

Wheatland Regional Sewer Project - Feather River AQMD Air District, Annual

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

**Wheatland Regional Sewer Project
Feather River AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	6.98	1000sqft	0.16	6,982.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	67
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Vehicle Trips - Trip rate adjusted based on project-specific information provided by the applicant.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	6/7/2023	6/14/2023
tblConstructionPhase	PhaseEndDate	6/14/2023	1/25/2023
tblConstructionPhase	PhaseStartDate	1/19/2023	1/26/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	1/19/2023

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tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	469.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	872.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	134.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	1.74	3.87
tblVehicleTrips	SU_TR	1.74	3.87
tblVehicleTrips	WD_TR	1.74	3.87

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	0.2262	0.2262
2	4-1-2023	6-30-2023	0.2752	0.2752
		Highest	0.2752	0.2752

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	0.0354	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	12.6679	12.6679	1.1000e-003	2.4000e-004	12.7668
Mobile	0.0164	0.0297	0.1506	3.1000e-004	0.0292	3.1000e-004	0.0295	7.8400e-003	3.0000e-004	8.1300e-003	0.0000	28.5695	28.5695	1.7000e-003	1.6700e-003	29.1108
Stationary	0.0248	0.0319	0.0653	4.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	4.3229	4.3229	2.6100e-003	0.0000	4.3882
Waste						0.0000	0.0000		0.0000	0.0000	1.3316	0.0000	1.3316	0.0787	0.0000	3.2990
Water						0.0000	0.0000		0.0000	0.0000	0.5121	0.8081	1.3202	0.0527	1.2600e-003	3.0132
Total	0.0773	0.0677	0.2211	3.9000e-004	0.0292	1.9200e-003	0.0312	7.8400e-003	1.9100e-003	9.7400e-003	1.8437	46.3685	48.2122	0.1368	3.1700e-003	52.5782

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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	0.0354	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	12.6679	12.6679	1.1000e-003	2.4000e-004	12.7668
Mobile	0.0164	0.0297	0.1506	3.1000e-004	0.0292	3.1000e-004	0.0295	7.8400e-003	3.0000e-004	8.1300e-003	0.0000	28.5695	28.5695	1.7000e-003	1.6700e-003	29.1108
Stationary	0.0248	0.0319	0.0653	4.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	4.3229	4.3229	2.6100e-003	0.0000	4.3882
Waste						0.0000	0.0000		0.0000	0.0000	1.3316	0.0000	1.3316	0.0787	0.0000	3.2990
Water						0.0000	0.0000		0.0000	0.0000	0.5121	0.8081	1.3202	0.0527	1.2600e-003	3.0132
Total	0.0773	0.0677	0.2211	3.9000e-004	0.0292	1.9200e-003	0.0312	7.8400e-003	1.9100e-003	9.7400e-003	1.8437	46.3685	48.2122	0.1368	3.1700e-003	52.5782

	ROG	NOx	CO	SO2	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/14/2023	1/16/2023	5	1	

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3	Grading	Grading	1/17/2023	1/18/2023	5	2
4	Building Construction	Building Construction	1/26/2023	6/14/2023	5	100
5	Paving	Paving	1/19/2023	1/25/2023	5	5
6	Architectural Coating	Architectural Coating	6/15/2023	6/21/2023	5	5

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,473; Non-Residential Outdoor: 3,491; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	3.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					
Fugitive Dust					3.1000e-004	0.0000	3.1000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	3.2300e-003	0.0289	0.0370	6.0000e-005	3.1000e-004	1.4100e-003	1.7200e-003	5.0000e-005	1.3500e-003	1.4000e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328

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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	2.0000e-004	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0859	0.0859	0.0000	1.0000e-005	0.0899
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	1.5000e-004	1.1000e-004	1.2700e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3133	0.3133	1.0000e-005	1.0000e-005	0.3164
Total	1.5000e-004	3.1000e-004	1.3100e-003	0.0000	4.2000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3992	0.3992	1.0000e-005	2.0000e-005	0.4063

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					3.1000e-004	0.0000	3.1000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	3.2300e-003	0.0289	0.0370	6.0000e-005	3.1000e-004	1.4100e-003	1.7200e-003	5.0000e-005	1.3500e-003	1.4000e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328

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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	2.0000e-004	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0859	0.0859	0.0000	1.0000e-005	0.0899
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	1.5000e-004	1.1000e-004	1.2700e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3133	0.3133	1.0000e-005	1.0000e-005	0.3164
Total	1.5000e-004	3.1000e-004	1.3100e-003	0.0000	4.2000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3992	0.3992	1.0000e-005	2.0000e-005	0.4063

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

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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	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

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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	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158

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					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	2.5700e-003	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

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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	0.0000	0.0000	0.0000	0.0000	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	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0501	0.0501	0.0000	0.0000	0.0506
Total	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0501	0.0501	0.0000	0.0000	0.0506

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					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	2.5700e-003	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

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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	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	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0501	0.0501	0.0000	0.0000	0.0506
Total	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0501	0.0501	0.0000	0.0000	0.0506

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.5 Building Construction - 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	6.0000e-005	2.3500e-003	7.2000e-004	1.0000e-005	3.3000e-004	1.0000e-005	3.4000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	0.9721	0.9721	0.0000	1.5000e-004	1.0160
Worker	4.6000e-004	3.2000e-004	3.8000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9399	0.9399	3.0000e-005	3.0000e-005	0.9492
Total	5.2000e-004	2.6700e-003	4.5200e-003	2.0000e-005	1.5100e-003	2.0000e-005	1.5300e-003	4.0000e-004	2.0000e-005	4.3000e-004	0.0000	1.9120	1.9120	3.0000e-005	1.8000e-004	1.9652

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	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.5 Building Construction - 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	6.0000e-005	2.3500e-003	7.2000e-004	1.0000e-005	3.3000e-004	1.0000e-005	3.4000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	0.9721	0.9721	0.0000	1.5000e-004	1.0160
Worker	4.6000e-004	3.2000e-004	3.8000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9399	0.9399	3.0000e-005	3.0000e-005	0.9492
Total	5.2000e-004	2.6700e-003	4.5200e-003	2.0000e-005	1.5100e-003	2.0000e-005	1.5300e-003	4.0000e-004	2.0000e-005	4.3000e-004	0.0000	1.9120	1.9120	3.0000e-005	1.8000e-004	1.9652

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	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

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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	1.4000e-004	1.0000e-004	1.1400e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2820	0.2820	1.0000e-005	1.0000e-005	0.2848
Total	1.4000e-004	1.0000e-004	1.1400e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2820	0.2820	1.0000e-005	1.0000e-005	0.2848

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

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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	1.4000e-004	1.0000e-004	1.1400e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2820	0.2820	1.0000e-005	1.0000e-005	0.2848
Total	1.4000e-004	1.0000e-004	1.1400e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2820	0.2820	1.0000e-005	1.0000e-005	0.2848

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	0.0814	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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3.7 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	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158

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	0.0809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	0.0814	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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3.7 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	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0157	0.0157	0.0000	0.0000	0.0158

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0164	0.0297	0.1506	3.1000e-004	0.0292	3.1000e-004	0.0295	7.8400e-003	3.0000e-004	8.1300e-003	0.0000	28.5695	28.5695	1.7000e-003	1.6700e-003	29.1108
Unmitigated	0.0164	0.0297	0.1506	3.1000e-004	0.0292	3.1000e-004	0.0295	7.8400e-003	3.0000e-004	8.1300e-003	0.0000	28.5695	28.5695	1.7000e-003	1.6700e-003	29.1108

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	27.02	27.02	27.02	78,886	78,886
Total	27.02	27.02	27.02	78,886	78,886

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
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.501205	0.048264	0.173979	0.159914	0.042609	0.009103	0.012183	0.016399	0.000418	0.000428	0.029388	0.001810	0.004302

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.9949	5.9949	9.7000e-004	1.2000e-004	6.0542
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.9949	5.9949	9.7000e-004	1.2000e-004	6.0542
NaturalGas Mitigated	6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.6730	6.6730	1.3000e-004	1.2000e-004	6.7127
NaturalGas Unmitigated	6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.6730	6.6730	1.3000e-004	1.2000e-004	6.7127

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	125048	6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.6730	6.6730	1.3000e-004	1.2000e-004	6.7127
Total		6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.6730	6.6730	1.3000e-004	1.2000e-004	6.7127

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	125048	6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.6730	6.6730	1.3000e-004	1.2000e-004	6.7127
Total		6.7000e-004	6.1300e-003	5.1500e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.6730	6.6730	1.3000e-004	1.2000e-004	6.7127

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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			
Unrefrigerated Warehouse-No Rail	64793	5.9949	9.7000e-004	1.2000e-004	6.0542
Total		5.9949	9.7000e-004	1.2000e-004	6.0542

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	64793	5.9949	9.7000e-004	1.2000e-004	6.0542
Total		5.9949	9.7000e-004	1.2000e-004	6.0542

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	0.0354	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Unmitigated	0.0354	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Total	0.0354	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

Wheatland Regional Sewer Project - Feather River AQMD Air District, Annual

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Total	0.0354	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3202	0.0527	1.2600e-003	3.0132
Unmitigated	1.3202	0.0527	1.2600e-003	3.0132

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	1.61413 / 0	1.3202	0.0527	1.2600e-003	3.0132
Total		1.3202	0.0527	1.2600e-003	3.0132

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

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	1.61413 / 0	1.3202	0.0527	1.2600e-003	3.0132
Total		1.3202	0.0527	1.2600e-003	3.0132

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.3316	0.0787	0.0000	3.2990
Unmitigated	1.3316	0.0787	0.0000	3.2990

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	6.56	1.3316	0.0787	0.0000	3.2990
Total		1.3316	0.0787	0.0000	3.2990

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	6.56	1.3316	0.0787	0.0000	3.2990
Total		1.3316	0.0787	0.0000	3.2990

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Wheatland Regional Sewer Project - Feather River AQMD Air District, Annual

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

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	0.02	8.6	469	0.73	CNG
Emergency Generator	1	0.02	8.6	872	0.73	Diesel
Emergency Generator	1	0.02	8.6	134	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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Wheatland Regional Sewer Project - Feather River AQMD Air District, Annual

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

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 - CNG (0 - 500 HP)	0.0177	1.7100e-003	0.0462	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.0284	1.0284	2.1500e-003	0.0000	1.0822
Emergency Generator - Diesel (100 - 175 HP)	9.5000e-004	2.6400e-003	3.4300e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.4388	0.4388	6.0000e-005	0.0000	0.4404
Emergency Generator - Diesel (750 - 9999 HP)	6.1500e-003	0.0275	0.0157	3.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	2.8557	2.8557	4.0000e-004	0.0000	2.8657
Total	0.0248	0.0319	0.0653	4.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	4.3229	4.3229	2.6100e-003	0.0000	4.3882

11.0 Vegetation

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

**Wheatland Regional Sewer Project
Feather River AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	6.98	1000sqft	0.16	6,982.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	67
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Vehicle Trips - Trip rate adjusted based on project-specific information provided by the applicant.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	6/7/2023	6/14/2023
tblConstructionPhase	PhaseEndDate	6/14/2023	1/25/2023
tblConstructionPhase	PhaseStartDate	1/19/2023	1/26/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	1/19/2023

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	469.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	872.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	134.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	1.74	3.87
tblVehicleTrips	SU_TR	1.74	3.87
tblVehicleTrips	WD_TR	1.74	3.87

2.0 Emissions Summary

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Mobile	0.1094	0.1502	0.8962	1.8000e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		185.1049	185.1049	9.7800e-003	9.7500e-003	188.2550
Stationary	0.1155	0.1482	0.3039	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003		22.1636	22.1636	0.0134		22.4984
Total	0.4224	0.3320	1.2290	2.1900e-003	0.1672	9.5900e-003	0.1768	0.0447	9.4900e-003	0.0542		247.5755	247.5755	0.0239	0.0105	251.3000

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Mobile	0.1094	0.1502	0.8962	1.8000e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		185.1049	185.1049	9.7800e-003	9.7500e-003	188.2550
Stationary	0.1155	0.1482	0.3039	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003		22.1636	22.1636	0.0134		22.4984
Total	0.4224	0.3320	1.2290	2.1900e-003	0.1672	9.5900e-003	0.1768	0.0447	9.4900e-003	0.0542		247.5755	247.5755	0.0239	0.0105	251.3000

	ROG	NOx	CO	SO2	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/14/2023	1/16/2023	5	1	
3	Grading	Grading	1/17/2023	1/18/2023	5	2	
4	Building Construction	Building Construction	1/26/2023	6/14/2023	5	100	

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

5	Paving	Paving	1/19/2023	1/25/2023	5	5
6	Architectural Coating	Architectural Coating	6/15/2023	6/21/2023	5	5

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,473; Non-Residential Outdoor: 3,491; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	4	10.00	0.00	3.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					
Fugitive Dust					0.0614	0.0000	0.0614	9.2900e-003	0.0000	9.2900e-003			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.0614	0.2821	0.3435	9.2900e-003	0.2698	0.2791		1,148.4055	1,148.4055	0.2089		1,153.6290

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	7.3000e-004	0.0372	8.5600e-003	1.8000e-004	5.2500e-003	3.7000e-004	5.6200e-003	1.4400e-003	3.5000e-004	1.7900e-003		18.9148	18.9148	3.0000e-005	2.9700e-003	19.8016
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
Worker	0.0361	0.0193	0.2970	7.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		75.7874	75.7874	2.1100e-003	1.9600e-003	76.4250
Total	0.0368	0.0565	0.3056	9.2000e-004	0.0874	7.6000e-004	0.0882	0.0232	7.1000e-004	0.0239		94.7022	94.7022	2.1400e-003	4.9300e-003	96.2266

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					0.0614	0.0000	0.0614	9.2900e-003	0.0000	9.2900e-003			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.0614	0.2821	0.3435	9.2900e-003	0.2698	0.2791	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	7.3000e-004	0.0372	8.5600e-003	1.8000e-004	5.2500e-003	3.7000e-004	5.6200e-003	1.4400e-003	3.5000e-004	1.7900e-003		18.9148	18.9148	3.0000e-005	2.9700e-003	19.8016
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
Worker	0.0361	0.0193	0.2970	7.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		75.7874	75.7874	2.1100e-003	1.9600e-003	76.4250
Total	0.0368	0.0565	0.3056	9.2000e-004	0.0874	7.6000e-004	0.0882	0.0232	7.1000e-004	0.0239		94.7022	94.7022	2.1400e-003	4.9300e-003	96.2266

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	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
Worker	0.0181	9.6700e-003	0.1485	3.7000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.8937	37.8937	1.0500e-003	9.8000e-004	38.2125
Total	0.0181	9.6700e-003	0.1485	3.7000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.8937	37.8937	1.0500e-003	9.8000e-004	38.2125

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657	0.0000	942.4317	942.4317	0.3048		950.0517

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	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
Worker	0.0181	9.6700e-003	0.1485	3.7000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.8937	37.8937	1.0500e-003	9.8000e-004	38.2125
Total	0.0181	9.6700e-003	0.1485	3.7000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.8937	37.8937	1.0500e-003	9.8000e-004	38.2125

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.7713	1,364.7713	0.4414		1,375.8062

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	0.0000	0.0000	0.0000	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
Worker	0.0289	0.0155	0.2376	5.9000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		60.6299	60.6299	1.6900e-003	1.5700e-003	61.1400
Total	0.0289	0.0155	0.2376	5.9000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		60.6299	60.6299	1.6900e-003	1.5700e-003	61.1400

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	0.0000	0.0000	0.0000	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
Worker	0.0289	0.0155	0.2376	5.9000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		60.6299	60.6299	1.6900e-003	1.5700e-003	61.1400
Total	0.0289	0.0155	0.2376	5.9000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		60.6299	60.6299	1.6900e-003	1.5700e-003	61.1400

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

3.5 Building Construction - 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	0.0000
Vendor	1.2700e-003	0.0444	0.0143	2.0000e-004	6.7800e-003	3.0000e-004	7.0700e-003	1.9500e-003	2.8000e-004	2.2300e-003		21.4110	21.4110	6.0000e-005	3.2400e-003	22.3783
Worker	0.0108	5.8000e-003	0.0891	2.2000e-004	0.0246	1.2000e-004	0.0248	6.5400e-003	1.1000e-004	6.6500e-003		22.7362	22.7362	6.3000e-004	5.9000e-004	22.9275
Total	0.0121	0.0502	0.1034	4.2000e-004	0.0314	4.2000e-004	0.0318	8.4900e-003	3.9000e-004	8.8800e-003		44.1472	44.1472	6.9000e-004	3.8300e-003	45.3058

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	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

3.5 Building Construction - 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	0.0000
Vendor	1.2700e-003	0.0444	0.0143	2.0000e-004	6.7800e-003	3.0000e-004	7.0700e-003	1.9500e-003	2.8000e-004	2.2300e-003		21.4110	21.4110	6.0000e-005	3.2400e-003	22.3783
Worker	0.0108	5.8000e-003	0.0891	2.2000e-004	0.0246	1.2000e-004	0.0248	6.5400e-003	1.1000e-004	6.6500e-003		22.7362	22.7362	6.3000e-004	5.9000e-004	22.9275
Total	0.0121	0.0502	0.1034	4.2000e-004	0.0314	4.2000e-004	0.0318	8.4900e-003	3.9000e-004	8.8800e-003		44.1472	44.1472	6.9000e-004	3.8300e-003	45.3058

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	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	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
Worker	0.0650	0.0348	0.5346	1.3300e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		136.4173	136.4173	3.7900e-003	3.5300e-003	137.5649
Total	0.0650	0.0348	0.5346	1.3300e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		136.4173	136.4173	3.7900e-003	3.5300e-003	137.5649

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	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	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
Worker	0.0650	0.0348	0.5346	1.3300e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		136.4173	136.4173	3.7900e-003	3.5300e-003	137.5649
Total	0.0650	0.0348	0.5346	1.3300e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		136.4173	136.4173	3.7900e-003	3.5300e-003	137.5649

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.3616					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	32.5532	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

3.7 Architectural Coating - 2023

Unmitigated Construction 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	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
Worker	3.6100e-003	1.9300e-003	0.0297	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.5787	7.5787	2.1000e-004	2.0000e-004	7.6425
Total	3.6100e-003	1.9300e-003	0.0297	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.5787	7.5787	2.1000e-004	2.0000e-004	7.6425

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	32.3616					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	32.5532	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

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

3.7 Architectural Coating - 2023

Mitigated Construction 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	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
Worker	3.6100e-003	1.9300e-003	0.0297	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.5787	7.5787	2.1000e-004	2.0000e-004	7.6425
Total	3.6100e-003	1.9300e-003	0.0297	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.5787	7.5787	2.1000e-004	2.0000e-004	7.6425

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1094	0.1502	0.8962	1.8000e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		185.1049	185.1049	9.7800e-003	9.7500e-003	188.2550
Unmitigated	0.1094	0.1502	0.8962	1.8000e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		185.1049	185.1049	9.7800e-003	9.7500e-003	188.2550

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	27.02	27.02	27.02	78,886	78,886
Total	27.02	27.02	27.02	78,886	78,886

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
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.501205	0.048264	0.173979	0.159914	0.042609	0.009103	0.012183	0.016399	0.000418	0.000428	0.029388	0.001810	0.004302

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

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	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
NaturalGas Unmitigated	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450

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					
Unrefrigerated Warehouse-No Rail	342.596	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Total		3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0.342596	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Total		3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Unmitigated	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.02	8.6	469	0.73	CNG
Emergency Generator	1	0.02	8.6	872	0.73	Diesel
Emergency Generator	1	0.02	8.6	134	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 - CNG (0 - 500 HP)	0.0825	7.9500e-003	0.2149	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		5.2726	5.2726	0.0110		5.5482
Emergency Generator - Diesel (100 - 175 HP)	4.4000e-003	0.0123	0.0160	2.0000e-005		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004		2.2499	2.2499	3.2000e-004		2.2578
Emergency Generator - Diesel (750 - 9999 HP)	0.0286	0.1280	0.0730	1.4000e-004		4.2100e-003	4.2100e-003		4.2100e-003	4.2100e-003		14.6411	14.6411	2.0500e-003		14.6924
Total	0.1156	0.1482	0.3039	1.9000e-004		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003		22.1636	22.1636	0.0134		22.4984

11.0 Vegetation

Wheatland Regional Sewer Project - Feather River AQMD Air District, Summer

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

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

**Wheatland Regional Sewer Project
Feather River AQMD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	6.98	1000sqft	0.16	6,982.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	67
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Vehicle Trips - Trip rate adjusted based on project-specific information provided by the applicant.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	6/7/2023	6/14/2023
tblConstructionPhase	PhaseEndDate	6/14/2023	1/25/2023
tblConstructionPhase	PhaseStartDate	1/19/2023	1/26/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	1/19/2023

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	469.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	872.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	134.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.02
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.60
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	1.74	3.87
tblVehicleTrips	SU_TR	1.74	3.87
tblVehicleTrips	WD_TR	1.74	3.87

2.0 Emissions Summary

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Mobile	0.0869	0.1726	0.8793	1.6500e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		170.0613	170.0613	0.0112	0.0106	173.4968
Stationary	0.1155	0.1482	0.3039	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003		22.1636	22.1636	0.0134		22.4984
Total	0.3999	0.3544	1.2121	2.0400e-003	0.1672	9.5900e-003	0.1768	0.0447	9.4900e-003	0.0542		232.5319	232.5319	0.0254	0.0113	236.5418

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Mobile	0.0869	0.1726	0.8793	1.6500e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		170.0613	170.0613	0.0112	0.0106	173.4968
Stationary	0.1155	0.1482	0.3039	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003		22.1636	22.1636	0.0134		22.4984
Total	0.3999	0.3544	1.2121	2.0400e-003	0.1672	9.5900e-003	0.1768	0.0447	9.4900e-003	0.0542		232.5319	232.5319	0.0254	0.0113	236.5418

	ROG	NOx	CO	SO2	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/14/2023	1/16/2023	5	1	
3	Grading	Grading	1/17/2023	1/18/2023	5	2	
4	Building Construction	Building Construction	1/26/2023	6/14/2023	5	100	

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

5	Paving	Paving	1/19/2023	1/25/2023	5	5
6	Architectural Coating	Architectural Coating	6/15/2023	6/21/2023	5	5

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,473; Non-Residential Outdoor: 3,491; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	4	10.00	0.00	3.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					
Fugitive Dust					0.0614	0.0000	0.0614	9.2900e-003	0.0000	9.2900e-003			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.0614	0.2821	0.3435	9.2900e-003	0.2698	0.2791		1,148.4055	1,148.4055	0.2089		1,153.6290

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	6.7000e-004	0.0404	8.7300e-003	1.8000e-004	5.2500e-003	3.7000e-004	5.6200e-003	1.4400e-003	3.5000e-004	1.7900e-003		18.9421	18.9421	3.0000e-005	2.9800e-003	19.8302
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
Worker	0.0318	0.0240	0.2569	6.6000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		67.2194	67.2194	2.4300e-003	2.2700e-003	67.9558
Total	0.0324	0.0644	0.2656	8.4000e-004	0.0874	7.6000e-004	0.0882	0.0232	7.1000e-004	0.0239		86.1615	86.1615	2.4600e-003	5.2500e-003	87.7860

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					0.0614	0.0000	0.0614	9.2900e-003	0.0000	9.2900e-003			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.0614	0.2821	0.3435	9.2900e-003	0.2698	0.2791	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	6.7000e-004	0.0404	8.7300e-003	1.8000e-004	5.2500e-003	3.7000e-004	5.6200e-003	1.4400e-003	3.5000e-004	1.7900e-003		18.9421	18.9421	3.0000e-005	2.9800e-003	19.8302
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
Worker	0.0318	0.0240	0.2569	6.6000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		67.2194	67.2194	2.4300e-003	2.2700e-003	67.9558
Total	0.0324	0.0644	0.2656	8.4000e-004	0.0874	7.6000e-004	0.0882	0.0232	7.1000e-004	0.0239		86.1615	86.1615	2.4600e-003	5.2500e-003	87.7860

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	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
Worker	0.0159	0.0120	0.1285	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.6097	33.6097	1.2200e-003	1.1300e-003	33.9779
Total	0.0159	0.0120	0.1285	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.6097	33.6097	1.2200e-003	1.1300e-003	33.9779

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657	0.0000	942.4317	942.4317	0.3048		950.0517

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	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
Worker	0.0159	0.0120	0.1285	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.6097	33.6097	1.2200e-003	1.1300e-003	33.9779
Total	0.0159	0.0120	0.1285	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.6097	33.6097	1.2200e-003	1.1300e-003	33.9779

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.7713	1,364.7713	0.4414		1,375.8062

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	0.0000	0.0000	0.0000	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
Worker	0.0254	0.0192	0.2055	5.3000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.7755	53.7755	1.9500e-003	1.8100e-003	54.3646
Total	0.0254	0.0192	0.2055	5.3000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.7755	53.7755	1.9500e-003	1.8100e-003	54.3646

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	0.0000	0.0000	0.0000	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
Worker	0.0254	0.0192	0.2055	5.3000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.7755	53.7755	1.9500e-003	1.8100e-003	54.3646
Total	0.0254	0.0192	0.2055	5.3000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.7755	53.7755	1.9500e-003	1.8100e-003	54.3646

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

3.5 Building Construction - 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	0.0000
Vendor	1.1900e-003	0.0481	0.0148	2.0000e-004	6.7800e-003	3.0000e-004	7.0700e-003	1.9500e-003	2.8000e-004	2.2400e-003		21.4567	21.4567	6.0000e-005	3.2500e-003	22.4269
Worker	9.5300e-003	7.2000e-003	0.0771	2.0000e-004	0.0246	1.2000e-004	0.0248	6.5400e-003	1.1000e-004	6.6500e-003		20.1658	20.1658	7.3000e-004	6.8000e-004	20.3867
Total	0.0107	0.0553	0.0918	4.0000e-004	0.0314	4.2000e-004	0.0318	8.4900e-003	3.9000e-004	8.8900e-003		41.6225	41.6225	7.9000e-004	3.9300e-003	42.8136

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	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

3.5 Building Construction - 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	0.0000
Vendor	1.1900e-003	0.0481	0.0148	2.0000e-004	6.7800e-003	3.0000e-004	7.0700e-003	1.9500e-003	2.8000e-004	2.2400e-003		21.4567	21.4567	6.0000e-005	3.2500e-003	22.4269
Worker	9.5300e-003	7.2000e-003	0.0771	2.0000e-004	0.0246	1.2000e-004	0.0248	6.5400e-003	1.1000e-004	6.6500e-003		20.1658	20.1658	7.3000e-004	6.8000e-004	20.3867
Total	0.0107	0.0553	0.0918	4.0000e-004	0.0314	4.2000e-004	0.0318	8.4900e-003	3.9000e-004	8.8900e-003		41.6225	41.6225	7.9000e-004	3.9300e-003	42.8136

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	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	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
Worker	0.0572	0.0432	0.4624	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.9949	120.9949	4.3800e-003	4.0800e-003	122.3205
Total	0.0572	0.0432	0.4624	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.9949	120.9949	4.3800e-003	4.0800e-003	122.3205

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	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	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
Worker	0.0572	0.0432	0.4624	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.9949	120.9949	4.3800e-003	4.0800e-003	122.3205
Total	0.0572	0.0432	0.4624	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.9949	120.9949	4.3800e-003	4.0800e-003	122.3205

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.3616					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	32.5532	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

3.7 Architectural Coating - 2023

Unmitigated Construction 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	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
Worker	3.1800e-003	2.4000e-003	0.0257	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.7219	6.7219	2.4000e-004	2.3000e-004	6.7956
Total	3.1800e-003	2.4000e-003	0.0257	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.7219	6.7219	2.4000e-004	2.3000e-004	6.7956

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	32.3616					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	32.5532	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

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

3.7 Architectural Coating - 2023

Mitigated Construction 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	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
Worker	3.1800e-003	2.4000e-003	0.0257	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.7219	6.7219	2.4000e-004	2.3000e-004	6.7956
Total	3.1800e-003	2.4000e-003	0.0257	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.7219	6.7219	2.4000e-004	2.3000e-004	6.7956

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0869	0.1726	0.8793	1.6500e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		170.0613	170.0613	0.0112	0.0106	173.4968
Unmitigated	0.0869	0.1726	0.8793	1.6500e-003	0.1672	1.7300e-003	0.1689	0.0447	1.6300e-003	0.0463		170.0613	170.0613	0.0112	0.0106	173.4968

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	27.02	27.02	27.02	78,886	78,886
Total	27.02	27.02	27.02	78,886	78,886

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
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.501205	0.048264	0.173979	0.159914	0.042609	0.009103	0.012183	0.016399	0.000418	0.000428	0.029388	0.001810	0.004302

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

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	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
NaturalGas Unmitigated	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450

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					
Unrefrigerated Warehouse-No Rail	342.596	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Total		3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0.342596	3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450
Total		3.6900e-003	0.0336	0.0282	2.0000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003		40.3054	40.3054	7.7000e-004	7.4000e-004	40.5450

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Unmitigated	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	0.1938	1.0000e-005	7.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.02	8.6	469	0.73	CNG
Emergency Generator	1	0.02	8.6	872	0.73	Diesel
Emergency Generator	1	0.02	8.6	134	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 - CNG (0 - 500 HP)	0.0825	7.9500e-003	0.2149	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		5.2726	5.2726	0.0110		5.5482
Emergency Generator - Diesel (100 - 175 HP)	4.4000e-003	0.0123	0.0160	2.0000e-005		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004		2.2499	2.2499	3.2000e-004		2.2578
Emergency Generator - Diesel (750 - 9999 HP)	0.0286	0.1280	0.0730	1.4000e-004		4.2100e-003	4.2100e-003		4.2100e-003	4.2100e-003		14.6411	14.6411	2.0500e-003		14.6924
Total	0.1156	0.1482	0.3039	1.9000e-004		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003		22.1636	22.1636	0.0134		22.4984

11.0 Vegetation

Wheatland Regional Sewer Project - Feather River AQMD Air District, Winter

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

Wheatland Regional Sewer Project

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

Feather River AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Wheatland Regional Sewer Project

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

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	7	No Change	0.00

Wheatland Regional Sewer Project

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

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	4.80000E-004	3.26000E-003	4.53000E-003	1.00000E-005	1.80000E-004	1.80000E-004	0.00000E+000	6.38310E-001	6.38310E-001	4.00000E-005	0.00000E+000	6.39270E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.67000E-003	1.29200E-002	1.82900E-002	3.00000E-005	6.40000E-004	6.40000E-004	0.00000E+000	2.68829E+000	2.68829E+000	1.30000E-004	0.00000E+000	2.69160E+000
Cranes	8.79000E-003	9.53900E-002	4.58600E-002	1.40000E-004	3.98000E-003	3.66000E-003	0.00000E+000	1.26738E+001	1.26738E+001	4.10000E-003	0.00000E+000	1.27763E+001
Forklifts	7.69000E-003	7.19800E-002	8.58600E-002	1.10000E-004	4.45000E-003	4.09000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Graders	4.80000E-004	5.82000E-003	2.12000E-003	1.00000E-005	1.90000E-004	1.70000E-004	0.00000E+000	7.26720E-001	7.26720E-001	2.40000E-004	0.00000E+000	7.32590E-001
Pavers	4.20000E-004	4.12000E-003	6.31000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	9.03360E-001	9.03360E-001	2.90000E-004	0.00000E+000	9.10670E-001
Rollers	3.40000E-004	3.52000E-003	4.05000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	5.04270E-001	5.04270E-001	1.60000E-004	0.00000E+000	5.08350E-001
Rubber Tired Dozers	9.40000E-004	9.80000E-003	4.27000E-003	1.00000E-005	4.40000E-004	4.10000E-004	0.00000E+000	1.03158E+000	1.03158E+000	3.30000E-004	0.00000E+000	1.03992E+000
Tractors/Loaders/Backhoes	1.68100E-002	1.70560E-001	2.47820E-001	3.50000E-004	8.42000E-003	7.75000E-003	0.00000E+000	3.03851E+001	3.03851E+001	9.83000E-003	0.00000E+000	3.06308E+001

Wheatland Regional Sewer Project

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

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	4.80000E-004	3.26000E-003	4.53000E-003	1.00000E-005	1.80000E-004	1.80000E-004	0.00000E+000	6.38310E-001	6.38310E-001	4.00000E-005	0.00000E+000	6.39270E-001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.67000E-003	1.29200E-002	1.82900E-002	3.00000E-005	6.40000E-004	6.40000E-004	0.00000E+000	2.68828E+000	2.68828E+000	1.30000E-004	0.00000E+000	2.69159E+000
Cranes	8.79000E-003	9.53900E-002	4.58600E-002	1.40000E-004	3.98000E-003	3.66000E-003	0.00000E+000	1.26738E+001	1.26738E+001	4.10000E-003	0.00000E+000	1.27763E+001
Forklifts	7.69000E-003	7.19800E-002	8.58600E-002	1.10000E-004	4.45000E-003	4.09000E-003	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001
Graders	4.80000E-004	5.82000E-003	2.12000E-003	1.00000E-005	1.90000E-004	1.70000E-004	0.00000E+000	7.26720E-001	7.26720E-001	2.40000E-004	0.00000E+000	7.32590E-001
Pavers	4.20000E-004	4.12000E-003	6.31000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	9.03360E-001	9.03360E-001	2.90000E-004	0.00000E+000	9.10670E-001
Rollers	3.40000E-004	3.52000E-003	4.05000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	5.04270E-001	5.04270E-001	1.60000E-004	0.00000E+000	5.08340E-001
Rubber Tired Dozers	9.40000E-004	9.80000E-003	4.27000E-003	1.00000E-005	4.40000E-004	4.10000E-004	0.00000E+000	1.03158E+000	1.03158E+000	3.30000E-004	0.00000E+000	1.03992E+000
Tractors/Loaders/Balckhoes	1.68100E-002	1.70560E-001	2.47820E-001	3.50000E-004	8.42000E-003	7.75000E-003	0.00000E+000	3.03851E+001	3.03851E+001	9.83000E-003	0.00000E+000	3.06307E+001

Wheatland Regional Sewer Project

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

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.71984E-006	3.71984E-006	0.00000E+000	0.00000E+000	3.71526E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.57806E-006	1.57806E-006	0.00000E+000	0.00000E+000	7.82700E-007
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.92866E-007	9.92866E-007	0.00000E+000	0.00000E+000	9.84903E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.96715E-005
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31643E-006	1.31643E-006	0.00000E+000	0.00000E+000	1.30588E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

Wheatland Regional Sewer Project

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

No	Unpaved Road Mitigation	Moisture Content: %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.01	0.00	0.01	0.00	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Wheatland Regional Sewer Project

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

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Wheatland Regional Sewer Project

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

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00

Wheatland Regional Sewer Project

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

No	Commuter	Provide Ride Sharing Program			
	Commuter	Commuter Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Wheatland Regional Sewer Project

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

No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Wheatland Regional Sewer Project

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

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Road Construction Emissions Model
Data Entry Worksheet

Version 9.0.0

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

Input Type

Project Name
Wheatland Regional Sewer

Construction Start Year
2023

Project Type
4
For 4: Other Linear Project Type, please provide project specific off-road equipment population and vehicle trip data

Project Construction Time
Working Days per Month
18.00
22.00

Predominant Soil/Site Type: Enter 1, 2, or 3
(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)
2

Project Length
Total Project Area
Maximum Area Disturbed/Day
Water Trucks Used?
8.00
10.50
0.23
1

Enter a Year between 2014 and 2040 (inclusive)

- 1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway
- 2) Road Widening : Project to add a new lane to an existing roadway
- 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane
- 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction

months
days (assume 22 if unknown)

- 1) Sand Gravel : Use for quaternary deposits (Delta/West County)
- 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)
- 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)

miles
acres
acres
1. Yes
2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Mitigation Options

Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer

Select "20% NCx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAGMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (<http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation>).

Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		1.80		1/1/2023
Grading/Excavation		8.10		2/25/2023
Drainage/Utilities/Sub-Grade		5.40		10/30/2023
Paving		2.70		4/12/2024
Totals (Months)	18			

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT					
User Input										
Miles/round trip: Grubbing/Land Clearing	30.00			48	1440.00					
Miles/round trip: Grading/Excavation	30.00			82	2460.00					
Miles/round trip: Drainage/Utilities/Sub-Grade	30.00			62	1860.00					
Miles/round trip: Paving				0	0.00					
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Grading/Excavation (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Drainage/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.51	0.12	0.05	0.02	1,712.66	0.00	0.27	1,792.94
Paving (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.14	1.35	11.70	0.37	0.17	0.05	5,481.81	0.01	0.86	5,738.74
Tons per const. Period - Grubbing/Land Clearing	0.00	0.03	0.23	0.01	0.00	0.00	108.54	0.00	0.02	113.63
Pounds per day - Grading/Excavation	0.24	2.31	19.98	0.63	0.29	0.09	9,364.75	0.01	1.47	9,803.69
Tons per const. Period - Grading/Excavation	0.02	0.21	1.78	0.06	0.03	0.01	834.40	0.00	0.13	873.51
Pounds per day - Drainage/Utilities/Sub-Grade	0.18	1.75	15.00	0.47	0.22	0.07	7,022.95	0.01	1.10	7,352.12
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.01	0.10	0.89	0.03	0.01	0.00	417.16	0.00	0.07	436.72
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.03	0.34	2.90	0.09	0.04	0.01	1,360.10	0.00	0.21	1,423.85

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT					
User Input										
Miles/round trip: Grubbing/Land Clearing				0	0.00					
Miles/round trip: Grading/Excavation				0	0.00					
Miles/round trip: Drainage/Utilities/Sub-Grade				0	0.00					
Miles/round trip: Paving	30.00			35	1050.00					
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Grading/Excavation (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Drainage/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.51	0.12	0.05	0.02	1,712.66	0.00	0.27	1,792.94
Paving (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.10	0.99	8.43	0.27	0.12	0.04	3,944.81	0.00	0.62	4,129.71
Tons per const. Period - Paving	0.00	0.03	0.25	0.01	0.00	0.00	117.16	0.00	0.02	122.65
Total tons per construction project	0.00	0.03	0.25	0.01	0.00	0.00	117.16	0.00	0.02	122.65

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions		User Override of Worker Commute Default Values		Default Values		Calculated					
User Input				Daily Trips	Daily VMT						
Miles/ one-way trip											
One-way trips/day				0	0.00						
No. of employees: Grubbing/Land Clearing				0	0.00						
No. of employees: Grading/Excavation				0	0.00						
No. of employees: Drainage/Utilities/Sub-Grade				0	0.00						
No. of employees: Paving				0	0.00						
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Grubbing/Land Clearing (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68	
Grading/Excavation (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68	
Draining/Utilities/Sub-Grade (grams/mile)	0.01	0.87	0.07	0.05	0.02	0.00	310.84	0.00	0.01	312.75	
Paving (grams/mile)	0.01	0.84	0.06	0.05	0.02	0.00	306.70	0.00	0.01	308.54	
Grubbing/Land Clearing (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50	
Grading/Excavation (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50	
Draining/Utilities/Sub-Grade (grams/trip)	1.00	2.69	0.28	0.00	0.00	0.00	66.85	0.07	0.03	77.70	
Paving (grams/trip)	0.98	2.66	0.27	0.00	0.00	0.00	65.99	0.07	0.03	76.61	
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions		User Override of Program Estimate of		User Override of Truck		Default Values		Calculated		User Override of		Default Values		Calculated	
User Input		Default # Water Trucks	Number of Water Trucks	Round Trips/Vehicle/Day	Round Trips/Vehicle/Day	Trips/day	Miles/Round Trip	Miles/Round Trip	Daily VMT	Miles/Round Trip	Miles/Round Trip	Daily VMT			
Grubbing/Land Clearing - Exhaust									0.00						
Grading/Excavation - Exhaust									0.00						
Drainage/Utilities/Subgrade									0.00						
Paving									0.00						
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e					
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67					
Grading/Excavation (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67					
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.51	0.12	0.05	0.02	1,712.66	0.00	0.27	1,792.94					
Paving (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00					
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e					
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust		User Override of Max		Default		PM10		PM2.5	
		Acreage Disturbed/Day	Maximum Acreage/Day	pounds/day	tons/period	pounds/day	tons/period	pounds/day	tons/period
Fugitive Dust - Grubbing/Land Clearing				2.30	0.05	0.48	0.01		
Fugitive Dust - Grading/Excavation				2.30	0.20	0.48	0.04		
Fugitive Dust - Drainage/Utilities/Subgrade				2.30	0.14	0.48	0.03		

Values in cells D195 through D228, D246 through D279, D297 through D330, and D348 through D381 are required when 'Other Project Type' is selected.

Off-Road Equipment Emissions													
Grubbing/Land Clearing		Default Number of Vehicles	Mitigation Option Override of	Default	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
				Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00				Model Default Tier	Crawler Tractors	0.44	2.24	5.12	0.20	0.18	0.01	758.27	
				Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00				Model Default Tier	Excavators	0.19	3.26	1.55	0.08	0.07	0.01	500.11	
				Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
User-Defined Off-road Equipment					ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
Number of Vehicles		If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab			pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
Equipment Tier	Type												
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Grubbing/Land Clearing			pounds per day	0.63	5.50	6.67	0.27	0.25	0.01	1,258.38	0.41	
	Grubbing/Land Clearing			tons per phase	0.01	0.11	0.13	0.01	0.01	0.00	24.92	0.01	

Grading/Excavation		Default Number of Vehicles	Mitigation Option Override of	Default	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
Override of Default Number of Vehicles		Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00			Model Default Tier	Crawler Tractors	0.44	2.24	5.12	0.20	0.18	0.01	758.27	0.25	
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00			Model Default Tier	Graders	0.38	1.69	4.65	0.15	0.14	0.01	640.86	0.21	
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2.00			Model Default Tier	Rollers	0.31	3.70	3.22	0.18	0.16	0.01	508.22	0.16	
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00			Model Default Tier	Rubber Tired Loaders	0.27	1.51	2.65	0.09	0.08	0.01	605.56	0.20	
2.00			Model Default Tier	Scrapers	1.57	12.27	16.57	0.65	0.60	0.03	2,940.26	0.95	
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
User-Defined Off-road Equipment					ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab					pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
Number of Vehicles			Equipment Tier	Type									
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grading/Excavation					pounds per day	2.98	21.42	32.22	1.26	1.16	0.06	5,453.17	1.76
Grading/Excavation					tons per phase	0.27	1.91	2.87	0.11	0.10	0.01	485.88	0.16

Drainage/Utilities/Subgrade		Default Number of Vehicles	Mitigation Option Override of Default		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
Override of Default Number of Vehicles		Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
	1.00		Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.25	2.41	1.67	0.09	0.09	0.00	375.26	0.02
	2.00		Model Default Tier	Bore/Drill Rigs	0.42	4.07	3.91	0.13	0.12	0.02	1,833.25	0.59
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Excavators	0.18	3.26	1.46	0.07	0.07	0.01	500.21	0.16
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Generator Sets	0.29	3.67	2.61	0.12	0.12	0.01	623.04	0.03
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.00		Model Default Tier	Plate Compactors	0.08	0.42	0.50	0.02	0.02	0.00	68.96	0.01
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Rollers	0.15	1.85	1.56	0.08	0.08	0.00	254.13	0.08
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.00		Model Default Tier	Tractors/Loaders/Backhoes	0.29	4.47	2.96	0.14	0.13	0.01	603.39	0.20
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment					ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab					pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
Number of Vehicles		Equipment Tier	Type									
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drainage/Utilities/Sub-Grade		pounds per day		1.67	20.15	14.66	0.65	0.61	0.04	4,258.23	1.09
	Drainage/Utilities/Sub-Grade		tons per phase		0.10	1.20	0.87	0.04	0.04	0.00	252.94	0.06

Paving	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
	Number of Vehicles	Override of	Default									
	Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier								
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Pavers	0.18	2.89	1.74	0.08	0.07	0.00	455.16	0.15
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		3.00	Model Default Tier	Rollers	0.44	5.55	4.57	0.24	0.22	0.01	762.44	0.25
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1.00	Model Default Tier	Tractors/Loaders/Backhoes	0.14	2.24	1.45	0.07	0.06	0.00	301.77	0.10
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment												
					ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
Number of Vehicles		Equipment Tier			pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving		pounds per day			0.76	10.68	7.76	0.39	0.36	0.02	1,519.37	0.49
Paving		tons per phase			0.02	0.32	0.23	0.01	0.01	0.00	45.13	0.01
Total Emissions all Phases (tons per construction period) =>					0.40	3.53	4.10	0.17	0.16	0.01	808.86	0.24

N2O	CO2e
pounds/day	pounds/day
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.01	766.45
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.01	647.76
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
0.00	0.00
0.00	513.69
0.00	0.00
0.00	0.00
0.01	612.10
0.03	2,971.94
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
0.05	5,511.94
0.00	491.11

N2O	CO2e
pounds/day	pounds/day
0.00	0.00
0.00	376.65
0.02	1,853.03
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	505.60
0.00	0.00
0.00	625.08
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
0.00	69.31
0.00	0.00
0.00	0.00
0.00	256.87
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
0.00	0.00
0.01	609.88
0.00	0.00
0.00	0.00
<hr/>	
N2O	CO2e
pounds/day	pounds/day
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
<hr/>	
0.04	4,296.42
0.00	255.21

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Wheatland Regional Sewer														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.77	6.85	18.37	2.94	0.64	2.30	0.90	0.42	0.48	0.06	6,740.18	0.41	0.87	7,010.69
Grading/Excavation	3.22	23.74	52.20	4.19	1.89	2.30	1.93	1.45	0.48	0.14	14,817.92	1.77	1.52	15,315.63
Drainage/Utilities/Sub-Grade	1.85	21.90	29.66	3.42	1.12	2.30	1.31	0.83	0.48	0.11	11,281.19	1.09	1.14	11,648.54
Paving	0.86	11.67	16.19	0.66	0.66	0.00	0.48	0.48	0.00	0.05	5,464.18	0.50	0.63	5,665.44
Maximum (pounds/day)	3.22	23.74	52.20	4.19	1.89	2.30	1.93	1.45	0.48	0.14	14,817.92	1.77	1.52	15,315.63
Total (tons/construction project)	0.44	3.90	7.26	0.65	0.27	0.39	0.28	0.20	0.08	0.02	2,286.12	0.25	0.24	2,363.62

Notes: Project Start Year -> 2023
 Project Length (months) -> 18
 Total Project Area (acres) -> 11
 Maximum Area Disturbed/Day (acres) -> 0
 Water Truck Used? -> Yes

Phase	Total Material Imported/Exported Volume (yd ³ /day)		Daily VMT (miles/day)			
	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	760	0	1,440	0	0	0
Grading/Excavation	1,300	0	2,460	0	0	0
Drainage/Utilities/Sub-Grade	980	0	1,860	0	0	0
Paving	0	560	0	1,050	0	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Wheatland Regional Sewer														
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.02	0.14	0.36	0.06	0.01	0.05	0.02	0.01	0.01	0.00	133.46	0.01	0.02	125.93
Grading/Excavation	0.29	2.11	4.65	0.37	0.17	0.20	0.17	0.13	0.04	0.01	1,320.28	0.16	0.14	1,237.98
Drainage/Utilities/Sub-Grade	0.11	1.30	1.76	0.20	0.07	0.14	0.08	0.05	0.03	0.01	670.10	0.07	0.07	627.71
Paving	0.03	0.35	0.48	0.02	0.02	0.00	0.01	0.01	0.00	0.00	162.29	0.01	0.02	152.65
Maximum (tons/phase)	0.29	2.11	4.65	0.37	0.17	0.20	0.17	0.13	0.04	0.01	1,320.28	0.16	0.14	1,237.98
Total (tons/construction project)	0.44	3.90	7.26	0.65	0.27	0.39	0.28	0.20	0.08	0.02	2,286.12	0.25	0.24	2,144.26

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Wheatland Regional Sewer														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.49	9.38	10.74	2.69	0.39	2.30	0.67	0.19	0.48	0.06	6,702.89	0.41	0.87	6,971.59
Grading/Excavation	1.89	33.37	20.44	3.08	0.78	2.30	0.90	0.42	0.48	0.14	14,754.20	1.77	1.51	15,248.83
Drainage/Utilities/Sub-Grade	1.79	21.82	27.60	3.40	1.10	2.30	1.29	0.81	0.48	0.11	11,236.00	1.09	1.13	11,601.18
Paving	0.83	11.62	15.10	0.65	0.65	0.00	0.47	0.47	0.00	0.05	5,439.70	0.49	0.63	5,639.78
Maximum (pounds/day)	1.89	33.37	27.60	3.40	1.10	2.30	1.29	0.81	0.48	0.14	14,754.20	1.77	1.51	15,248.83
Total (tons/construction project)	0.31	4.80	4.12	0.55	0.16	0.39	0.18	0.10	0.08	0.02	2,276.29	0.25	0.24	2,353.32

Notes: Project Start Year -> 2023
 Project Length (months) -> 18
 Total Project Area (acres) -> 11
 Maximum Area Disturbed/Day (acres) -> 0
 Water Truck Used? -> Yes

Phase	Total Material Imported/Exported Volume (yd ³ /day)		Daily VMT (miles/day)			
	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	760	0	1,440	0	0	0
Grading/Excavation	1,300	0	2,460	0	0	0
Drainage/Utilities/Sub-Grade	980	0	1,860	0	0	0
Paving	0	560	0	1,050	0	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Wheatland Regional Sewer														
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.01	0.19	0.21	0.05	0.01	0.05	0.01	0.00	0.01	0.00	132.72	0.01	0.02	125.23
Grading/Excavation	0.17	2.97	1.82	0.27	0.07	0.20	0.08	0.04	0.04	0.01	1,314.60	0.16	0.13	1,232.58
Drainage/Utilities/Sub-Grade	0.11	1.30	1.64	0.20	0.07	0.14	0.08	0.05	0.03	0.01	667.42	0.06	0.07	625.16
Paving	0.02	0.35	0.45	0.02	0.02	0.00	0.01	0.01	0.00	0.00	161.56	0.01	0.02	151.96
Maximum (tons/phase)	0.17	2.97	1.82	0.27	0.07	0.20	0.08	0.05	0.04	0.01	1314.60	0.16	0.13	1,232.58
Total (tons/construction project)	0.31	4.80	4.12	0.55	0.16	0.39	0.18	0.10	0.08	0.02	2276.29	0.25	0.24	2,134.92

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.
 The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model
Data Entry Worksheet

Version 9.0.0

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

Input Type

Project Name
Wheatland Regional Sewer

Construction Start Year
2023

Project Type
4
For 4: Other Linear Project Type, please provide project specific off-road equipment population and vehicle trip data

Project Construction Time
Working Days per Month
18.00
22.00

Predominant Soil/Site Type: Enter 1, 2, or 3
(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)
2

Project Length
Total Project Area
Maximum Area Disturbed/Day
Water Trucks Used?
8.00
10.50
0.23
1

Enter a Year between 2014 and 2040 (inclusive)

- 1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway
- 2) Road Widening : Project to add a new lane to an existing roadway
- 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane
- 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction

months
days (assume 22 if unknown)

- 1) Sand Gravel : Use for quaternary deposits (Delta/West County)
- 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)
- 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)

miles
acres
acres
1. Yes
2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd ³) (assume 20 if unknown)	Import Volume (yd ³ /day)	Export Volume (yd ³ /day)
Soil	Grubbing/Land Clearing	16.00	380.00	380.00
	Grading/Excavation	16.00	650.00	650.00
	Drainage/Utilities/Sub-Grade	16.00	490.00	490.00
	Paving			
Asphalt	Grubbing/Land Clearing			
	Grading/Excavation			
	Drainage/Utilities/Sub-Grade			
	Paving	16.00	280.00	280.00

Mitigation Options

On-road Fleet Emissions Mitigation
2010 and Newer On-road Vehicles Fleet

Off-road Equipment Emissions Mitigation
Tier 4 Equipment

Will all off-road equipment be tier 4?
Tier 4 equipment for limited equipment types

Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer

Select "20% NCx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAGMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (<http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation>).

Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

If "Tier 4 equipment for limited equipment types" is selected, please provide tier information for each equipment type in cells from E183 to E379 below.

The remaining sections of this sheet contain areas that require modification when "Other Project Type" is selected.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		1.80		1/1/2023
Grading/Excavation		8.10		2/25/2023
Drainage/Utilities/Sub-Grade		5.40		10/30/2023
Paving		2.70		4/12/2024
Totals (Months)		18		

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT					
User Input										
Miles/round trip: Grubbing/Land Clearing	30.00			48	1440.00					
Miles/round trip: Grading/Excavation	30.00			82	2460.00					
Miles/round trip: Drainage/Utilities/Sub-Grade	30.00			62	1860.00					
Miles/round trip: Paving				0	0.00					
2010+ Model Year Mitigation Option Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Drainage/Utilities/Sub-Grade (grams/mile)	0.03	0.41	3.01	0.11	0.05	0.02	1,701.64	0.00	0.27	1,781.39
Paving (grams/mile)	0.03	0.41	3.02	0.11	0.05	0.02	1,693.55	0.00	0.27	1,772.92
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.09	1.28	9.94	0.35	0.15	0.05	5,444.51	0.00	0.86	5,699.64
Tons per const. Period - Grubbing/Land Clearing	0.00	0.03	0.20	0.01	0.00	0.00	107.80	0.00	0.02	112.85
Pounds per day - Grading/Excavation	0.16	2.19	16.98	0.60	0.26	0.09	9,301.03	0.01	1.46	9,736.89
Tons per const. Period - Grading/Excavation	0.01	0.20	1.51	0.05	0.02	0.01	828.72	0.00	0.13	867.56
Pounds per day - Drainage/Utilities/Sub-Grade	0.12	1.67	12.94	0.46	0.20	0.07	6,977.77	0.01	1.10	7,304.76
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.01	0.10	0.77	0.03	0.01	0.00	414.48	0.00	0.07	433.90
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.02	0.32	2.48	0.09	0.04	0.01	1,351.00	0.00	0.21	1,414.31

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT					
User Input										
Miles/round trip: Grubbing/Land Clearing				0	0.00					
Miles/round trip: Grading/Excavation				0	0.00					
Miles/round trip: Drainage/Utilities/Sub-Grade				0	0.00					
Miles/round trip: Paving	30.00			35	1050.00					
2010+ Model Year Mitigation Option Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Drainage/Utilities/Sub-Grade (grams/mile)	0.03	0.41	3.01	0.11	0.05	0.02	1,701.64	0.00	0.27	1,781.39
Paving (grams/mile)	0.03	0.41	3.02	0.11	0.05	0.02	1,693.55	0.00	0.27	1,772.92
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.07	0.94	7.34	0.26	0.11	0.04	3,920.33	0.00	0.62	4,104.04
Tons per const. Period - Paving	0.00	0.03	0.22	0.01	0.00	0.00	116.43	0.00	0.02	121.89
Total tons per construction project	0.00	0.03	0.22	0.01	0.00	0.00	116.43	0.00	0.02	121.89

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions		User Override of Worker Commute Default Values		Default Values		Calculated					
User Input				Daily Trips	Daily VMT						
Miles/ one-way trip											
One-way trips/day				0	0.00						
No. of employees: Grubbing/Land Clearing				0	0.00						
No. of employees: Grading/Excavation				0	0.00						
No. of employees: Drainage/Utilities/Sub-Grade				0	0.00						
No. of employees: Paving				0	0.00						
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Grubbing/Land Clearing (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68	
Grading/Excavation (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68	
Draining/Utilities/Sub-Grade (grams/mile)	0.01	0.87	0.07	0.05	0.02	0.00	310.84	0.00	0.01	312.75	
Paving (grams/mile)	0.01	0.84	0.06	0.05	0.02	0.00	306.70	0.00	0.01	308.54	
Grubbing/Land Clearing (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50	
Grading/Excavation (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50	
Draining/Utilities/Sub-Grade (grams/trip)	1.00	2.69	0.28	0.00	0.00	0.00	66.85	0.07	0.03	77.70	
Paving (grams/trip)	0.98	2.66	0.27	0.00	0.00	0.00	65.99	0.07	0.03	76.61	
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions		User Override of Program Estimate of		User Override of Truck		Default Values		Calculated		User Override of Default Values		Calculated	
User Input		Default # Water Trucks	Number of Water Trucks	Round Trips/Vehicle/Day	Round Trips/Vehicle/Day	Trips/day	Miles/Round Trip	Miles/Round Trip	Daily VMT				
Grubbing/Land Clearing - Exhaust									0.00				
Grading/Excavation - Exhaust									0.00				
Drainage/Utilities/Subgrade									0.00				
Paving									0.00				
2010+ Model Year Mitigation Option Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e			
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36			
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36			
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.41	3.01	0.11	0.05	0.02	1,701.64	0.00	0.27	1,781.39			
Paving (grams/mile)	0.03	0.41	3.02	0.11	0.05	0.02	1,693.55	0.00	0.27	1,772.92			
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e			
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust		User Override of Max Acreage Disturbed/Day		Default Maximum Acreage/Day		PM10 pounds/day		PM10 tons/per period		PM2.5 pounds/day		PM2.5 tons/per period	
Fugitive Dust - Grubbing/Land Clearing						2.30	0.05	0.48	0.01				
Fugitive Dust - Grading/Excavation						2.30	0.20	0.48	0.04				
Fugitive Dust - Drainage/Utilities/Subgrade						2.30	0.14	0.48	0.03				

Values in cells D195 through D228, D246 through D279, D297 through D330, and D348 through D381 are required when 'Other Project Type' is selected.
 Values in cells E232 through E236, E283 through E287, E334 through E338, and E385 through E389 are required when non-default Equipment are used and they are not all Tier 4

Off-Road Equipment Emissions												
Grubbing/Land Clearing	Default	Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
	Number of Vehicles	Override of	Current									
Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)		Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
		Model Default Tier	Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00		Tier 4	Tier 4	Crawler Tractors	0.24	4.18	0.48	0.02	0.02	0.01	758.27	
		Model Default Tier	Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00		Tier 4	Tier 4	Excavators	0.16	3.92	0.32	0.02	0.01	0.01	500.11	
		Model Default Tier	Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab			Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
0.00		Equipment Tier			pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Grubbing/Land Clearing			pounds per day	0.40	8.10	0.80	0.04	0.04	0.01	1,258.38	0.41
	Grubbing/Land Clearing			tons per phase	0.01	0.16	0.02	0.00	0.00	0.00	24.92	0.01

Grading/Excavation	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
	Number of Vehicles	Override of	Current	Current									
Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	
		Model Default Tier	Model Default Tier	Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00		Tier 4	Tier 4	Tier 4	Crawler Tractors	0.24	4.18	0.48	0.02	0.02	0.01	758.27	
		Model Default Tier	Model Default Tier	Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00		Tier 4	Tier 4	Tier 4	Graders	0.20	3.52	0.41	0.02	0.02	0.01	640.86	
		Model Default Tier	Model Default Tier	Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2.00		Tier 4	Tier 4	Tier 4	Rollers	0.16	3.97	0.32	0.02	0.01	0.01	508.22	
		Model Default Tier	Model Default Tier	Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1.00		Tier 4	Tier 4	Tier 4	Rubber Tired Loaders	0.19	3.35	0.39	0.02	0.02	0.01	605.56	
2.00		Tier 4	Tier 4	Tier 4	Scrapers	0.93	16.16	1.86	0.09	0.09	0.03	2,940.26	
		Model Default Tier	Model Default Tier	Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Model Default Tier	Model Default Tier	Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
User-Defined Off-road Equipment						ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
Number of Vehicles						pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab													
0.00		N/A		Equipment Tier	Type	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation						pounds per day	1.73	31.17	3.46	0.17	0.16	0.06	5,453.17
Grading/Excavation						tons per phase	0.15	2.78	0.31	0.02	0.01	0.01	485.88

Drainage/Utilities/Subgrade	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
	Number of Vehicles	Override of	Current									
	Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier								
			Model Default Tier	Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Model Default Tier	Air Compressors	0.25	2.41	1.67	0.09	0.09	0.00	375.26
	2.00		Model Default Tier	Model Default Tier	Bore/Drill Rigs	0.42	4.07	3.91	0.13	0.12	0.02	1,833.25
			Model Default Tier	Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Model Default Tier	Excavators	0.18	3.26	1.46	0.07	0.07	0.01	500.21
			Model Default Tier	Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Model Default Tier	Generator Sets	0.29	3.67	2.61	0.12	0.12	0.01	623.04
			Model Default Tier	Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.00		Model Default Tier	Model Default Tier	Plate Compactors	0.08	0.42	0.50	0.02	0.02	0.00	68.96
			Model Default Tier	Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.00		Model Default Tier	Model Default Tier	Rollers	0.15	1.85	1.56	0.08	0.08	0.00	254.13
			Model Default Tier	Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.00		Model Default Tier	Model Default Tier	Tractors/Loaders/Backhoes	0.29	4.47	2.96	0.14	0.13	0.01	603.39
			Model Default Tier	Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab				ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
	Number of Vehicles		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Drainage/Utilities/Sub-Grade		pounds per day	1.67	20.15	14.66	0.65	0.61	0.04	4,258.23	1.09
		Drainage/Utilities/Sub-Grade		tons per phase	0.10	1.20	0.87	0.04	0.04	0.00	252.94	0.06

Paving	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	
	Number of Vehicles	Override of	Current										
	Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier									
			Model Default Tier	Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	1.00		Model Default Tier	Model Default Tier	Pavers	0.18	2.89	1.74	0.08	0.07	0.00	455.16	
			Model Default Tier	Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	3.00		Model Default Tier	Model Default Tier	Rollers	0.44	5.55	4.57	0.24	0.22	0.01	762.44	
			Model Default Tier	Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	1.00		Model Default Tier	Model Default Tier	Tractors/Loaders/Backhoes	0.14	2.24	1.45	0.07	0.06	0.00	301.77	
			Model Default Tier	Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			Model Default Tier	Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
User-Defined Off-road Equipment						ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4
Number of Vehicles					Equipment Tier	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00					N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00					N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00					N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00					N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00					N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00					N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving					pounds per day	0.76	10.68	7.76	0.39	0.36	0.02	1,519.37	0.49
Paving					tons per phase	0.02	0.32	0.23	0.01	0.01	0.00	45.13	0.01
Total Emissions all Phases (tons per construction period) =>						0.28	4.45	1.43	0.07	0.06	0.01	808.86	0.24

N2O	CO2e
pounds/day	pounds/day
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
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
0.00	0.00
0.00	0.00
0.00	460.07
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.01	770.65
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
0.00	305.01
0.00	0.00
0.00	0.00
0.00	0.00
<hr/>	
N2O	CO2e
pounds/day	pounds/day
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
0.00	0.00
0.01	1,535.73
0.00	45.61
<hr/>	
0.01	817.12

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET