-003	0.0000	25.6028
Total	0.0550	0.1537	0.1402	2.6000e-004		8.0900e-003	8.0900e-003		8.0900e-003	8.0900e-003	0.0000	25.5134	25.5134	3.5800e-003	0.0000	25.6028

11.0 Vegetation

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Santa Rosa Fire Station 5
Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	10.76	1000sqft	1.05	10,760.00	0
Parking Lot	46.00	1000sqft	1.06	46,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	98.81	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Project Characteristics - Modeler: Erica. Updated CO2 intensity per Sonoma clean power 2018 levels.

Land Use - Project land use information from 3/4 data request response. Gov office building includes landscaping as part of lot acreage.

Construction Phase - Shortened Demo phase. Added extra building phase for foundation and vertical construction. 25% of construction time to foundation, 75% to vertical. Added trenching phase.

Trips and VMT - Changed grading trip hauling length to 25 from 20.

Grading - CY of 8,000 cut, plus 250 CY of wood chips from stumps/trees.

Vehicle Trips - Updated per W Trans Appendix G write up w/daily rate for community room addition from existing conditions.

Energy Use - T24 standards adjusted downwards to reflect increased efficiency between 2016-2019 standards (CEC, 2017). NG was 0 per applicant's data request response to use electricity. Electricity rate was increased x1.27 for increased electricity in lieu of NG.

Water And Wastewater - Updated outdoor water use w/applicant annual approximation.

Construction Off-road Equipment Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Per applicant's project description, converted 200kW to 268 HP. Hours/day for testing. Hours/year include testing for maintenance.

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	50.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	6.00	10.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	6.11	7.76
tblEnergyUse	T24NG	16.31	0.00
tblGrading	AcresOfGrading	5.00	3.00
tblGrading	MaterialExported	0.00	8,250.00
tblLandUse	LotAcreage	0.25	1.05
tblProjectCharacteristics	CO2IntensityFactor	641.35	98.81
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblVehicleTrips	ST_TR	0.00	4.74
tblVehicleTrips	SU_TR	0.00	4.74
tblVehicleTrips	WD_TR	68.93	4.74
tblWater	OutdoorWaterUseRate	1,310,128.59	360,000.00

2.0 Emissions Summary

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

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	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0634	0.2337	0.5613	2.1000e-003	0.1858	1.6500e-003	0.1874	0.0497	1.5400e-003	0.0512		213.0625	213.0625	7.3000e-003		213.2449
Stationary	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810
Total	10.9018	29.7355	27.4809	0.0528	0.1858	1.5544	1.7402	0.0497	1.5543	1.6040		5,612.8298	5,612.8298	0.7644	0.0000	5,631.9391

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0634	0.2337	0.5613	2.1000e-003	0.1858	1.6500e-003	0.1874	0.0497	1.5400e-003	0.0512		213.0625	213.0625	7.3000e-003		213.2449
Stationary	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810
Total	10.9018	29.7355	27.4809	0.0528	0.1858	1.5544	1.7402	0.0497	1.5543	1.6040		5,612.8298	5,612.8298	0.7644	0.0000	5,631.9391

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

3.0 Construction Detail

Construction Phase

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/2/2023	5	1	
2	Site Preparation	Site Preparation	1/3/2023	1/5/2023	5	3	
3	Grading	Grading	1/6/2023	1/19/2023	5	10	
4	Utility Trenching	Trenching	1/20/2023	2/2/2023	5	10	
5	Paving	Paving	2/3/2023	2/16/2023	5	10	
6	Building Construction 1	Building Construction	2/17/2023	4/27/2023	5	50	Foundation
7	Building Construction 2	Building Construction	4/28/2023	11/23/2023	5	150	Vertical
8	Architectural Coating	Architectural Coating	11/25/2023	12/8/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,140; Non-Residential Outdoor: 5,380; Striped Parking Area: 2,760 (Architectural Coating – sqft)

OffRoad Equipment

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction 1	Cranes	1	8.00	231	0.29
Building Construction 1	Forklifts	2	7.00	89	0.20
Building Construction 1	Generator Sets	1	8.00	84	0.74
Building Construction 1	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 1	Welders	3	8.00	46	0.45
Building Construction 2	Cranes	1	8.00	231	0.29
Building Construction 2	Forklifts	2	7.00	89	0.20
Building Construction 2	Generator Sets	1	8.00	84	0.74
Building Construction 2	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 2	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

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	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,031.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Utility Trenching			0.00	0.00	10.80	7.30				
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 1	8	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2	8	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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	lb/day										lb/day					
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0363	0.0197	0.2714	9.6000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		95.3743	95.3743	1.8600e-003		95.4207
Total	0.0363	0.0197	0.2714	9.6000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		95.3743	95.3743	1.8600e-003		95.4207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0363	0.0197	0.2714	9.6000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		95.3743	95.3743	1.8600e-003		95.4207
Total	0.0363	0.0197	0.2714	9.6000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		95.3743	95.3743	1.8600e-003		95.4207

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703		2,374.8634	2,374.8634	0.7681		2,394.0654

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0224	0.0121	0.1670	5.9000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		58.6919	58.6919	1.1400e-003		58.7205
Total	0.0224	0.0121	0.1670	5.9000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		58.6919	58.6919	1.1400e-003		58.7205

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	1.3027	14.2802	9.7820	0.0245	0.7158	0.5419	1.2577	0.0773	0.4985	0.5758	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0224	0.0121	0.1670	5.9000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		58.6919	58.6919	1.1400e-003		58.7205
Total	0.0224	0.0121	0.1670	5.9000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		58.6919	58.6919	1.1400e-003		58.7205

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.4335	0.0000	6.4335	3.3587	0.0000	3.3587			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	6.4335	0.6044	7.0379	3.3587	0.5560	3.9147		1,995.6147	1,995.6147	0.6454		2,011.7503

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6188	19.0902	6.2112	0.0932	2.2514	0.0375	2.2889	0.6169	0.0359	0.6528		9,998.6915	9,998.6915	0.4469		10,009.8632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0279	0.0152	0.2088	7.4000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0222		73.3649	73.3649	1.4300e-003		73.4006
Total	0.6468	19.1053	6.4200	0.0939	2.3335	0.0380	2.3715	0.6387	0.0364	0.6751		10,072.0563	10,072.0563	0.4483		10,083.2637

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8951	0.0000	2.8951	1.5114	0.0000	1.5114			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	2.8951	0.6044	3.4994	1.5114	0.5560	2.0674	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6188	19.0902	6.2112	0.0932	2.2514	0.0375	2.2889	0.6169	0.0359	0.6528		9,998.6915	9,998.6915	0.4469		10,009.8632
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0279	0.0152	0.2088	7.4000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0222		73.3649	73.3649	1.4300e-003		73.4006
Total	0.6468	19.1053	6.4200	0.0939	2.3335	0.0380	2.3715	0.6387	0.0364	0.6751		10,072.0563	10,072.0563	0.4483		10,083.2637

3.5 Utility Trenching - 2023

Unmitigated Construction Off-Site

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

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.5 Utility Trenching - 2023

Mitigated Construction Off-Site

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

3.6 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	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2777					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1579	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009
Total	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2777					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1579	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009
Total	0.0419	0.0227	0.3131	1.1000e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		110.0473	110.0473	2.1400e-003		110.1009

3.7 Building Construction 1 - 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	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.7 Building Construction 1 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0195	0.6812	0.1857	2.3600e-003	0.0609	7.8000e-004	0.0617	0.0175	7.4000e-004	0.0183		250.2854	250.2854	9.9700e-003		250.5348
Worker	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
Total	0.0838	0.7161	0.6658	4.0500e-003	0.2499	1.9200e-003	0.2518	0.0677	1.7900e-003	0.0694		419.0246	419.0246	0.0133		419.3561

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.7 Building Construction 1 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0195	0.6812	0.1857	2.3600e-003	0.0609	7.8000e-004	0.0617	0.0175	7.4000e-004	0.0183		250.2854	250.2854	9.9700e-003		250.5348
Worker	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
Total	0.0838	0.7161	0.6658	4.0500e-003	0.2499	1.9200e-003	0.2518	0.0677	1.7900e-003	0.0694		419.0246	419.0246	0.0133		419.3561

3.8 Building Construction 2 - 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	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.8 Building Construction 2 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0195	0.6812	0.1857	2.3600e-003	0.0609	7.8000e-004	0.0617	0.0175	7.4000e-004	0.0183		250.2854	250.2854	9.9700e-003		250.5348
Worker	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
Total	0.0838	0.7161	0.6658	4.0500e-003	0.2499	1.9200e-003	0.2518	0.0677	1.7900e-003	0.0694		419.0246	419.0246	0.0133		419.3561

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.8 Building Construction 2 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0195	0.6812	0.1857	2.3600e-003	0.0609	7.8000e-004	0.0617	0.0175	7.4000e-004	0.0183		250.2854	250.2854	9.9700e-003		250.5348
Worker	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
Total	0.0838	0.7161	0.6658	4.0500e-003	0.2499	1.9200e-003	0.2518	0.0677	1.7900e-003	0.0694		419.0246	419.0246	0.0133		419.3561

3.9 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	lb/day										lb/day					
Archit. Coating	13.1402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	13.3319	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.9 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0140	7.5800e-003	0.1044	3.7000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		36.6824	36.6824	7.1000e-004		36.7003
Total	0.0140	7.5800e-003	0.1044	3.7000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		36.6824	36.6824	7.1000e-004		36.7003

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.1402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	13.3319	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

3.9 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0140	7.5800e-003	0.1044	3.7000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		36.6824	36.6824	7.1000e-004		36.7003
Total	0.0140	7.5800e-003	0.1044	3.7000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		36.6824	36.6824	7.1000e-004		36.7003

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0634	0.2337	0.5613	2.1000e-003	0.1858	1.6500e-003	0.1874	0.0497	1.5400e-003	0.0512		213.0625	213.0625	7.3000e-003		213.2449
Unmitigated	0.0634	0.2337	0.5613	2.1000e-003	0.1858	1.6500e-003	0.1874	0.0497	1.5400e-003	0.0512		213.0625	213.0625	7.3000e-003		213.2449

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	51.00	51.00	51.00	87,463	87,463
Parking Lot	0.00	0.00	0.00		
Total	51.00	51.00	51.00	87,463	87,463

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
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.580272	0.038274	0.193741	0.109917	0.015100	0.005324	0.018491	0.026678	0.002649	0.002134	0.005793	0.000896	0.000732
Parking Lot	0.580272	0.038274	0.193741	0.109917	0.015100	0.005324	0.018491	0.026678	0.002649	0.002134	0.005793	0.000896	0.000732

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

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					
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Unmitigated	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132

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	0.0360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2466					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Total	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

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	lb/day										lb/day					
Architectural Coating	0.0360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2466					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Total	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	24	250	268	0.73	Diesel

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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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (175 - 300 HP)	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810
Total	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810

11.0 Vegetation

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Santa Rosa Fire Station 5
Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	10.76	1000sqft	1.05	10,760.00	0
Parking Lot	46.00	1000sqft	1.06	46,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	98.81	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Project Characteristics - Modeler: Erica. Updated CO2 intensity per Sonoma clean power 2018 levels.

Land Use - Project land use information from 3/4 data request response. Gov office building includes landscaping as part of lot acreage.

Construction Phase - Shortened Demo phase. Added extra building phase for foundation and vertical construction. 25% of construction time to foundation, 75% to vertical. Added trenching phase.

Trips and VMT - Changed grading trip hauling length to 25 from 20.

Grading - CY of 8,000 cut, plus 250 CY of wood chips from stumps/trees.

Vehicle Trips - Updated per W Trans Appendix G write up w/daily rate for community room addition from existing conditions.

Energy Use - T24 standards adjusted downwards to reflect increased efficiency between 2016-2019 standards (CEC, 2017). NG was 0 per applicant's data request response to use electricity. Electricity rate was increased x1.27 for increased electricity in lieu of NG.

Water And Wastewater - Updated outdoor water use w/applicant annual approximation.

Construction Off-road Equipment Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Per applicant's project description, converted 200kW to 268 HP. Hours/day for testing. Hours/year include testing for maintenance.

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	50.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	6.00	10.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	6.11	7.76
tblEnergyUse	T24NG	16.31	0.00
tblGrading	AcresOfGrading	5.00	3.00
tblGrading	MaterialExported	0.00	8,250.00
tblLandUse	LotAcreage	0.25	1.05
tblProjectCharacteristics	CO2IntensityFactor	641.35	98.81
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblVehicleTrips	ST_TR	0.00	4.74
tblVehicleTrips	SU_TR	0.00	4.74
tblVehicleTrips	WD_TR	68.93	4.74
tblWater	OutdoorWaterUseRate	1,310,128.59	360,000.00

2.0 Emissions Summary

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

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	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0537	0.2429	0.5791	1.9700e-003	0.1858	1.6600e-003	0.1874	0.0497	1.5500e-003	0.0512		199.4920	199.4920	7.5400e-003		199.6806
Stationary	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810
Total	10.8921	29.7448	27.4987	0.0527	0.1858	1.5544	1.7402	0.0497	1.5543	1.6040		5,599.2593	5,599.2593	0.7646	0.0000	5,618.3748

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0537	0.2429	0.5791	1.9700e-003	0.1858	1.6600e-003	0.1874	0.0497	1.5500e-003	0.0512		199.4920	199.4920	7.5400e-003		199.6806
Stationary	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810
Total	10.8921	29.7448	27.4987	0.0527	0.1858	1.5544	1.7402	0.0497	1.5543	1.6040		5,599.2593	5,599.2593	0.7646	0.0000	5,618.3748

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

3.0 Construction Detail

Construction Phase

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/2/2023	5	1	
2	Site Preparation	Site Preparation	1/3/2023	1/5/2023	5	3	
3	Grading	Grading	1/6/2023	1/19/2023	5	10	
4	Utility Trenching	Trenching	1/20/2023	2/2/2023	5	10	
5	Paving	Paving	2/3/2023	2/16/2023	5	10	
6	Building Construction 1	Building Construction	2/17/2023	4/27/2023	5	50	Foundation
7	Building Construction 2	Building Construction	4/28/2023	11/23/2023	5	150	Vertical
8	Architectural Coating	Architectural Coating	11/25/2023	12/8/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,140; Non-Residential Outdoor: 5,380; Striped Parking Area: 2,760 (Architectural Coating – sqft)

OffRoad Equipment

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction 1	Cranes	1	8.00	231	0.29
Building Construction 1	Forklifts	2	7.00	89	0.20
Building Construction 1	Generator Sets	1	8.00	84	0.74
Building Construction 1	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 1	Welders	3	8.00	46	0.45
Building Construction 2	Cranes	1	8.00	231	0.29
Building Construction 2	Forklifts	2	7.00	89	0.20
Building Construction 2	Generator Sets	1	8.00	84	0.74
Building Construction 2	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction 2	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

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	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,031.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Utility Trenching			0.00	0.00	10.80	7.30				
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 1	8	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2	8	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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	lb/day										lb/day					
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0387	0.0243	0.2518	8.8000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		87.8642	87.8642	1.7200e-003		87.9071
Total	0.0387	0.0243	0.2518	8.8000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		87.8642	87.8642	1.7200e-003		87.9071

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0387	0.0243	0.2518	8.8000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		87.8642	87.8642	1.7200e-003		87.9071
Total	0.0387	0.0243	0.2518	8.8000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		87.8642	87.8642	1.7200e-003		87.9071

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703		2,374.8634	2,374.8634	0.7681		2,394.0654

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0238	0.0150	0.1550	5.4000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		54.0703	54.0703	1.0600e-003		54.0967
Total	0.0238	0.0150	0.1550	5.4000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		54.0703	54.0703	1.0600e-003		54.0967

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	1.3027	14.2802	9.7820	0.0245	0.7158	0.5419	1.2577	0.0773	0.4985	0.5758	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0238	0.0150	0.1550	5.4000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		54.0703	54.0703	1.0600e-003		54.0967
Total	0.0238	0.0150	0.1550	5.4000e-004	0.0657	4.0000e-004	0.0661	0.0174	3.6000e-004	0.0178		54.0703	54.0703	1.0600e-003		54.0967

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.4335	0.0000	6.4335	3.3587	0.0000	3.3587			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	6.4335	0.6044	7.0379	3.3587	0.5560	3.9147		1,995.6147	1,995.6147	0.6454		2,011.7503

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6331	19.4957	6.4792	0.0919	2.2514	0.0383	2.2896	0.6169	0.0366	0.6536		9,858.4820	9,858.4820	0.4618		9,870.0260
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0298	0.0187	0.1937	6.8000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0222		67.5878	67.5878	1.3200e-003		67.6209
Total	0.6629	19.5145	6.6728	0.0926	2.3335	0.0388	2.3723	0.6387	0.0371	0.6758		9,926.0698	9,926.0698	0.4631		9,937.6469

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8951	0.0000	2.8951	1.5114	0.0000	1.5114			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	2.8951	0.6044	3.4994	1.5114	0.5560	2.0674	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6331	19.4957	6.4792	0.0919	2.2514	0.0383	2.2896	0.6169	0.0366	0.6536		9,858.4820	9,858.4820	0.4618		9,870.0260
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0298	0.0187	0.1937	6.8000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0222		67.5878	67.5878	1.3200e-003		67.6209
Total	0.6629	19.5145	6.6728	0.0926	2.3335	0.0388	2.3723	0.6387	0.0371	0.6758		9,926.0698	9,926.0698	0.4631		9,937.6469

3.5 Utility Trenching - 2023

Unmitigated Construction Off-Site

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

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.5 Utility Trenching - 2023

Mitigated Construction Off-Site

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

3.6 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	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2777					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1579	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313
Total	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2777					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1579	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313
Total	0.0447	0.0281	0.2905	1.0200e-003	0.1232	7.4000e-004	0.1240	0.0327	6.8000e-004	0.0334		101.3817	101.3817	1.9800e-003		101.4313

3.7 Building Construction 1 - 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	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.7 Building Construction 1 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0207	0.6845	0.2104	2.3000e-003	0.0609	8.1000e-004	0.0617	0.0175	7.7000e-004	0.0183		243.9594	243.9594	0.0107		244.2272
Worker	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
Total	0.0892	0.7275	0.6559	3.8600e-003	0.2499	1.9500e-003	0.2518	0.0677	1.8200e-003	0.0695		399.4114	399.4114	0.0138		399.7552

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.7 Building Construction 1 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0207	0.6845	0.2104	2.3000e-003	0.0609	8.1000e-004	0.0617	0.0175	7.7000e-004	0.0183		243.9594	243.9594	0.0107		244.2272
Worker	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
Total	0.0892	0.7275	0.6559	3.8600e-003	0.2499	1.9500e-003	0.2518	0.0677	1.8200e-003	0.0695		399.4114	399.4114	0.0138		399.7552

3.8 Building Construction 2 - 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	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.8 Building Construction 2 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0207	0.6845	0.2104	2.3000e-003	0.0609	8.1000e-004	0.0617	0.0175	7.7000e-004	0.0183		243.9594	243.9594	0.0107		244.2272
Worker	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
Total	0.0892	0.7275	0.6559	3.8600e-003	0.2499	1.9500e-003	0.2518	0.0677	1.8200e-003	0.0695		399.4114	399.4114	0.0138		399.7552

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.8 Building Construction 2 - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0207	0.6845	0.2104	2.3000e-003	0.0609	8.1000e-004	0.0617	0.0175	7.7000e-004	0.0183		243.9594	243.9594	0.0107		244.2272
Worker	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
Total	0.0892	0.7275	0.6559	3.8600e-003	0.2499	1.9500e-003	0.2518	0.0677	1.8200e-003	0.0695		399.4114	399.4114	0.0138		399.7552

3.9 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	lb/day										lb/day					
Archit. Coating	13.1402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	13.3319	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.9 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0149	9.3500e-003	0.0968	3.4000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		33.7939	33.7939	6.6000e-004		33.8104
Total	0.0149	9.3500e-003	0.0968	3.4000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		33.7939	33.7939	6.6000e-004		33.8104

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.1402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	13.3319	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

3.9 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0149	9.3500e-003	0.0968	3.4000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		33.7939	33.7939	6.6000e-004		33.8104
Total	0.0149	9.3500e-003	0.0968	3.4000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		33.7939	33.7939	6.6000e-004		33.8104

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0537	0.2429	0.5791	1.9700e-003	0.1858	1.6600e-003	0.1874	0.0497	1.5500e-003	0.0512		199.4920	199.4920	7.5400e-003		199.6806
Unmitigated	0.0537	0.2429	0.5791	1.9700e-003	0.1858	1.6600e-003	0.1874	0.0497	1.5500e-003	0.0512		199.4920	199.4920	7.5400e-003		199.6806

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	51.00	51.00	51.00	87,463	87,463
Parking Lot	0.00	0.00	0.00		
Total	51.00	51.00	51.00	87,463	87,463

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
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.580272	0.038274	0.193741	0.109917	0.015100	0.005324	0.018491	0.026678	0.002649	0.002134	0.005793	0.000896	0.000732
Parking Lot	0.580272	0.038274	0.193741	0.109917	0.015100	0.005324	0.018491	0.026678	0.002649	0.002134	0.005793	0.000896	0.000732

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

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					
Government Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Unmitigated	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132

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	0.0360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2466					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Total	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132

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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	lb/day										lb/day					
Architectural Coating	0.0360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2466					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132
Total	0.2831	5.0000e-005	5.7900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0132

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Santa Rosa Fire Station 5 - Bay Area AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	24	250	268	0.73	Diesel

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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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (175 - 300 HP)	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810
Total	10.5554	29.5018	26.9139	0.0507		1.5527	1.5527		1.5527	1.5527		5,399.7548	5,399.7548	0.7571		5,418.6810

11.0 Vegetation
