
Appendix F

CALEEMOD OUTPUTS

BAU Annual Emissions

FR SPA 3 BAU Version
Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	600.00	Student	1.15	50,162.02	0
Parking Lot	30.00	1000sqft	0.69	30,000.00	0
City Park	11.89	Acre	11.89	517,928.40	0
Apartments Low Rise	954.00	Dwelling Unit	59.63	954,000.00	2490
Single Family Housing	1,995.00	Dwelling Unit	500.00	3,591,000.00	8569
Strip Mall	79.20	1000sqft	7.30	79,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	14			Operational Year	2010
Utility Company	Roseville Electric				
CO2 Intensity (lb/MWhr)	793.8	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - per proposed project and City of Roseville average persons per household

Construction Phase - modeling for operational emissions only

Off-road Equipment -

Vehicle Trips - per traffic study

Vehicle Emission Factors -

Woodstoves - no woodburning appliances or fireplaces allowed in multi family units. defaults for single family housing have not been adjusted

Area Coating - per APCD rules

Energy Use - .

Water And Wastewater - all wastewater treated at City's WWTP, no septic systems.

Solid Waste -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - n

Energy Mitigation - BAU

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberNoFireplace	95.40	429.30
tblFireplaces	NumberWood	333.90	0.00
tblLandUse	LotAcreage	647.73	500.00
tblLandUse	LotAcreage	1.82	7.30

tblLandUse	Population	2,728.00	2,490.00
tblLandUse	Population	5,706.00	8,569.00
tblProjectCharacteristics	OperationalYear	2014	2010
tblVehicleTrips	WD_TR	6.59	6.50
tblVehicleTrips	WD_TR	1.59	2.20
tblVehicleTrips	WD_TR	1.29	1.00
tblVehicleTrips	WD_TR	9.57	9.00
tblVehicleTrips	WD_TR	44.32	35.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	47.70	0.00
tblWoodstoves	NumberNoncatalytic	47.70	0.00

tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5949	6.3190	4.7874	5.3900e-003	0.0154	0.3199	0.3353	4.0900e-003	0.2984	0.3025	0.0000	502.6454	502.6454	0.1331	0.0000	505.4406
2016	0.5654	5.9649	4.6426	5.3900e-003	0.0154	0.2992	0.3146	4.0900e-003	0.2789	0.2830	0.0000	497.6435	497.6435	0.1322	0.0000	500.4207
2017	0.1594	1.6670	1.3407	1.6100e-003	4.5900e-003	0.0829	0.0875	1.2200e-003	0.0772	0.0785	0.0000	146.6914	146.6914	0.0393	0.0000	147.5175
Total	1.3197	13.9510	10.7706	0.0124	0.0353	0.7021	0.7374	9.4000e-003	0.6545	0.6639	0.0000	1,146.9804	1,146.9804	0.3047	0.0000	1,153.3788

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5949	6.3190	4.7874	5.3900e-003	0.0154	0.3199	0.3353	4.0900e-003	0.2984	0.3025	0.0000	502.6449	502.6449	0.1331	0.0000	505.4400
2016	0.5654	5.9649	4.6426	5.3900e-003	0.0154	0.2992	0.3146	4.0900e-003	0.2789	0.2830	0.0000	497.6430	497.6430	0.1322	0.0000	500.4201
2017	0.1594	1.6670	1.3407	1.6100e-003	4.5900e-003	0.0829	0.0875	1.2200e-003	0.0772	0.0785	0.0000	146.6913	146.6913	0.0393	0.0000	147.5174
Total	1.3197	13.9510	10.7706	0.0124	0.0353	0.7021	0.7374	9.4000e-003	0.6545	0.6639	0.0000	1,146.9791	1,146.9791	0.3047	0.0000	1,153.3774

	ROG	NOx	CO	SO2	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

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	154.2009	1.9777	177.5191	0.0614		21.8092	21.8092		21.8083	21.8083	2,060.7506	1,313.3093	3,374.0599	1.9533	0.1697	3,467.6766
Energy	0.2676	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	9,673.7515	9,673.7515	0.3074	0.1017	9,711.7216
Mobile	29.0156	70.2563	299.0095	0.3965	27.6506	1.2725	28.9230	7.4082	1.1654	8.5736	0.0000	35,638.0406	35,638.0406	1.9899	0.0000	35,679.8281
Waste						0.0000	0.0000		0.0000	0.0000	754.5905	0.0000	754.5905	44.5950	0.0000	1,691.0859
Water						0.0000	0.0000		0.0000	0.0000	70.5694	568.3566	638.9260	0.2637	0.1578	693.3688
Total	183.4841	74.5251	477.5311	0.4725	27.6506	23.2666	50.9172	7.4082	23.1586	30.5668	2,885.9105	47,193.4580	50,079.3685	49.1093	0.4291	51,243.6810

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	154.2009	1.9777	177.5191	0.0614		21.8092	21.8092		21.8083	21.8083	2,060.7506	1,313.3093	3,374.0599	1.9533	0.1697	3,467.6766
Energy	0.2676	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	9,673.7515	9,673.7515	0.3074	0.1017	9,711.7216
Mobile	27.9898	64.0951	276.7849	0.3581	24.8855	1.1531	26.0386	6.6674	1.0560	7.7234	0.0000	32,176.3429	32,176.3429	1.8171	0.0000	32,214.5014
Waste						0.0000	0.0000		0.0000	0.0000	754.5905	0.0000	754.5905	44.5950	0.0000	1,691.0859
Water						0.0000	0.0000		0.0000	0.0000	56.4555	490.6352	547.0907	0.2112	0.1263	590.6666
Total	182.4583	68.3639	455.3065	0.4341	24.8855	23.1473	48.0328	6.6674	23.0492	29.7166	2,871.7966	43,654.0388	46,525.8354	48.8840	0.3976	47,675.6522

	ROG	NOx	CO	SO2	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	0.56	8.27	4.65	8.13	10.00	0.51	5.66	10.00	0.47	2.78	0.49	7.50	7.10	0.46	7.34	6.96

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	4/19/2017	5	600	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015**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	0.5883	6.3114	4.7076	5.2100e-003		0.3198	0.3198		0.2983	0.2983	0.0000	488.6086	488.6086	0.1325	0.0000	491.3901
Total	0.5883	6.3114	4.7076	5.2100e-003		0.3198	0.3198		0.2983	0.2983	0.0000	488.6086	488.6086	0.1325	0.0000	491.3901

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5400e-003	7.6700e-003	0.0797	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	1.0000e-004	4.1900e-003	0.0000	14.0369	14.0369	6.5000e-004	0.0000	14.0505
Total	6.5400e-003	7.6700e-003	0.0797	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	1.0000e-004	4.1900e-003	0.0000	14.0369	14.0369	6.5000e-004	0.0000	14.0505

3.2 Demolition - 2015**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	0.5883	6.3114	4.7076	5.2100e-003		0.3198	0.3198		0.2983	0.2983	0.0000	488.6080	488.6080	0.1325	0.0000	491.3895
Total	0.5883	6.3114	4.7076	5.2100e-003		0.3198	0.3198		0.2983	0.2983	0.0000	488.6080	488.6080	0.1325	0.0000	491.3895

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5400e-003	7.6700e-003	0.0797	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	1.0000e-004	4.1900e-003	0.0000	14.0369	14.0369	6.5000e-004	0.0000	14.0505
Total	6.5400e-003	7.6700e-003	0.0797	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	1.0000e-004	4.1900e-003	0.0000	14.0369	14.0369	6.5000e-004	0.0000	14.0505

3.2 Demolition - 2016**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	0.5595	5.9581	4.5715	5.2100e-003		0.2991	0.2991		0.2788	0.2788	0.0000	484.1206	484.1206	0.1317	0.0000	486.8853
Total	0.5595	5.9581	4.5715	5.2100e-003		0.2991	0.2991		0.2788	0.2788	0.0000	484.1206	484.1206	0.1317	0.0000	486.8853

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8500e-003	6.8400e-003	0.0711	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	9.0000e-005	4.1800e-003	0.0000	13.5230	13.5230	5.9000e-004	0.0000	13.5354
Total	5.8500e-003	6.8400e-003	0.0711	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	9.0000e-005	4.1800e-003	0.0000	13.5230	13.5230	5.9000e-004	0.0000	13.5354

3.2 Demolition - 2016**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	0.5595	5.9581	4.5715	5.2100e-003		0.2991	0.2991		0.2788	0.2788	0.0000	484.1200	484.1200	0.1317	0.0000	486.8847
Total	0.5595	5.9581	4.5715	5.2100e-003		0.2991	0.2991		0.2788	0.2788	0.0000	484.1200	484.1200	0.1317	0.0000	486.8847

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8500e-003	6.8400e-003	0.0711	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	9.0000e-005	4.1800e-003	0.0000	13.5230	13.5230	5.9000e-004	0.0000	13.5354
Total	5.8500e-003	6.8400e-003	0.0711	1.8000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	9.0000e-005	4.1800e-003	0.0000	13.5230	13.5230	5.9000e-004	0.0000	13.5354

3.2 Demolition - 2017**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	0.1579	1.6652	1.3218	1.5600e-003		0.0829	0.0829		0.0772	0.0772	0.0000	142.8110	142.8110	0.0392	0.0000	143.6338
Total	0.1579	1.6652	1.3218	1.5600e-003		0.0829	0.0829		0.0772	0.0772	0.0000	142.8110	142.8110	0.0392	0.0000	143.6338

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	1.5500e-003	1.8200e-003	0.0189	5.0000e-005	4.5900e-003	3.0000e-005	4.6200e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	3.8804	3.8804	1.6000e-004	0.0000	3.8838
Total	1.5500e-003	1.8200e-003	0.0189	5.0000e-005	4.5900e-003	3.0000e-005	4.6200e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	3.8804	3.8804	1.6000e-004	0.0000	3.8838

3.2 Demolition - 2017**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	0.1579	1.6652	1.3218	1.5600e-003		0.0829	0.0829		0.0772	0.0772	0.0000	142.8109	142.8109	0.0392	0.0000	143.6336
Total	0.1579	1.6652	1.3218	1.5600e-003		0.0829	0.0829		0.0772	0.0772	0.0000	142.8109	142.8109	0.0392	0.0000	143.6336

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	1.5500e-003	1.8200e-003	0.0189	5.0000e-005	4.5900e-003	3.0000e-005	4.6200e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	3.8804	3.8804	1.6000e-004	0.0000	3.8838
Total	1.5500e-003	1.8200e-003	0.0189	5.0000e-005	4.5900e-003	3.0000e-005	4.6200e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	3.8804	3.8804	1.6000e-004	0.0000	3.8838

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Destination Accessibility

Integrate Below Market Rate Housing

	ROG	NOx	CO	SO2	Fugitive 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	27.9898	64.0951	276.7849	0.3581	24.8855	1.1531	26.0386	6.6674	1.0560	7.7234	0.0000	32,176.34 29	32,176.34 29	1.8171	0.0000	32,214.50 14
Unmitigated	29.0156	70.2563	299.0095	0.3965	27.6506	1.2725	28.9230	7.4082	1.1654	8.5736	0.0000	35,638.04 06	35,638.04 06	1.9899	0.0000	35,679.82 81

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6,201.00	6,830.64	5790.78	17,852,820	16,067,538
City Park	26.16	18.91	18.91	51,420	46,278
Elementary School	600.00	0.00	0.00	944,974	850,477
Parking Lot	0.00	0.00	0.00		
Single Family Housing	17,955.00	20,109.60	17496.15	52,126,798	46,914,118
Strip Mall	2,772.00	3,329.57	1618.06	4,137,766	3,723,989
Total	27,554.16	30,288.71	24,923.89	75,113,777	67,602,399

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455538	0.063088	0.186236	0.184349	0.062438	0.009089	0.011942	0.012661	0.001858	0.001285	0.007343	0.000678	0.003494

5.0 Energy Detail

5.1 Fleet Mix

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 Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,025.0039	7,025.0039	0.2567	0.0531	7,046.8541
NaturalGas Mitigated	0.2676	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	2,648.7476	2,648.7476	0.0508	0.0486	2,664.8675
NaturalGas Unmitigated	0.2676	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	2,648.7476	2,648.7476	0.0508	0.0486	2,664.8675
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,025.0039	7,025.0039	0.2567	0.0531	7,046.8541

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	755942	4.0800e-003	0.0371	0.0311	2.2000e-004		2.8200e-003	2.8200e-003		2.8200e-003	2.8200e-003	0.0000	40.3399	40.3399	7.7000e-004	7.4000e-004	40.5854
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.55734e+007	0.1918	1.6392	0.6975	0.0105		0.1325	0.1325		0.1325	0.1325	0.0000	1,898.3344	1,898.3344	0.0364	0.0348	1,909.8874
Strip Mall	601128	3.2400e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.0785	32.0785	6.1000e-004	5.9000e-004	32.2737
Apartments Low Rise	1.27051e+007	0.0685	0.5854	0.2491	3.7400e-003		0.0473	0.0473		0.0473	0.0473	0.0000	677.9948	677.9948	0.0130	0.0124	682.1210
Total		0.2677	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	2,648.7476	2,648.7476	0.0508	0.0486	2,664.8675

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	755942	4.0800e-003	0.0371	0.0311	2.2000e-004		2.8200e-003	2.8200e-003		2.8200e-003	2.8200e-003	0.0000	40.3399	40.3399	7.7000e-004	7.4000e-004	40.5854
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.55734e+007	0.1918	1.6392	0.6975	0.0105		0.1325	0.1325		0.1325	0.1325	0.0000	1,898.3344	1,898.3344	0.0364	0.0348	1,909.8874
Strip Mall	601128	3.2400e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.0785	32.0785	6.1000e-004	5.9000e-004	32.2737
Apartments Low Rise	1.27051e+007	0.0685	0.5854	0.2491	3.7400e-003		0.0473	0.0473		0.0473	0.0473	0.0000	677.9948	677.9948	0.0130	0.0124	682.1210
Total		0.2677	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	2,648.7476	2,648.7476	0.0508	0.0486	2,664.8675

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.43014e+006	1,235.0602	0.0451	9.3400e-003	1,238.9017
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	384743	138.5311	5.0600e-003	1.0500e-003	138.9620
Parking Lot	26400	9.5056	3.5000e-004	7.0000e-005	9.5352
Single Family Housing	1.44544e+007	5,204.4580	0.1901	0.0393	5,220.6457
Strip Mall	1.21493e+006	437.4490	0.0160	3.3100e-003	438.8096
Total		7,025.0039	0.2567	0.0531	7,046.8541

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.43014e+006	1,235.0602	0.0451	9.3400e-003	1,238.9017
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	384743	138.5311	5.0600e-003	1.0500e-003	138.9620
Parking Lot	26400	9.5056	3.5000e-004	7.0000e-005	9.5352
Single Family Housing	1.44544e+007	5,204.4580	0.1901	0.0393	5,220.6457
Strip Mall	1.21493e+006	437.4490	0.0160	3.3100e-003	438.8096
Total		7,025.0039	0.2567	0.0531	7,046.8541

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	154.2009	1.9777	177.5191	0.0614		21.8092	21.8092		21.8083	21.8083	2,060.7506	1,313.3093	3,374.0599	1.9533	0.1697	3,467.6766
Unmitigated	154.2009	1.9777	177.5191	0.0614		21.8092	21.8092		21.8083	21.8083	2,060.7506	1,313.3093	3,374.0599	1.9533	0.1697	3,467.6766

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	7.7482					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	20.3957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	125.2204	1.6983	154.2089	0.0602		21.6940	21.6940		21.6930	21.6930	2,060.7506	1,277.5286	3,338.2792	1.9097	0.1697	3,430.9797
Landscaping	0.8366	0.2794	23.3102	1.1600e-003		0.1153	0.1153		0.1153	0.1153	0.0000	35.7807	35.7807	0.0436	0.0000	36.6969
Total	154.2009	1.9777	177.5191	0.0614		21.8092	21.8092		21.8083	21.8083	2,060.7506	1,313.3093	3,374.0599	1.9533	0.1697	3,467.6766

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	7.7482					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	20.3957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	125.2204	1.6983	154.2089	0.0602		21.6940	21.6940		21.6930	21.6930	2,060.7506	1,277.5286	3,338.2792	1.9097	0.1697	3,430.9797
Landscaping	0.8366	0.2794	23.3102	1.1600e-003		0.1153	0.1153		0.1153	0.1153	0.0000	35.7807	35.7807	0.0436	0.0000	36.6969
Total	154.2009	1.9777	177.5191	0.0614		21.8092	21.8092		21.8083	21.8083	2,060.7506	1,313.3093	3,374.0599	1.9533	0.1697	3,467.6766

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	547.0907	0.2112	0.1263	590.6666
Unmitigated	638.9260	0.2637	0.1578	693.3688

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	62.1569 / 39.1859	192.4739	0.0819	0.0491	209.4190
City Park	0 / 14.1667	17.8531	6.5000e-004	1.3000e-004	17.9086
Elementary School	1.45454 / 3.74026	8.0620	2.0500e-003	1.1800e-003	8.4696
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	129.982 / 81.9454	402.5004	0.1713	0.1027	437.9360
Strip Mall	5.86654 / 3.59562	18.0366	7.7300e-003	4.6300e-003	19.6355
Total		638.9260	0.2637	0.1578	693.3688

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	49.7256 / 39.1859	163.8556	0.0656	0.0393	177.4144
City Park	0 / 14.1667	17.8531	6.5000e-004	1.3000e-004	17.9086
Elementary School	1.16364 / 3.74026	7.3923	1.6600e-003	9.5000e-004	7.7207
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	103.986 / 81.9454	342.6541	0.1371	0.0822	371.0081
Strip Mall	4.69323 / 3.59562	15.3355	6.1800e-003	3.7100e-003	16.6148
Total		547.0907	0.2112	0.1263	590.6666

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	754.5905	44.5950	0.0000	1,691.085 ₉
Unmitigated	754.5905	44.5950	0.0000	1,691.085 ₉

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	438.84	89.0806	5.2645	0.0000	199.6353
City Park	1.02	0.2071	0.0122	0.0000	0.4640
Elementary School	109.5	22.2275	1.3136	0.0000	49.8133
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3084.84	626.1946	37.0070	0.0000	1,403.342 ₆
Strip Mall	83.16	16.8807	0.9976	0.0000	37.8308
Total		754.5905	44.5950	0.0000	1,691.085₉

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	438.84	89.0806	5.2645	0.0000	199.6353
City Park	1.02	0.2071	0.0122	0.0000	0.4640
Elementary School	109.5	22.2275	1.3136	0.0000	49.8133
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3084.84	626.1946	37.0070	0.0000	1,403.342 6
Strip Mall	83.16	16.8807	0.9976	0.0000	37.8308
Total		754.5905	44.5950	0.0000	1,691.085 9

9.0 Operational Offroad

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

Proposed Project Annual Emissions

FR SPA 3 Buildout Operational 2020
Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	600.00	Student	1.15	50,162.02	0
Parking Lot	30.00	1000sqft	0.69	30,000.00	0
City Park	11.89	Acre	11.89	517,928.40	0
Apartments Low Rise	954.00	Dwelling Unit	59.63	954,000.00	2490
Single Family Housing	1,995.00	Dwelling Unit	500.00	3,591,000.00	8569
Strip Mall	79.20	1000sqft	7.30	79,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	14			Operational Year	2020
Utility Company	Roseville Electric				
CO2 Intensity (lb/MWhr)	640.78	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity reduced to reflect attainment of 33% RPS. Default value of 793.8 reflects 17% RPS.

Formula: $[793.8 / (1-.17)] * (1- 0.33) = 640.78$

Land Use - per proposed project and City of Roseville average persons per household

Construction Phase - modeling for operational emissions only

Off-road Equipment -

Vehicle Trips - per traffic study

Woodstoves - no woodburning appliances or fireplaces allowed in multi family units. defaults for single family housing have not been adjusted

Area Coating - per APCD rules

Energy Use - .

Water And Wastewater - all wastewater treated at City's WWTP, no septic systems.

Solid Waste -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - 32.5% above Title 24 is a 15% improvement over the 2014 requirements (CalEEMod is based on 2008 Title 24 requirements)

Water Mitigation - water conservation measures not modeled include use of high-efficiency irrigation, drought tolerant landscaping, and reduction in turf areas. Because these measures vary across housing densities, they were not modeled.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblConstructionPhase	NumDays	600.00	2.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	524.70	0.00
tblFireplaces	NumberNoFireplace	95.40	0.00
tblFireplaces	NumberWood	333.90	0.00
tblLandUse	LotAcreage	647.73	500.00
tblLandUse	LotAcreage	1.82	7.30

tblLandUse	Population	2,728.00	2,490.00
tblLandUse	Population	5,706.00	8,569.00
tblProjectCharacteristics	CO2IntensityFactor	793.8	640.78
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	WD_TR	6.59	6.50
tblVehicleTrips	WD_TR	1.59	2.20
tblVehicleTrips	WD_TR	1.29	1.00
tblVehicleTrips	WD_TR	9.57	9.00
tblVehicleTrips	WD_TR	44.32	35.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	47.70	0.00

tblWoodstoves	NumberNoncatalytic	47.70	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	4.6500e-003	0.0496	0.0370	4.0000e-005	1.2000e-004	2.5300e-003	2.6500e-003	3.0000e-005	2.3600e-003	2.3900e-003	0.0000	3.8891	3.8891	1.0300e-003	0.0000	3.9107
Total	4.6500e-003	0.0496	0.0370	4.0000e-005	1.2000e-004	2.5300e-003	2.6500e-003	3.0000e-005	2.3600e-003	2.3900e-003	0.0000	3.8891	3.8891	1.0300e-003	0.0000	3.9107

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	4.6500e-003	0.0496	0.0370	4.0000e-005	1.2000e-004	2.5300e-003	2.6500e-003	3.0000e-005	2.3600e-003	2.3900e-003	0.0000	3.8891	3.8891	1.0300e-003	0.0000	3.9107
Total	4.6500e-003	0.0496	0.0370	4.0000e-005	1.2000e-004	2.5300e-003	2.6500e-003	3.0000e-005	2.3600e-003	2.3900e-003	0.0000	3.8891	3.8891	1.0300e-003	0.0000	3.9107

	ROG	NOx	CO	SO2	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

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	153.9922	1.9525	176.1828	0.0614		21.7859	21.7859		21.7853	21.7853	2,060.7506	900.0295	2,960.7801	1.9366	0.1621	3,051.6986
Energy	0.2676	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	8,319.5488	8,319.5488	0.3074	0.1017	8,357.5189
Mobile	12.7864	28.3398	124.5217	0.3945	27.6598	0.4255	28.0853	7.4112	0.3926	7.8038	0.0000	27,380.7696	27,380.7696	0.8713	0.0000	27,399.0673
Waste						0.0000	0.0000		0.0000	0.0000	754.5905	0.0000	754.5905	44.5950	0.0000	1,691.0859
Water						0.0000	0.0000		0.0000	0.0000	70.5694	458.7951	529.3645	0.2637	0.1578	583.8073
Total	167.0462	32.5835	301.7070	0.4705	27.6598	22.3964	50.0562	7.4112	22.3628	29.7740	2,885.9105	37,059.1430	39,945.0535	47.9741	0.4215	41,083.1779

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	28.9564	0.2542	21.9839	1.1600e-003		0.2196	0.2196		0.2185	0.2185	0.0000	1,450.0059	1,450.0059	0.0620	0.0259	1,459.3458
Energy	0.1994	1.7067	0.7442	0.0109		0.1378	0.1378		0.1378	0.1378	0.0000	7,449.6272	7,449.6272	0.2857	0.0875	7,482.7379
Mobile	12.3309	25.5357	114.0556	0.3494	24.3959	0.3801	24.7760	6.5367	0.3506	6.8873	0.0000	24,246.2129	24,246.2129	0.7787	0.0000	24,262.5659
Waste						0.0000	0.0000		0.0000	0.0000	754.5905	0.0000	754.5905	44.5950	0.0000	1,691.0859
Water						0.0000	0.0000		0.0000	0.0000	56.4555	396.0559	452.5114	0.2112	0.1263	496.0874
Total	41.4867	27.4966	136.7836	0.3615	24.3959	0.7374	25.1334	6.5367	0.7069	7.2436	811.0460	33,541.9020	34,352.9480	45.9326	0.2397	35,391.8230

	ROG	NOx	CO	SO2	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	75.16	15.61	54.66	23.18	11.80	96.71	49.79	11.80	96.84	75.67	71.90	9.49	14.00	4.26	43.14	13.85

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	1/1/2014	1/2/2014	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-003	0.0495	0.0363	4.0000e-005		2.5300e-003	2.5300e-003		2.3600e-003	2.3600e-003	0.0000	3.7776	3.7776	1.0200e-003	0.0000	3.7990
Total	4.6000e-003	0.0495	0.0363	4.0000e-005		2.5300e-003	2.5300e-003		2.3600e-003	2.3600e-003	0.0000	3.7776	3.7776	1.0200e-003	0.0000	3.7990

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	7.0000e-005	6.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1115	0.1115	1.0000e-005	0.0000	0.1116
Total	6.0000e-005	7.0000e-005	6.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1115	0.1115	1.0000e-005	0.0000	0.1116

3.2 Demolition - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-003	0.0495	0.0363	4.0000e-005		2.5300e-003	2.5300e-003		2.3600e-003	2.3600e-003	0.0000	3.7776	3.7776	1.0200e-003	0.0000	3.7990
Total	4.6000e-003	0.0495	0.0363	4.0000e-005		2.5300e-003	2.5300e-003		2.3600e-003	2.3600e-003	0.0000	3.7776	3.7776	1.0200e-003	0.0000	3.7990

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	7.0000e-005	6.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1115	0.1115	1.0000e-005	0.0000	0.1116
Total	6.0000e-005	7.0000e-005	6.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1115	0.1115	1.0000e-005	0.0000	0.1116

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	12.3309	25.5357	114.0556	0.3494	24.3959	0.3801	24.7760	6.5367	0.3506	6.8873	0.0000	24,246.21 29	24,246.21 29	0.7787	0.0000	24,262.56 59
Unmitigated	12.7864	28.3398	124.5217	0.3945	27.6598	0.4255	28.0853	7.4112	0.3926	7.8038	0.0000	27,380.76 96	27,380.76 96	0.8713	0.0000	27,399.06 73

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6,201.00	6,830.64	5790.78	17,852,820	15,746,187
City Park	26.16	18.91	18.91	51,420	45,352
Elementary School	600.00	0.00	0.00	944,974	833,467
Parking Lot	0.00	0.00	0.00		
Single Family Housing	17,955.00	20,109.60	17496.15	52,126,798	45,975,836
Strip Mall	2,772.00	3,329.57	1618.06	4,137,766	3,649,510
Total	27,554.16	30,288.71	24,923.89	75,113,777	66,250,351

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.463102	0.064860	0.187402	0.173152	0.059565	0.008320	0.013499	0.015223	0.001635	0.001280	0.007831	0.000608	0.003523

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	5,476.0763	5,476.0763	0.2478	0.0513	5,497.1763
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,670.8012	5,670.8012	0.2567	0.0531	5,692.6514
NaturalGas Mitigated	0.1994	1.7067	0.7442	0.0109		0.1378	0.1378		0.1378	0.1378	0.0000	1,973.5509	1,973.5509	0.0378	0.0362	1,985.5616
NaturalGas Unmitigated	0.2676	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	2,648.7476	2,648.7476	0.0508	0.0486	2,664.8675

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					
Single Family Housing	3.55734e+007	0.1918	1.6392	0.6975	0.0105		0.1325	0.1325		0.1325	0.1325	0.0000	1,898.3344	1,898.3344	0.0364	0.0348	1,909.8874
Strip Mall	601128	3.2400e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.0785	32.0785	6.1000e-004	5.9000e-004	32.2737
Elementary School	755942	4.0800e-003	0.0371	0.0311	2.2000e-004		2.8200e-003	2.8200e-003		2.8200e-003	2.8200e-003	0.0000	40.3399	40.3399	7.7000e-004	7.4000e-004	40.5854
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Low Rise	1.27051e+007	0.0685	0.5854	0.2491	3.7400e-003		0.0473	0.0473		0.0473	0.0473	0.0000	677.9948	677.9948	0.0130	0.0124	682.1210
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.2677	2.2911	1.0025	0.0146		0.1849	0.1849		0.1849	0.1849	0.0000	2,648.7476	2,648.7476	0.0508	0.0486	2,664.8675

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	383219	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003	0.0000	20.4500	20.4500	3.9000e-004	3.7000e-004	20.5745
Elementary School	497551	2.6800e-003	0.0244	0.0205	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5512	26.5512	5.1000e-004	4.9000e-004	26.7128
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.71388e+007	0.1463	1.2505	0.5321	7.9800e-003		0.1011	0.1011		0.1011	0.1011	0.0000	1,448,228.5	1,448,228.5	0.0278	0.0266	1,457,042.2
Apartments Low Rise	8.9634e+006	0.0483	0.4130	0.1758	2.6400e-003		0.0334	0.0334		0.0334	0.0334	0.0000	478.3211	478.3211	9.1700e-003	8.7700e-003	481.2321
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.1994	1.7067	0.7442	0.0109		0.1378	0.1378		0.1378	0.1378	0.0000	1,973.5509	1,973.5509	0.0378	0.0362	1,985.5616

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.43014e+006	996.9789	0.0451	9.3400e-003	1,000.8204
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	384743	111.8266	5.0600e-003	1.0500e-003	112.2575
Parking Lot	26400	7.6732	3.5000e-004	7.0000e-005	7.7028
Single Family Housing	1.44544e+007	4,201.2001	0.1901	0.0393	4,217.3878
Strip Mall	1.21493e+006	353.1224	0.0160	3.3100e-003	354.4830
Total		5,670.8012	0.2567	0.0531	5,692.6514

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.37402e+006	980.6688	0.0444	9.1800e-003	984.4474
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	348739	101.3620	4.5900e-003	9.5000e-004	101.7525
Parking Lot	26400	7.6732	3.5000e-004	7.0000e-005	7.7028
Single Family Housing	1.40522e+007	4,084.3192	0.1849	0.0382	4,100.0565
Strip Mall	1.03922e+006	302.0531	0.0137	2.8300e-003	303.2170
Total		5,476.0763	0.2478	0.0513	5,497.1763

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	28.9564	0.2542	21.9839	1.1600e-003		0.2196	0.2196		0.2185	0.2185	0.0000	1,450.0059	1,450.0059	0.0620	0.0259	1,459.3458
Unmitigated	153.9922	1.9525	176.1828	0.0614		21.7859	21.7859		21.7853	21.7853	2,060.7506	900.0295	2,960.7801	1.9366	0.1621	3,051.6986

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	7.7482					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	20.3957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	125.1787	1.6983	154.2067	0.0602		21.6651	21.6651		21.6645	21.6645	2,060.7506	864.2488	2,924.9994	1.9017	0.1621	3,015.1847
Landscaping	0.6696	0.2542	21.9761	1.1600e-003		0.1208	0.1208		0.1208	0.1208	0.0000	35.7807	35.7807	0.0349	0.0000	36.5139
Total	153.9922	1.9525	176.1828	0.0614		21.7859	21.7859		21.7853	21.7853	2,060.7506	900.0295	2,960.7801	1.9366	0.1621	3,051.6986

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	7.7482					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	20.3957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1429	1.0000e-005	7.7900e-003	0.0000		0.0987	0.0987		0.0977	0.0977	0.0000	1,414.2252	1,414.2252	0.0271	0.0259	1,422.8320
Landscaping	0.6696	0.2542	21.9761	1.1600e-003		0.1208	0.1208		0.1208	0.1208	0.0000	35.7807	35.7807	0.0349	0.0000	36.5139
Total	28.9564	0.2542	21.9839	1.1600e-003		0.2196	0.2196		0.2185	0.2185	0.0000	1,450.0059	1,450.0059	0.0620	0.0259	1,459.3458

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	452.5114	0.2112	0.1263	496.0874
Unmitigated	529.3645	0.2637	0.1578	583.8073

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	62.1569 / 39.1859	159.6101	0.0819	0.0491	176.5552
City Park	0 / 14.1667	14.4116	6.5000e-004	1.3000e-004	14.4671
Elementary School	1.45454 / 3.74026	6.6071	2.0500e-003	1.1800e-003	7.0147
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	129.982 / 81.9454	333.7758	0.1713	0.1027	369.2114
Strip Mall	5.86654 / 3.59562	14.9598	7.7300e-003	4.6300e-003	16.5587
Total		529.3645	0.2637	0.1578	583.8073

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	49.7256 / 39.1859	135.6607	0.0656	0.0393	149.2195
City Park	0 / 14.1667	14.4116	6.5000e-004	1.3000e-004	14.4671
Elementary School	1.16364 / 3.74026	6.0467	1.6600e-003	9.5000e-004	6.3750
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	103.986 / 81.9454	283.6930	0.1371	0.0822	312.0471
Strip Mall	4.69323 / 3.59562	12.6994	6.1800e-003	3.7100e-003	13.9787
Total		452.5114	0.2112	0.1263	496.0874

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	754.5905	44.5950	0.0000	1,691.085 ₉
Mitigated	754.5905	44.5950	0.0000	1,691.085 ₉

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	438.84	89.0806	5.2645	0.0000	199.6353
City Park	1.02	0.2071	0.0122	0.0000	0.4640
Elementary School	109.5	22.2275	1.3136	0.0000	49.8133
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3084.84	626.1946	37.0070	0.0000	1,403.342 ₆
Strip Mall	83.16	16.8807	0.9976	0.0000	37.8308
Total		754.5905	44.5950	0.0000	1,691.085₉

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	438.84	89.0806	5.2645	0.0000	199.6353
City Park	1.02	0.2071	0.0122	0.0000	0.4640
Elementary School	109.5	22.2275	1.3136	0.0000	49.8133
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3084.84	626.1946	37.0070	0.0000	1,403.342 6
Strip Mall	83.16	16.8807	0.9976	0.0000	37.8308
Total		754.5905	44.5950	0.0000	1,691.085 9

9.0 Operational Offroad

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

Construction Mitigation Reports

FR SPA 3 Construction Phases 2C, 2D, 2E
Placer-Sacramento County, 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	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	3	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Sweepers/Scrubbers	Diesel	No Change	1	1	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00
Welders	Diesel	No Change	0	1	No Change	0.00

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	6.09200E-002	3.83840E-001	2.80130E-001	4.40000E-004	3.31700E-002	3.31700E-002	0.00000E+000	3.75328E+001	3.75328E+001	4.98000E-003	0.00000E+000	3.76374E+001
Cranes	1.19110E-001	1.41483E+000	4.91880E-001	9.00000E-004	6.46800E-002	5.95100E-002	0.00000E+000	8.56539E+001	8.56539E+001	2.54800E-002	0.00000E+000	8.61889E+001
Excavators	1.05900E-002	1.26410E-001	8.56200E-002	1.30000E-004	6.21000E-003	5.72000E-003	0.00000E+000	1.27283E+001	1.27283E+001	3.76000E-003	0.00000E+000	1.28073E+001
Forklifts	1.66200E-002	1.42940E-001	8.69500E-002	1.00000E-004	1.20000E-002	1.10400E-002	0.00000E+000	9.93826E+000	9.93826E+000	2.96000E-003	0.00000E+000	1.00003E+001
Generator Sets	5.04500E-002	3.65950E-001	2.61970E-001	4.50000E-004	2.69100E-002	2.69100E-002	0.00000E+000	3.84694E+001	3.84694E+001	4.10000E-003	0.00000E+000	3.85555E+001
Graders	1.33200E-002	1.36860E-001	6.21400E-002	8.00000E-005	7.68000E-003	7.07000E-003	0.00000E+000	7.53113E+000	7.53113E+000	2.23000E-003	0.00000E+000	7.57787E+000
Pavers	4.19000E-003	4.78000E-002	2.59600E-002	4.00000E-005	2.39000E-003	2.20000E-003	0.00000E+000	3.90659E+000	3.90659E+000	1.15000E-003	0.00000E+000	3.93084E+000
Paving Equipment	3.08000E-003	3.87500E-002	2.30100E-002	4.00000E-005	1.85000E-003	1.70000E-003	0.00000E+000	3.47092E+000	3.47092E+000	1.03000E-003	0.00000E+000	3.49246E+000
Rollers	3.35000E-003	3.08400E-002	1.83800E-002	2.00000E-005	2.30000E-003	2.11000E-003	0.00000E+000	2.27104E+000	2.27104E+000	6.70000E-004	0.00000E+000	2.28513E+000
Rubber Tired Dozers	1.59000E-002	1.81210E-001	1.38630E-001	1.10000E-004	8.45000E-003	7.77000E-003	0.00000E+000	1.07034E+001	1.07034E+001	3.16000E-003	0.00000E+000	1.07698E+001
Scrapers	3.65800E-002	4.76220E-001	2.97840E-001	3.70000E-004	1.92100E-002	1.76700E-002	0.00000E+000	3.58593E+001	3.58593E+001	1.06000E-002	0.00000E+000	3.60818E+001
Sweepers/Scrubbers	4.90000E-004	4.05000E-003	2.38000E-003	0.00000E+000	3.60000E-004	3.30000E-004	0.00000E+000	2.74970E-001	2.74970E-001	8.00000E-005	0.00000E+000	2.76680E-001
Tractors/Loaders/ Backhoes	9.96000E-002	9.51900E-001	6.62220E-001	8.50000E-004	7.46500E-002	6.86800E-002	0.00000E+000	8.16230E+001	8.16230E+001	2.42400E-002	0.00000E+000	8.21320E+001
Trenchers	1.27000E-002	1.12010E-001	6.20600E-002	8.00000E-005	8.74000E-003	8.04000E-003	0.00000E+000	7.33238E+000	7.33238E+000	2.17000E-003	0.00000E+000	7.37789E+000
Welders	1.18030E-001	3.43430E-001	3.72990E-001	4.60000E-004	2.95100E-002	2.95100E-002	0.00000E+000	3.41621E+001	3.41621E+001	9.62000E-003	0.00000E+000	3.43642E+001

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	6.09200E-002	3.07070E-001	2.80130E-001	4.40000E-004	3.31700E-002	3.31700E-002	0.00000E+000	3.75328E+001	3.75328E+001	4.98000E-003	0.00000E+000	3.76373E+001
Cranes	1.19110E-001	1.41483E+000	4.91880E-001	9.00000E-004	6.46800E-002	5.95100E-002	0.00000E+000	8.56538E+001	8.56538E+001	2.54800E-002	0.00000E+000	8.61888E+001
Excavators	1.05900E-002	1.01130E-001	8.56200E-002	1.30000E-004	6.21000E-003	5.72000E-003	0.00000E+000	1.27283E+001	1.27283E+001	3.76000E-003	0.00000E+000	1.28073E+001
Forklifts	1.66200E-002	1.14350E-001	8.69500E-002	1.00000E-004	1.20000E-002	1.10400E-002	0.00000E+000	9.93824E+000	9.93824E+000	2.96000E-003	0.00000E+000	1.00003E+001
Generator Sets	5.04500E-002	2.92760E-001	2.61970E-001	4.50000E-004	2.69100E-002	2.69100E-002	0.00000E+000	3.84694E+001	3.84694E+001	4.10000E-003	0.00000E+000	3.85554E+001
Graders	1.33200E-002	1.09490E-001	6.21400E-002	8.00000E-005	7.68000E-003	7.07000E-003	0.00000E+000	7.53112E+000	7.53112E+000	2.23000E-003	0.00000E+000	7.57786E+000
Pavers	4.19000E-003	3.82400E-002	2.59600E-002	4.00000E-005	2.39000E-003	2.20000E-003	0.00000E+000	3.90659E+000	3.90659E+000	1.15000E-003	0.00000E+000	3.93083E+000
Paving Equipment	3.08000E-003	3.10000E-002	2.30100E-002	4.00000E-005	1.85000E-003	1.70000E-003	0.00000E+000	3.47092E+000	3.47092E+000	1.03000E-003	0.00000E+000	3.49245E+000
Rollers	3.35000E-003	2.46700E-002	1.83800E-002	2.00000E-005	2.30000E-003	2.11000E-003	0.00000E+000	2.27104E+000	2.27104E+000	6.70000E-004	0.00000E+000	2.28513E+000
Rubber Tired Dozers	1.59000E-002	1.44960E-001	1.38630E-001	1.10000E-004	8.45000E-003	7.77000E-003	0.00000E+000	1.07034E+001	1.07034E+001	3.16000E-003	0.00000E+000	1.07698E+001
Scrapers	3.65800E-002	3.80980E-001	2.97840E-001	3.70000E-004	1.92100E-002	1.76700E-002	0.00000E+000	3.58593E+001	3.58593E+001	1.06000E-002	0.00000E+000	3.60818E+001
Sweepers/Scrubbers	4.90000E-004	3.24000E-003	2.38000E-003	0.00000E+000	3.60000E-004	3.30000E-004	0.00000E+000	2.74970E-001	2.74970E-001	8.00000E-005	0.00000E+000	2.76680E-001
Tractors/Loaders/Balckhoes	9.96000E-002	7.61520E-001	6.62220E-001	8.50000E-004	7.46500E-002	6.86800E-002	0.00000E+000	8.16229E+001	8.16229E+001	2.42400E-002	0.00000E+000	8.21319E+001
Trenchers	1.27000E-002	8.96100E-002	6.20600E-002	8.00000E-005	8.74000E-003	8.04000E-003	0.00000E+000	7.33237E+000	7.33237E+000	2.17000E-003	0.00000E+000	7.37788E+000
Welders	1.18030E-001	3.43430E-001	3.72990E-001	4.60000E-004	2.95100E-002	2.95100E-002	0.00000E+000	3.41621E+001	3.41621E+001	9.62000E-003	0.00000E+000	3.43642E+001

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	2.00005E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06573E-006	1.06573E-006	0.00000E+000	0.00000E+000	1.32847E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16749E-006	1.16749E-006	0.00000E+000	0.00000E+000	1.16024E-006
Excavators	0.00000E+000	1.99984E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.57130E-006	1.57130E-006	0.00000E+000	0.00000E+000	1.56161E-006
Forklifts	0.00000E+000	2.00014E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.01242E-006	2.01242E-006	0.00000E+000	0.00000E+000	1.99993E-006
Generator Sets	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.03979E-006	1.03979E-006	0.00000E+000	0.00000E+000	1.29683E-006
Graders	0.00000E+000	1.99985E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32782E-006	1.32782E-006	0.00000E+000	0.00000E+000	1.31963E-006
Pavers	0.00000E+000	2.00000E-001	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	2.54399E-006
Paving Equipment	0.00000E+000	2.00000E-001	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	2.86331E-006
Rollers	0.00000E+000	2.00065E-001	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
Rubber Tired Dozers	0.00000E+000	2.00044E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.86857E-006	1.86857E-006	0.00000E+000	0.00000E+000	9.28521E-007
Scrapers	0.00000E+000	1.99992E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11547E-006	1.11547E-006	0.00000E+000	0.00000E+000	1.10859E-006
Sweepers/Scrubbers	0.00000E+000	2.00000E-001	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/Bulldozers	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10263E-006	1.10263E-006	0.00000E+000	0.00000E+000	1.09580E-006
Trenchers	0.00000E+000	1.99982E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.36381E-006	1.36381E-006	0.00000E+000	0.00000E+000	1.35540E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17089E-006	1.17089E-006	0.00000E+000	0.00000E+000	1.16400E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00

Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.04	0.01	0.04	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.31	0.08	0.31	0.08	0.00	0.00
Grading	Fugitive Dust	0.13	0.05	0.06	0.02	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.23	1.24	1.23	1.23
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	9.82	9.81	9.81	9.68	9.82	9.82	0.00	9.81	9.81	9.80	9.83	9.81
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.13	0.37		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

FR SPA 3 Construction Phases 2F
Placer-Sacramento County, 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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	3	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00
Welders	Diesel	No Change	0	1	No Change	0.00

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	3.68800E-002	2.39720E-001	1.97020E-001	3.10000E-004	1.94800E-002	1.94800E-002	0.00000E+000	2.68092E+001	2.68092E+001	3.00000E-003	0.00000E+000	2.68722E+001
Cranes	7.29500E-002	8.65060E-001	3.05320E-001	5.90000E-004	3.90000E-002	3.58800E-002	0.00000E+000	5.57385E+001	5.57385E+001	1.69200E-002	0.00000E+000	5.60937E+001
Excavators	6.99000E-003	7.97500E-002	6.17100E-002	1.00000E-004	3.92000E-003	3.61000E-003	0.00000E+000	8.97979E+000	8.97979E+000	2.71000E-003	0.00000E+000	9.03667E+000
Forklifts	7.97800E-002	6.88230E-001	4.54620E-001	5.50000E-004	5.72600E-002	5.26800E-002	0.00000E+000	5.17369E+001	5.17369E+001	1.57000E-002	0.00000E+000	5.20666E+001
Generator Sets	2.21310E-001	1.69551E+000	1.37065E+000	2.38000E-003	1.17050E-001	1.17050E-001	0.00000E+000	2.04322E+002	2.04322E+002	1.78500E-002	0.00000E+000	2.04697E+002
Graders	9.17000E-003	9.34200E-002	4.43500E-002	6.00000E-005	5.25000E-003	4.83000E-003	0.00000E+000	5.30219E+000	5.30219E+000	1.60000E-003	0.00000E+000	5.33577E+000
Pavers	3.21000E-003	3.61000E-002	2.28200E-002	4.00000E-005	1.79000E-003	1.65000E-003	0.00000E+000	3.40395E+000	3.40395E+000	1.03000E-003	0.00000E+000	3.42551E+000
Paving Equipment	2.46000E-003	2.85400E-002	2.03500E-002	3.00000E-005	1.42000E-003	1.30000E-003	0.00000E+000	3.02407E+000	3.02407E+000	9.10000E-004	0.00000E+000	3.04323E+000
Rollers	2.69000E-003	2.49000E-002	1.61100E-002	2.00000E-005	1.83000E-003	1.69000E-003	0.00000E+000	1.97750E+000	1.97750E+000	6.00000E-004	0.00000E+000	1.99003E+000
Rubber Tired Dozers	1.11400E-002	1.24840E-001	9.43600E-002	8.00000E-005	5.81000E-003	5.34000E-003	0.00000E+000	7.53951E+000	7.53951E+000	2.27000E-003	0.00000E+000	7.58727E+000
Scrapers	2.48800E-002	3.16720E-001	1.98390E-001	2.70000E-004	1.27700E-002	1.17400E-002	0.00000E+000	2.52692E+001	2.52692E+001	7.62000E-003	0.00000E+000	2.54293E+001
Tractors/Loaders/Backhoes	1.22500E-001	1.17282E+000	8.86280E-001	1.15000E-003	8.96300E-002	8.24600E-002	0.00000E+000	1.07544E+002	1.07544E+002	3.26100E-002	0.00000E+000	1.08228E+002
Trenchers	9.45000E-003	8.27800E-002	4.78300E-002	6.00000E-005	6.49000E-003	5.97000E-003	0.00000E+000	5.54774E+000	5.54774E+000	1.67000E-003	0.00000E+000	5.58288E+000
Welders	6.48700E-002	2.14270E-001	2.34660E-001	3.10000E-004	1.64400E-002	1.64400E-002	0.00000E+000	2.26806E+001	2.26806E+001	5.27000E-003	0.00000E+000	2.27913E+001

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	3.68800E-002	1.91780E-001	1.97020E-001	3.10000E-004	1.94800E-002	1.94800E-002	0.00000E+000	2.68091E+001	2.68091E+001	3.00000E-003	0.00000E+000	2.68722E+001
Cranes	7.29500E-002	8.65060E-001	3.05320E-001	5.90000E-004	3.90000E-002	3.58800E-002	0.00000E+000	5.57384E+001	5.57384E+001	1.69200E-002	0.00000E+000	5.60936E+001
Excavators	6.99000E-003	6.38000E-002	6.17100E-002	1.00000E-004	3.92000E-003	3.61000E-003	0.00000E+000	8.97978E+000	8.97978E+000	2.71000E-003	0.00000E+000	9.03666E+000
Forklifts	7.97800E-002	5.50580E-001	4.54620E-001	5.50000E-004	5.72600E-002	5.26800E-002	0.00000E+000	5.17368E+001	5.17368E+001	1.57000E-002	0.00000E+000	5.20665E+001
Generator Sets	2.21310E-001	1.35641E+000	1.37065E+000	2.38000E-003	1.17050E-001	1.17050E-001	0.00000E+000	2.04322E+002	2.04322E+002	1.78500E-002	0.00000E+000	2.04697E+002
Graders	9.17000E-003	7.47400E-002	4.43500E-002	6.00000E-005	5.25000E-003	4.83000E-003	0.00000E+000	5.30218E+000	5.30218E+000	1.60000E-003	0.00000E+000	5.33577E+000
Pavers	3.21000E-003	2.88800E-002	2.28200E-002	4.00000E-005	1.79000E-003	1.65000E-003	0.00000E+000	3.40395E+000	3.40395E+000	1.03000E-003	0.00000E+000	3.42551E+000
Paving Equipment	2.46000E-003	2.28300E-002	2.03500E-002	3.00000E-005	1.42000E-003	1.30000E-003	0.00000E+000	3.02407E+000	3.02407E+000	9.10000E-004	0.00000E+000	3.04323E+000
Rollers	2.69000E-003	1.99200E-002	1.61100E-002	2.00000E-005	1.83000E-003	1.69000E-003	0.00000E+000	1.97750E+000	1.97750E+000	6.00000E-004	0.00000E+000	1.99003E+000
Rubber Tired Dozers	1.11400E-002	9.98700E-002	9.43600E-002	8.00000E-005	5.81000E-003	5.34000E-003	0.00000E+000	7.53950E+000	7.53950E+000	2.27000E-003	0.00000E+000	7.58726E+000
Scrapers	2.48800E-002	2.53380E-001	1.98390E-001	2.70000E-004	1.27700E-002	1.17400E-002	0.00000E+000	2.52692E+001	2.52692E+001	7.62000E-003	0.00000E+000	2.54293E+001
Tractors/Loaders/Balckhoes	1.22500E-001	9.38260E-001	8.86280E-001	1.15000E-003	8.96300E-002	8.24600E-002	0.00000E+000	1.07544E+002	1.07544E+002	3.26100E-002	0.00000E+000	1.08228E+002
Trenchers	9.45000E-003	6.62200E-002	4.78300E-002	6.00000E-005	6.49000E-003	5.97000E-003	0.00000E+000	5.54773E+000	5.54773E+000	1.67000E-003	0.00000E+000	5.58288E+000
Welders	6.48700E-002	2.14270E-001	2.34660E-001	3.10000E-004	1.64400E-002	1.64400E-002	0.00000E+000	2.26806E+001	2.26806E+001	5.27000E-003	0.00000E+000	2.27913E+001

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	1.99983E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11902E-006	1.11902E-006	0.00000E+000	0.00000E+000	1.48852E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25587E-006	1.25587E-006	0.00000E+000	0.00000E+000	1.24791E-006
Excavators	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11361E-006	1.11361E-006	0.00000E+000	0.00000E+000	1.10660E-006
Forklifts	0.00000E+000	2.00006E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.35300E-006	1.35300E-006	0.00000E+000	0.00000E+000	1.15237E-006
Generator Sets	0.00000E+000	1.99999E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17461E-006	1.17461E-006	0.00000E+000	0.00000E+000	1.22131E-006
Graders	0.00000E+000	1.99957E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.88601E-006	1.88601E-006	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	2.00000E-001	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
Paving Equipment	0.00000E+000	2.00070E-001	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	2.00000E-001	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
Rubber Tired Dozers	0.00000E+000	2.00016E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32635E-006	1.32635E-006	0.00000E+000	0.00000E+000	1.31800E-006
Scrapers	0.00000E+000	1.99987E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18721E-006	1.18721E-006	0.00000E+000	0.00000E+000	1.17974E-006
Tractors/Loaders/Balckhoes	0.00000E+000	1.99997E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11583E-006	1.11583E-006	0.00000E+000	0.00000E+000	1.20116E-006
Trenchers	0.00000E+000	2.00048E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.80254E-006	1.80254E-006	0.00000E+000	0.00000E+000	0.00000E+000
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32272E-006	1.32272E-006	0.00000E+000	0.00000E+000	1.31629E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.49	0.13	0.49	0.13	0.00	0.00
Grading	Fugitive Dust	0.09	0.03	0.04	0.02	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.23	1.24	1.13	1.23
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	9.80	9.81	9.81	9.70	9.83	9.83	0.00	9.81	9.81	9.95	9.85	9.81
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.12	0.34		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

FR SPA 3 Construction Phase 2H
Placer-Sacramento County, 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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Cranes	Diesel	No Change	1	1	No Change	20.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	1	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Welders	Diesel	No Change	1	1	No Change	0.00

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	3.00300E-002	2.04010E-001	1.95900E-001	3.10000E-004	1.48600E-002	1.48600E-002	0.00000E+000	2.70645E+001	2.70645E+001	2.44000E-003	0.00000E+000	2.71157E+001
Cranes	5.59500E-002	6.67940E-001	2.49860E-001	5.90000E-004	2.86900E-002	2.64000E-002	0.00000E+000	5.37648E+001	5.37648E+001	1.68400E-002	0.00000E+000	5.41185E+001
Excavators	5.34000E-003	5.71400E-002	6.04500E-002	1.00000E-004	2.77000E-003	2.55000E-003	0.00000E+000	8.69927E+000	8.69927E+000	2.71000E-003	0.00000E+000	8.75614E+000
Forklifts	6.15700E-002	5.46210E-001	4.33640E-001	5.50000E-004	4.31200E-002	3.96700E-002	0.00000E+000	4.99094E+001	4.99094E+001	1.56400E-002	0.00000E+000	5.02377E+001
Generator Sets	5.77600E-002	4.77840E-001	4.48530E-001	7.90000E-004	2.97400E-002	2.97400E-002	0.00000E+000	6.78249E+001	6.78249E+001	4.66000E-003	0.00000E+000	6.79227E+001
Graders	7.49000E-003	7.47900E-002	4.20100E-002	6.00000E-005	4.20000E-003	3.87000E-003	0.00000E+000	5.10953E+000	5.10953E+000	1.59000E-003	0.00000E+000	5.14293E+000
Pavers	2.82000E-003	3.12300E-002	2.53300E-002	4.00000E-005	1.53000E-003	1.40000E-003	0.00000E+000	3.71439E+000	3.71439E+000	1.16000E-003	0.00000E+000	3.73868E+000
Paving Equipment	2.11000E-003	2.35600E-002	2.24800E-002	4.00000E-005	1.15000E-003	1.06000E-003	0.00000E+000	3.29683E+000	3.29683E+000	1.03000E-003	0.00000E+000	3.31839E+000
Rollers	2.32000E-003	2.24400E-002	1.74200E-002	2.00000E-005	1.54000E-003	1.42000E-003	0.00000E+000	2.15471E+000	2.15471E+000	6.70000E-004	0.00000E+000	2.16879E+000
Rubber Tired Dozers	9.68000E-003	1.05270E-001	8.06600E-002	8.00000E-005	4.86000E-003	4.47000E-003	0.00000E+000	7.31736E+000	7.31736E+000	2.28000E-003	0.00000E+000	7.36520E+000
Scrapers	2.03100E-002	2.51270E-001	1.55580E-001	2.70000E-004	9.90000E-003	9.11000E-003	0.00000E+000	2.44919E+001	2.44919E+001	7.62000E-003	0.00000E+000	2.46520E+001
Tractors/Loaders/Backhoes	9.32900E-002	9.26410E-001	8.51040E-001	1.14000E-003	6.44500E-002	5.93000E-002	0.00000E+000	1.03265E+002	1.03265E+002	3.23200E-002	0.00000E+000	1.03944E+002
Welders	5.03500E-002	1.99120E-001	2.20650E-001	3.10000E-004	1.29700E-002	1.29700E-002	0.00000E+000	2.25865E+001	2.25865E+001	4.11000E-003	0.00000E+000	2.26729E+001

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	3.00300E-002	1.63200E-001	1.95890E-001	3.10000E-004	1.48600E-002	1.48600E-002	0.00000E+000	2.70645E+001	2.70645E+001	2.44000E-003	0.00000E+000	2.71156E+001
Cranes	5.59500E-002	5.34350E-001	2.49860E-001	5.90000E-004	2.86900E-002	2.64000E-002	0.00000E+000	5.37647E+001	5.37647E+001	1.68400E-002	0.00000E+000	5.41185E+001
Excavators	5.34000E-003	4.57100E-002	6.04500E-002	1.00000E-004	2.77000E-003	2.55000E-003	0.00000E+000	8.69926E+000	8.69926E+000	2.71000E-003	0.00000E+000	8.75613E+000
Forklifts	6.15700E-002	4.36960E-001	4.33640E-001	5.50000E-004	4.31200E-002	3.96700E-002	0.00000E+000	4.99093E+001	4.99093E+001	1.56400E-002	0.00000E+000	5.02377E+001
Generator Sets	5.77600E-002	1.91130E-001	4.48530E-001	7.90000E-004	2.97400E-002	2.97400E-002	0.00000E+000	6.78248E+001	6.78248E+001	4.66000E-003	0.00000E+000	6.79227E+001
Graders	7.49000E-003	5.98300E-002	4.20100E-002	6.00000E-005	4.20000E-003	3.87000E-003	0.00000E+000	5.10952E+000	5.10952E+000	1.59000E-003	0.00000E+000	5.14293E+000
Pavers	2.82000E-003	2.49800E-002	2.53300E-002	4.00000E-005	1.53000E-003	1.40000E-003	0.00000E+000	3.71439E+000	3.71439E+000	1.16000E-003	0.00000E+000	3.73867E+000
Paving Equipment	2.11000E-003	1.88500E-002	2.24800E-002	4.00000E-005	1.15000E-003	1.06000E-003	0.00000E+000	3.29683E+000	3.29683E+000	1.03000E-003	0.00000E+000	3.31838E+000
Rollers	2.32000E-003	1.79500E-002	1.74200E-002	2.00000E-005	1.54000E-003	1.42000E-003	0.00000E+000	2.15470E+000	2.15470E+000	6.70000E-004	0.00000E+000	2.16879E+000
Rubber Tired Dozers	9.68000E-003	8.42200E-002	8.06600E-002	8.00000E-005	4.86000E-003	4.47000E-003	0.00000E+000	7.31735E+000	7.31735E+000	2.28000E-003	0.00000E+000	7.36519E+000
Scrapers	2.03100E-002	2.01020E-001	1.55580E-001	2.70000E-004	9.90000E-003	9.11000E-003	0.00000E+000	2.44918E+001	2.44918E+001	7.62000E-003	0.00000E+000	2.46520E+001
Tractors/Loaders/Balckhoes	9.32900E-002	7.41130E-001	8.51040E-001	1.14000E-003	6.44500E-002	5.93000E-002	0.00000E+000	1.03265E+002	1.03265E+002	3.23200E-002	0.00000E+000	1.03944E+002
Welders	5.03500E-002	1.99120E-001	2.20650E-001	3.10000E-004	1.29700E-002	1.29700E-002	0.00000E+000	2.25865E+001	2.25865E+001	4.11000E-003	0.00000E+000	2.26729E+001

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	2.00039E-001	5.10465E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10846E-006	1.10846E-006	0.00000E+000	0.00000E+000	1.10637E-006
Cranes	0.00000E+000	2.00003E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.30197E-006	1.30197E-006	0.00000E+000	0.00000E+000	1.10868E-006
Excavators	0.00000E+000	2.00035E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14952E-006	1.14952E-006	0.00000E+000	0.00000E+000	1.14206E-006
Forklifts	0.00000E+000	2.00015E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20218E-006	1.20218E-006	0.00000E+000	0.00000E+000	1.19432E-006
Generator Sets	0.00000E+000	6.00013E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17781E-006
Graders	0.00000E+000	2.00027E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.95713E-006	1.95713E-006	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	2.00128E-001	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	2.67474E-006
Paving Equipment	0.00000E+000	1.99915E-001	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	3.01351E-006
Rollers	0.00000E+000	2.00089E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.64100E-006	4.64100E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	1.99962E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.36661E-006	1.36661E-006	0.00000E+000	0.00000E+000	1.35774E-006
Scrapers	0.00000E+000	1.99984E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22490E-006	1.22490E-006	0.00000E+000	0.00000E+000	1.21694E-006
Tractors/Loaders/Balckhoes	0.00000E+000	1.99998E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16206E-006	1.16206E-006	0.00000E+000	0.00000E+000	1.15447E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32823E-006	1.32823E-006	0.00000E+000	0.00000E+000	8.82112E-007

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.48	0.13	0.48	0.13	0.00	0.00
Grading	Fugitive Dust	0.09	0.03	0.04	0.02	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.23	1.21	1.25	1.23
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	9.81	9.81	9.81	9.86	9.83	9.83	0.00	9.81	9.81	9.73	9.75	9.81
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.13	0.37		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

FR SPA 3 Construction Phase 2I
Placer-Sacramento County, 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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Sweepers/Scrubbers	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	3	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

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	2.45000E-002	1.70560E-001	1.93430E-001	3.10000E-004	1.09100E-002	1.09100E-002	0.00000E+000	2.70645E+001	2.70645E+001	1.98000E-003	0.00000E+000	2.71061E+001
Cranes	4.51600E-002	5.34580E-001	2.12940E-001	5.90000E-004	2.19200E-002	2.01600E-002	0.00000E+000	5.22902E+001	5.22902E+001	1.69100E-002	0.00000E+000	5.26454E+001
Excavators	4.77000E-003	4.70000E-002	6.36600E-002	1.00000E-004	2.28000E-003	2.09000E-003	0.00000E+000	8.83853E+000	8.83853E+000	2.86000E-003	0.00000E+000	8.89856E+000
Forklifts	6.25000E-003	5.65700E-002	5.31200E-002	7.00000E-005	4.14000E-003	3.81000E-003	0.00000E+000	6.06829E+000	6.06829E+000	1.96000E-003	0.00000E+000	6.10950E+000
Generator Sets	1.73100E-002	1.51740E-001	1.67080E-001	3.00000E-004	8.37000E-003	8.37000E-003	0.00000E+000	2.55403E+001	2.55403E+001	1.39000E-003	0.00000E+000	2.55694E+001
Graders	6.77000E-003	6.61100E-002	4.32800E-002	6.00000E-005	3.69000E-003	3.39000E-003	0.00000E+000	5.18372E+000	5.18372E+000	1.68000E-003	0.00000E+000	5.21892E+000
Pavers	1.77000E-003	1.89200E-002	1.95100E-002	3.00000E-005	9.20000E-004	8.50000E-004	0.00000E+000	2.77991E+000	2.77991E+000	9.00000E-004	0.00000E+000	2.79880E+000
Paving Equipment	1.43000E-003	1.47600E-002	1.74700E-002	3.00000E-005	7.40000E-004	6.80000E-004	0.00000E+000	2.46741E+000	2.46741E+000	8.00000E-004	0.00000E+000	2.48417E+000
Rollers	1.46000E-003	1.45700E-002	1.32500E-002	2.00000E-005	9.30000E-004	8.50000E-004	0.00000E+000	1.61340E+000	1.61340E+000	5.20000E-004	0.00000E+000	1.62435E+000
Rubber Tired Dozers	9.14000E-003	9.64000E-002	7.53900E-002	8.00000E-005	4.43000E-003	4.07000E-003	0.00000E+000	7.43815E+000	7.43815E+000	2.41000E-003	0.00000E+000	7.48867E+000
Scrapers	1.85600E-002	2.19640E-001	1.39400E-001	2.80000E-004	8.57000E-003	7.88000E-003	0.00000E+000	2.48728E+001	2.48728E+001	8.04000E-003	0.00000E+000	2.50418E+001
Sweepers/Scrubbers	2.40000E-004	2.04000E-003	1.74000E-003	0.00000E+000	1.60000E-004	1.50000E-004	0.00000E+000	1.95410E-001	1.95410E-001	6.00000E-005	0.00000E+000	1.96740E-001
Tractors/Loaders/ Backhoes	3.83400E-002	3.86000E-001	4.28850E-001	5.90000E-004	2.39800E-002	2.20700E-002	0.00000E+000	5.14560E+001	5.14560E+001	1.66400E-002	0.00000E+000	5.18055E+001
Trenchers	7.32000E-003	6.62000E-002	4.59700E-002	6.00000E-005	4.96000E-003	4.56000E-003	0.00000E+000	5.16938E+000	5.16938E+000	1.67000E-003	0.00000E+000	5.20449E+000
Welders	3.93900E-002	1.86440E-001	2.10680E-001	3.10000E-004	9.88000E-003	9.88000E-003	0.00000E+000	2.26806E+001	2.26806E+001	3.20000E-003	0.00000E+000	2.27478E+001

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	2.45000E-002	1.36450E-001	1.93430E-001	3.10000E-004	1.09100E-002	1.09100E-002	0.00000E+000	2.70645E+001	2.70645E+001	1.98000E-003	0.00000E+000	2.71061E+001
Cranes	4.51600E-002	5.34580E-001	2.12940E-001	5.90000E-004	2.19200E-002	2.01600E-002	0.00000E+000	5.22902E+001	5.22902E+001	1.69100E-002	0.00000E+000	5.26453E+001
Excavators	4.77000E-003	3.76000E-002	6.36600E-002	1.00000E-004	2.28000E-003	2.09000E-003	0.00000E+000	8.83852E+000	8.83852E+000	2.86000E-003	0.00000E+000	8.89855E+000
Forklifts	6.25000E-003	4.52500E-002	5.31200E-002	7.00000E-005	4.14000E-003	3.81000E-003	0.00000E+000	6.06828E+000	6.06828E+000	1.96000E-003	0.00000E+000	6.10950E+000
Generator Sets	1.73100E-002	1.21390E-001	1.67080E-001	3.00000E-004	8.37000E-003	8.37000E-003	0.00000E+000	2.55403E+001	2.55403E+001	1.39000E-003	0.00000E+000	2.55694E+001
Graders	6.77000E-003	5.28800E-002	4.32800E-002	6.00000E-005	3.69000E-003	3.39000E-003	0.00000E+000	5.18371E+000	5.18371E+000	1.68000E-003	0.00000E+000	5.21892E+000
Pavers	1.77000E-003	1.51300E-002	1.95100E-002	3.00000E-005	9.20000E-004	8.50000E-004	0.00000E+000	2.77991E+000	2.77991E+000	9.00000E-004	0.00000E+000	2.79879E+000
Paving Equipment	1.43000E-003	1.18100E-002	1.74700E-002	3.00000E-005	7.40000E-004	6.80000E-004	0.00000E+000	2.46741E+000	2.46741E+000	8.00000E-004	0.00000E+000	2.48416E+000
Rollers	1.46000E-003	1.16500E-002	1.32500E-002	2.00000E-005	9.30000E-004	8.50000E-004	0.00000E+000	1.61339E+000	1.61339E+000	5.20000E-004	0.00000E+000	1.62435E+000
Rubber Tired Dozers	9.14000E-003	7.71200E-002	7.53900E-002	8.00000E-005	4.43000E-003	4.07000E-003	0.00000E+000	7.43814E+000	7.43814E+000	2.41000E-003	0.00000E+000	7.48866E+000
Scrapers	1.85600E-002	1.75710E-001	1.39400E-001	2.80000E-004	8.57000E-003	7.88000E-003	0.00000E+000	2.48728E+001	2.48728E+001	8.04000E-003	0.00000E+000	2.50417E+001
Sweepers/Scrubbers	2.40000E-004	2.04000E-003	1.74000E-003	0.00000E+000	1.60000E-004	1.50000E-004	0.00000E+000	1.95410E-001	1.95410E-001	6.00000E-005	0.00000E+000	1.96740E-001
Tractors/Loaders/Balckhoes	3.83400E-002	3.08800E-001	4.28850E-001	5.90000E-004	2.39800E-002	2.20700E-002	0.00000E+000	5.14560E+001	5.14560E+001	1.66400E-002	0.00000E+000	5.18054E+001
Trenchers	7.32000E-003	5.29600E-002	4.59700E-002	6.00000E-005	4.96000E-003	4.56000E-003	0.00000E+000	5.16937E+000	5.16937E+000	1.67000E-003	0.00000E+000	5.20448E+000
Welders	3.93900E-002	1.86440E-001	2.10680E-001	3.10000E-004	9.88000E-003	9.88000E-003	0.00000E+000	2.26806E+001	2.26806E+001	3.20000E-003	0.00000E+000	2.27477E+001

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	1.99988E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10846E-006	1.10846E-006	0.00000E+000	0.00000E+000	1.10676E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14744E-006	1.14744E-006	0.00000E+000	0.00000E+000	1.32965E-006
Excavators	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13141E-006	1.13141E-006	0.00000E+000	0.00000E+000	1.12378E-006
Forklifts	0.00000E+000	2.00106E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64791E-006	1.64791E-006	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	2.00013E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17461E-006	1.17461E-006	0.00000E+000	0.00000E+000	1.17328E-006
Graders	0.00000E+000	2.00121E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.92912E-006	1.92912E-006	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	2.00317E-001	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	3.57296E-006
Paving Equipment	0.00000E+000	1.99864E-001	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	4.02549E-006
Rollers	0.00000E+000	2.00412E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	6.19809E-006	6.19809E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.34442E-006	1.34442E-006	0.00000E+000	0.00000E+000	1.33535E-006
Scrapers	0.00000E+000	2.00009E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20614E-006	1.20614E-006	0.00000E+000	0.00000E+000	1.19800E-006
Sweepers/Scrubbers	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/Bulldozers	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16604E-006	1.16604E-006	0.00000E+000	0.00000E+000	1.15818E-006
Trenchers	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.93447E-006	1.93447E-006	0.00000E+000	0.00000E+000	1.92142E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32272E-006	1.32272E-006	0.00000E+000	0.00000E+000	8.79208E-007

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction

Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.49	0.13	0.49	0.13	0.00	0.00
Grading	Fugitive Dust	0.09	0.03	0.04	0.02	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.23	1.22	1.22	1.23
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	9.82	9.81	9.81	9.92	9.79	9.79	0.00	9.81	9.81	9.69	9.68	9.81
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.14	0.38		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

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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	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Sweepers/Scrubbers	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	3	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00

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	2.08300E-002	1.42620E-001	1.90300E-001	3.10000E-004	8.04000E-003	8.04000E-003	0.00000E+000	2.68092E+001	2.68092E+001	1.68000E-003	0.00000E+000	2.68444E+001
Excavators	3.74000E-003	3.28000E-002	6.00800E-002	1.00000E-004	1.59000E-003	1.46000E-003	0.00000E+000	8.37162E+000	8.37162E+000	2.71000E-003	0.00000E+000	8.42848E+000
Forklifts	4.94000E-003	4.59900E-002	5.19800E-002	7.00000E-005	2.97000E-003	2.73000E-003	0.00000E+000	6.06829E+000	6.06829E+000	1.96000E-003	0.00000E+000	6.10950E+000
Generator Sets	1.44900E-002	1.28570E-001	1.65990E-001	3.00000E-004	6.31000E-003	6.31000E-003	0.00000E+000	2.55403E+001	2.55403E+001	1.18000E-003	0.00000E+000	2.55651E+001
Graders	4.99000E-003	4.67100E-002	3.95500E-002	6.00000E-005	2.60000E-003	2.39000E-003	0.00000E+000	4.91629E+000	4.91629E+000	1.59000E-003	0.00000E+000	4.94968E+000
Pavers	1.59000E-003	1.61500E-002	2.21800E-002	4.00000E-005	7.70000E-004	7.10000E-004	0.00000E+000	3.17695E+000	3.17695E+000	1.03000E-003	0.00000E+000	3.19852E+000
Paving Equipment	1.40000E-003	1.36900E-002	2.00600E-002	3.00000E-005	6.70000E-004	6.10000E-004	0.00000E+000	2.81947E+000	2.81947E+000	9.10000E-004	0.00000E+000	2.83862E+000
Rollers	1.33000E-003	1.38100E-002	1.48800E-002	2.00000E-005	8.00000E-004	7.30000E-004	0.00000E+000	1.84415E+000	1.84415E+000	6.00000E-004	0.00000E+000	1.85668E+000
Rubber Tired Dozers	7.69000E-003	7.78400E-002	6.30600E-002	8.00000E-005	3.56000E-003	3.28000E-003	0.00000E+000	7.04011E+000	7.04011E+000	2.28000E-003	0.00000E+000	7.08793E+000
Scrapers	1.45100E-002	1.58350E-001	1.12890E-001	2.70000E-004	6.18000E-003	5.69000E-003	0.00000E+000	2.36164E+001	2.36164E+001	7.64000E-003	0.00000E+000	2.37768E+001
Sweepers/Scrubbers	1.90000E-004	1.80000E-003	1.92000E-003	0.00000E+000	1.20000E-004	1.10000E-004	0.00000E+000	2.23330E-001	2.23330E-001	7.00000E-005	0.00000E+000	2.24840E-001
Tractors/Loaders/Backhoes	3.01900E-002	3.06890E-001	4.19400E-001	5.80000E-004	1.61500E-002	1.48500E-002	0.00000E+000	5.12732E+001	5.12732E+001	1.65800E-002	0.00000E+000	5.16214E+001
Trenchers	6.34000E-003	5.89300E-002	4.53200E-002	6.00000E-005	4.18000E-003	3.84000E-003	0.00000E+000	5.17155E+000	5.17155E+000	1.67000E-003	0.00000E+000	5.20667E+000

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	2.08300E-002	1.14090E-001	1.90300E-001	3.10000E-004	8.04000E-003	8.04000E-003	0.00000E+000	2.68091E+001	2.68091E+001	1.68000E-003	0.00000E+000	2.68444E+001
Excavators	3.74000E-003	2.62400E-002	6.00800E-002	1.00000E-004	1.59000E-003	1.46000E-003	0.00000E+000	8.37161E+000	8.37161E+000	2.71000E-003	0.00000E+000	8.42847E+000
Forklifts	4.94000E-003	3.67900E-002	5.19800E-002	7.00000E-005	2.97000E-003	2.73000E-003	0.00000E+000	6.06828E+000	6.06828E+000	1.96000E-003	0.00000E+000	6.10950E+000
Generator Sets	1.44900E-002	1.02860E-001	1.65990E-001	3.00000E-004	6.31000E-003	6.31000E-003	0.00000E+000	2.55403E+001	2.55403E+001	1.18000E-003	0.00000E+000	2.55650E+001
Graders	4.99000E-003	3.73700E-002	3.95500E-002	6.00000E-005	2.60000E-003	2.39000E-003	0.00000E+000	4.91629E+000	4.91629E+000	1.59000E-003	0.00000E+000	4.94968E+000
Pavers	1.59000E-003	1.29200E-002	2.21800E-002	4.00000E-005	7.70000E-004	7.10000E-004	0.00000E+000	3.17694E+000	3.17694E+000	1.03000E-003	0.00000E+000	3.19852E+000
Paving Equipment	1.40000E-003	1.09500E-002	2.00600E-002	3.00000E-005	6.70000E-004	6.10000E-004	0.00000E+000	2.81947E+000	2.81947E+000	9.10000E-004	0.00000E+000	2.83862E+000
Rollers	1.33000E-003	1.10500E-002	1.48800E-002	2.00000E-005	8.00000E-004	7.30000E-004	0.00000E+000	1.84415E+000	1.84415E+000	6.00000E-004	0.00000E+000	1.85668E+000
Rubber Tired Dozers	7.69000E-003	6.22700E-002	6.30600E-002	8.00000E-005	3.56000E-003	3.28000E-003	0.00000E+000	7.04011E+000	7.04011E+000	2.28000E-003	0.00000E+000	7.08792E+000
Scrapers	1.45100E-002	1.26680E-001	1.12890E-001	2.70000E-004	6.18000E-003	5.69000E-003	0.00000E+000	2.36164E+001	2.36164E+001	7.64000E-003	0.00000E+000	2.37768E+001
Sweepers/Scrubbers	1.90000E-004	1.80000E-003	1.92000E-003	0.00000E+000	1.20000E-004	1.10000E-004	0.00000E+000	2.23330E-001	2.23330E-001	7.00000E-005	0.00000E+000	2.24840E-001
Tractors/Loaders/Balckhoes	3.01900E-002	2.45510E-001	4.19400E-001	5.80000E-004	1.61500E-002	1.48500E-002	0.00000E+000	5.12731E+001	5.12731E+001	1.65800E-002	0.00000E+000	5.16213E+001
Trenchers	6.34000E-003	4.71400E-002	4.53200E-002	6.00000E-005	4.18000E-003	3.84000E-003	0.00000E+000	5.17154E+000	5.17154E+000	1.67000E-003	0.00000E+000	5.20667E+000

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	2.00042E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11902E-006	1.11902E-006	0.00000E+000	0.00000E+000	1.11755E-006
Excavators	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19451E-006	1.19451E-006	0.00000E+000	0.00000E+000	1.18645E-006
Forklifts	0.00000E+000	2.00043E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64791E-006	1.64791E-006	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	1.99969E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17461E-006	1.17461E-006	0.00000E+000	0.00000E+000	1.17348E-006
Graders	0.00000E+000	1.99957E-001	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	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.14767E-006	3.14767E-006	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	2.00146E-001	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	1.99855E-001	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
Rubber Tired Dozers	0.00000E+000	2.00026E-001	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	1.41085E-006
Scrapers	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27030E-006	1.27030E-006	0.00000E+000	0.00000E+000	1.26173E-006
Sweepers/Scrubbers	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/Balckhoes	0.00000E+000	2.00007E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17020E-006	1.17020E-006	0.00000E+000	0.00000E+000	1.16231E-006
Trenchers	0.00000E+000	2.00068E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.93366E-006	1.93366E-006	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.49	0.13	0.49	0.13	0.00	0.00
Grading	Fugitive Dust	0.09	0.03	0.04	0.01	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	1.23	1.23	1.26	1.23
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	9.81	9.81	9.82	10.14	9.77	9.77	0.00	9.81	9.81	9.73	9.76	9.81
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.14	0.38		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

FR SPA 3 Construction Phase 3A2
Placer-Sacramento County, 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	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Sweepers/Scrubbers	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	3	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00

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	1.96700E-002	1.33210E-001	1.91020E-001	3.10000E-004	6.97000E-003	6.97000E-003	0.00000E+000	2.69368E+001	2.69368E+001	1.57000E-003	0.00000E+000	2.69697E+001
Excavators	3.48000E-003	2.85800E-002	6.01200E-002	1.00000E-004	1.40000E-003	1.29000E-003	0.00000E+000	8.37313E+000	8.37313E+000	2.71000E-003	0.00000E+000	8.43000E+000
Forklifts	4.48000E-003	4.20100E-002	5.16300E-002	7.00000E-005	2.53000E-003	2.33000E-003	0.00000E+000	6.06829E+000	6.06829E+000	1.96000E-003	0.00000E+000	6.10950E+000
Generator Sets	1.34500E-002	1.19660E-001	1.65710E-001	3.00000E-004	5.48000E-003	5.48000E-003	0.00000E+000	2.55403E+001	2.55403E+001	1.09000E-003	0.00000E+000	2.55632E+001
Graders	4.41000E-003	4.01800E-002	3.90700E-002	6.00000E-005	2.21000E-003	2.03000E-003	0.00000E+000	4.91523E+000	4.91523E+000	1.59000E-003	0.00000E+000	4.94861E+000
Pavers	1.66000E-003	1.62900E-002	2.49500E-002	4.00000E-005	7.70000E-004	7.10000E-004	0.00000E+000	3.57375E+000	3.57375E+000	1.16000E-003	0.00000E+000	3.59802E+000
Paving Equipment	1.51000E-003	1.42100E-002	2.26600E-002	4.00000E-005	6.90000E-004	6.40000E-004	0.00000E+000	3.17189E+000	3.17189E+000	1.03000E-003	0.00000E+000	3.19344E+000
Rollers	1.38000E-003	1.44900E-002	1.66700E-002	2.00000E-005	8.00000E-004	7.30000E-004	0.00000E+000	2.07470E+000	2.07470E+000	6.70000E-004	0.00000E+000	2.08879E+000
Rubber Tired Dozers	7.23000E-003	7.13700E-002	5.96800E-002	8.00000E-005	3.26000E-003	3.00000E-003	0.00000E+000	7.04242E+000	7.04242E+000	2.28000E-003	0.00000E+000	7.09025E+000
Scrapers	1.39300E-002	1.46660E-001	1.08660E-001	2.70000E-004	5.75000E-003	5.29000E-003	0.00000E+000	2.36137E+001	2.36137E+001	7.64000E-003	0.00000E+000	2.37741E+001
Sweepers/Scrubbers	2.00000E-004	1.92000E-003	2.16000E-003	0.00000E+000	1.20000E-004	1.10000E-004	0.00000E+000	2.51240E-001	2.51240E-001	8.00000E-005	0.00000E+000	2.52950E-001
Tractors/Loaders/Backhoes	2.78400E-002	2.81830E-001	4.16510E-001	5.80000E-004	1.36400E-002	1.25500E-002	0.00000E+000	5.10500E+001	5.10500E+001	1.65100E-002	0.00000E+000	5.13968E+001
Trenchers	5.87000E-003	5.47200E-002	4.38700E-002	6.00000E-005	3.80000E-003	3.49000E-003	0.00000E+000	5.02329E+000	5.02329E+000	1.62000E-003	0.00000E+000	5.05741E+000

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	1.96700E-002	1.06570E-001	1.91020E-001	3.10000E-004	6.97000E-003	6.97000E-003	0.00000E+000	2.69368E+001	2.69368E+001	1.57000E-003	0.00000E+000	2.69697E+001
Excavators	3.48000E-003	2.28600E-002	6.01200E-002	1.00000E-004	1.40000E-003	1.29000E-003	0.00000E+000	8.37312E+000	8.37312E+000	2.71000E-003	0.00000E+000	8.42999E+000
Forklifts	4.48000E-003	3.36100E-002	5.16300E-002	7.00000E-005	2.53000E-003	2.33000E-003	0.00000E+000	6.06828E+000	6.06828E+000	1.96000E-003	0.00000E+000	6.10950E+000
Generator Sets	1.34500E-002	9.57300E-002	1.65710E-001	3.00000E-004	5.48000E-003	5.48000E-003	0.00000E+000	2.55403E+001	2.55403E+001	1.09000E-003	0.00000E+000	2.55631E+001
Graders	4.41000E-003	3.21400E-002	3.90700E-002	6.00000E-005	2.21000E-003	2.03000E-003	0.00000E+000	4.91522E+000	4.91522E+000	1.59000E-003	0.00000E+000	4.94861E+000
Pavers	1.66000E-003	1.30300E-002	2.49500E-002	4.00000E-005	7.70000E-004	7.10000E-004	0.00000E+000	3.57374E+000	3.57374E+000	1.16000E-003	0.00000E+000	3.59801E+000
Paving Equipment	1.51000E-003	1.13700E-002	2.26600E-002	4.00000E-005	6.90000E-004	6.40000E-004	0.00000E+000	3.17189E+000	3.17189E+000	1.03000E-003	0.00000E+000	3.19343E+000
Rollers	1.38000E-003	1.15900E-002	1.66700E-002	2.00000E-005	8.00000E-004	7.30000E-004	0.00000E+000	2.07470E+000	2.07470E+000	6.70000E-004	0.00000E+000	2.08879E+000
Rubber Tired Dozers	7.23000E-003	5.71000E-002	5.96800E-002	8.00000E-005	3.26000E-003	3.00000E-003	0.00000E+000	7.04241E+000	7.04241E+000	2.28000E-003	0.00000E+000	7.09025E+000
Scrapers	1.39300E-002	1.17330E-001	1.08660E-001	2.70000E-004	5.75000E-003	5.29000E-003	0.00000E+000	2.36137E+001	2.36137E+001	7.64000E-003	0.00000E+000	2.37741E+001
Sweepers/Scrubbers	2.00000E-004	1.92000E-003	2.16000E-003	0.00000E+000	1.20000E-004	1.10000E-004	0.00000E+000	2.51240E-001	2.51240E-001	8.00000E-005	0.00000E+000	2.52950E-001
Tractors/Loaders/Balckhoes	2.78400E-002	2.25460E-001	4.16510E-001	5.80000E-004	1.36400E-002	1.25500E-002	0.00000E+000	5.10500E+001	5.10500E+001	1.65100E-002	0.00000E+000	5.13967E+001
Trenchers	5.87000E-003	4.37700E-002	4.38700E-002	6.00000E-005	3.80000E-003	3.49000E-003	0.00000E+000	5.02328E+000	5.02328E+000	1.62000E-003	0.00000E+000	5.05740E+000

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	1.99985E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48496E-006	1.48496E-006	0.00000E+000	0.00000E+000	1.48314E-006
Excavators	0.00000E+000	2.00140E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19430E-006	1.19430E-006	0.00000E+000	0.00000E+000	1.18624E-006
Forklifts	0.00000E+000	1.99952E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64791E-006	1.64791E-006	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	1.99983E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17461E-006	1.17461E-006	0.00000E+000	0.00000E+000	1.17356E-006
Graders	0.00000E+000	2.00100E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.03449E-006	2.03449E-006	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	2.00123E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.79818E-006	2.79818E-006	0.00000E+000	0.00000E+000	2.77931E-006
Paving Equipment	0.00000E+000	1.99859E-001	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	3.13142E-006
Rollers	0.00000E+000	2.00138E-001	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
Rubber Tired Dozers	0.00000E+000	1.99944E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.41997E-006	1.41997E-006	0.00000E+000	0.00000E+000	0.00000E+000
Scrapers	0.00000E+000	1.99986E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27045E-006	1.27045E-006	0.00000E+000	0.00000E+000	1.26188E-006
Sweepers/Scrubbers	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/Balckhoes	0.00000E+000	2.00014E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17532E-006	1.17532E-006	0.00000E+000	0.00000E+000	1.16739E-006
Trenchers	0.00000E+000	2.00110E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.99073E-006	1.99073E-006	0.00000E+000	0.00000E+000	1.97730E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.49	0.13	0.49	0.13	0.00	0.00
Grading	Fugitive Dust	0.09	0.03	0.04	0.01	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	1.38	1.38	1.38	1.38
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	11.55	11.54	11.75	11.94	11.55	11.55	0.00	11.53	11.53	11.49	11.56	11.53
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.17	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.22	0.52		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

FR SPA 3 Construction Phase 3B Residential
Placer-Sacramento County, 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	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Sweepers/Scrubbers	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	2	2	No Change	20.00
Forklifts	Diesel	No Change	3	3	No Change	20.00
Generator Sets	Diesel	No Change	3	3	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	2	No Change	20.00
Paving Equipment	Diesel	No Change	2	2	No Change	20.00
Rollers	Diesel	No Change	2	2	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	2	No Change	20.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	7	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00

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	1.86600E-002	1.25490E-001	1.91820E-001	3.10000E-004	5.98000E-003	5.98000E-003	0.00000E+000	2.70645E+001	2.70645E+001	1.50000E-003	0.00000E+000	2.70960E+001
Excavators	3.51000E-003	2.73300E-002	6.36100E-002	1.00000E-004	1.35000E-003	1.24000E-003	0.00000E+000	8.84113E+000	8.84113E+000	2.86000E-003	0.00000E+000	8.90118E+000
Forklifts	4.11000E-003	3.86300E-002	5.11700E-002	7.00000E-005	2.17000E-003	2.00000E-003	0.00000E+000	6.04311E+000	6.04311E+000	1.95000E-003	0.00000E+000	6.08415E+000
Generator Sets	1.25000E-002	1.11900E-001	1.64800E-001	3.00000E-004	4.72000E-003	4.72000E-003	0.00000E+000	2.54343E+001	2.54343E+001	9.90000E-004	0.00000E+000	2.54552E+001
Graders	4.35000E-003	3.82800E-002	4.10300E-002	6.00000E-005	2.11000E-003	1.94000E-003	0.00000E+000	5.18866E+000	5.18866E+000	1.68000E-003	0.00000E+000	5.22390E+000
Pavers	1.41000E-003	1.34000E-002	2.22500E-002	4.00000E-005	6.30000E-004	5.80000E-004	0.00000E+000	3.17628E+000	3.17628E+000	1.03000E-003	0.00000E+000	3.19785E+000
Paving Equipment	1.30000E-003	1.17900E-002	2.02500E-002	3.00000E-005	5.70000E-004	5.20000E-004	0.00000E+000	2.81945E+000	2.81945E+000	9.10000E-004	0.00000E+000	2.83860E+000
Rollers	1.17000E-003	1.21900E-002	1.48000E-002	2.00000E-005	6.50000E-004	5.90000E-004	0.00000E+000	1.84446E+000	1.84446E+000	6.00000E-004	0.00000E+000	1.85698E+000
Rubber Tired Dozers	7.12000E-003	6.88800E-002	5.90900E-002	8.00000E-005	3.12000E-003	2.87000E-003	0.00000E+000	7.43252E+000	7.43252E+000	2.40000E-003	0.00000E+000	7.48300E+000
Scrapers	1.42100E-002	1.43830E-001	1.11520E-001	2.80000E-004	5.68000E-003	5.23000E-003	0.00000E+000	2.49081E+001	2.49081E+001	8.06000E-003	0.00000E+000	2.50773E+001
Sweepers/Scrubbers	1.70000E-004	1.61000E-003	1.92000E-003	0.00000E+000	1.00000E-004	9.00000E-005	0.00000E+000	2.23330E-001	2.23330E-001	7.00000E-005	0.00000E+000	2.24840E-001
Tractors/Loaders/Backhoes	2.63000E-002	2.64900E-001	4.17750E-001	5.80000E-004	1.17800E-002	1.08400E-002	0.00000E+000	5.12065E+001	5.12065E+001	1.65600E-002	0.00000E+000	5.15543E+001
Trenchers	5.75000E-003	5.34700E-002	4.38700E-002	6.00000E-005	3.70000E-003	3.40000E-003	0.00000E+000	5.02268E+000	5.02268E+000	1.62000E-003	0.00000E+000	5.05679E+000

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	1.86600E-002	1.00390E-001	1.91820E-001	3.10000E-004	5.98000E-003	5.98000E-003	0.00000E+000	2.70645E+001	2.70645E+001	1.50000E-003	0.00000E+000	2.70960E+001
Excavators	3.51000E-003	2.18600E-002	6.36100E-002	1.00000E-004	1.35000E-003	1.24000E-003	0.00000E+000	8.84112E+000	8.84112E+000	2.86000E-003	0.00000E+000	8.90117E+000
Forklifts	4.11000E-003	3.09000E-002	5.11700E-002	7.00000E-005	2.17000E-003	2.00000E-003	0.00000E+000	6.04310E+000	6.04310E+000	1.95000E-003	0.00000E+000	6.08415E+000
Generator Sets	1.25000E-002	8.95200E-002	1.64800E-001	3.00000E-004	4.72000E-003	4.72000E-003	0.00000E+000	2.54343E+001	2.54343E+001	9.90000E-004	0.00000E+000	2.54552E+001
Graders	4.35000E-003	3.06200E-002	4.10300E-002	6.00000E-005	2.11000E-003	1.94000E-003	0.00000E+000	5.18866E+000	5.18866E+000	1.68000E-003	0.00000E+000	5.22390E+000
Pavers	1.41000E-003	1.07200E-002	2.22500E-002	4.00000E-005	6.30000E-004	5.80000E-004	0.00000E+000	3.17627E+000	3.17627E+000	1.03000E-003	0.00000E+000	3.19785E+000
Paving Equipment	1.30000E-003	9.43000E-003	2.02500E-002	3.00000E-005	5.70000E-004	5.20000E-004	0.00000E+000	2.81945E+000	2.81945E+000	9.10000E-004	0.00000E+000	2.83860E+000
Rollers	1.17000E-003	9.76000E-003	1.48000E-002	2.00000E-005	6.50000E-004	5.90000E-004	0.00000E+000	1.84445E+000	1.84445E+000	6.00000E-004	0.00000E+000	1.85698E+000
Rubber Tired Dozers	7.12000E-003	5.51100E-002	5.90900E-002	8.00000E-005	3.12000E-003	2.87000E-003	0.00000E+000	7.43251E+000	7.43251E+000	2.40000E-003	0.00000E+000	7.48299E+000
Scrapers	1.42100E-002	1.15060E-001	1.11520E-001	2.80000E-004	5.68000E-003	5.23000E-003	0.00000E+000	2.49081E+001	2.49081E+001	8.06000E-003	0.00000E+000	2.50773E+001
Sweepers/Scrubbers	1.70000E-004	1.61000E-003	1.92000E-003	0.00000E+000	1.00000E-004	9.00000E-005	0.00000E+000	2.23330E-001	2.23330E-001	7.00000E-005	0.00000E+000	2.24840E-001
Tractors/Loaders/Balckhoes	2.63000E-002	2.11920E-001	4.17750E-001	5.80000E-004	1.17800E-002	1.08400E-002	0.00000E+000	5.12064E+001	5.12064E+001	1.65600E-002	0.00000E+000	5.15542E+001
Trenchers	5.75000E-003	4.27700E-002	4.38700E-002	6.00000E-005	3.70000E-003	3.40000E-003	0.00000E+000	5.02267E+000	5.02267E+000	1.62000E-003	0.00000E+000	5.05679E+000

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	2.00016E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10846E-006	1.10846E-006	0.00000E+000	0.00000E+000	1.47623E-006
Excavators	0.00000E+000	2.00146E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13108E-006	1.13108E-006	0.00000E+000	0.00000E+000	1.12345E-006
Forklifts	0.00000E+000	2.00104E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.65478E-006	1.65478E-006	0.00000E+000	0.00000E+000	0.00000E+000
Generator Sets	0.00000E+000	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17854E-006
Graders	0.00000E+000	2.00104E-001	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	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.14834E-006	3.14834E-006	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	2.00170E-001	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	1.99344E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.42164E-006	5.42164E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	1.99913E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.34544E-006	1.34544E-006	0.00000E+000	0.00000E+000	1.33636E-006
Scrapers	0.00000E+000	2.00028E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20443E-006	1.20443E-006	0.00000E+000	0.00000E+000	1.19630E-006
Sweepers/Scrubbers	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	2.00000E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17173E-006	1.17173E-006	0.00000E+000	0.00000E+000	1.35779E-006
Trenchers	0.00000E+000	2.00112E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.99097E-006	1.99097E-006	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.48	0.13	0.48	0.13	0.00	0.00
Grading	Fugitive Dust	0.09	0.03	0.04	0.02	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	1.10	1.10	1.09	1.10
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	10.49	10.50	10.51	10.25	10.50	10.50	0.00	10.50	10.50	10.47	10.58	10.50
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.21	0.49		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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

FR SPA 3 Construction Phase 3B Commercial
Placer-Sacramento County, 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	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	1	1	No Change	20.00
Excavators	Diesel	No Change	2	1	No Change	20.00
Forklifts	Diesel	No Change	3	1	No Change	20.00
Generator Sets	Diesel	No Change	3	1	No Change	20.00
Graders	Diesel	No Change	1	1	No Change	20.00
Pavers	Diesel	No Change	2	1	No Change	20.00
Paving Equipment	Diesel	No Change	2	1	No Change	20.00
Rollers	Diesel	No Change	2	1	No Change	20.00
Rubber Tired Dozers	Diesel	No Change	1	1	No Change	20.00
Scrapers	Diesel	No Change	2	1	No Change	20.00
Sweepers/Scrubbers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	7	3	No Change	20.00
Trenchers	Diesel	No Change	1	1	No Change	20.00

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	1.36000E-003	9.14000E-003	1.35800E-002	2.00000E-005	4.60000E-004	4.60000E-004	0.00000E+000	1.91494E+000	1.91494E+000	1.10000E-004	0.00000E+000	1.91720E+000
Excavators	2.80000E-004	2.16000E-003	5.02000E-003	1.00000E-005	1.10000E-004	1.00000E-004	0.00000E+000	6.97980E-001	6.97980E-001	2.30000E-004	0.00000E+000	7.02720E-001
Forklifts	3.80000E-004	3.59000E-003	4.63000E-003	1.00000E-005	2.10000E-004	1.90000E-004	0.00000E+000	5.45560E-001	5.45560E-001	1.80000E-004	0.00000E+000	5.49260E-001
Generator Sets	1.16000E-003	1.03400E-002	1.48800E-002	3.00000E-005	4.50000E-004	4.50000E-004	0.00000E+000	2.29616E+000	2.29616E+000	9.00000E-005	0.00000E+000	2.29811E+000
Graders	6.90000E-004	6.04000E-003	6.48000E-003	1.00000E-005	3.30000E-004	3.10000E-004	0.00000E+000	8.19260E-001	8.19260E-001	2.60000E-004	0.00000E+000	8.24830E-001
Pavers	7.90000E-004	7.54000E-003	1.25200E-002	2.00000E-005	3.50000E-004	3.20000E-004	0.00000E+000	1.78666E+000	1.78666E+000	5.80000E-004	0.00000E+000	1.79879E+000
Paving Equipment	7.30000E-004	6.63000E-003	1.13900E-002	2.00000E-005	3.20000E-004	2.90000E-004	0.00000E+000	1.58594E+000	1.58594E+000	5.10000E-004	0.00000E+000	1.59671E+000
Rollers	6.60000E-004	6.86000E-003	8.33000E-003	1.00000E-005	3.60000E-004	3.30000E-004	0.00000E+000	1.03751E+000	1.03751E+000	3.40000E-004	0.00000E+000	1.04455E+000
Rubber Tired Dozers	1.12000E-003	1.08800E-002	9.33000E-003	1.00000E-005	4.90000E-004	4.50000E-004	0.00000E+000	1.17356E+000	1.17356E+000	3.80000E-004	0.00000E+000	1.18153E+000
Scrapers	1.12000E-003	1.13500E-002	8.80000E-003	2.00000E-005	4.50000E-004	4.10000E-004	0.00000E+000	1.96643E+000	1.96643E+000	6.40000E-004	0.00000E+000	1.97979E+000
Sweepers/Scrubbers	1.90000E-004	1.81000E-003	2.16000E-003	0.00000E+000	1.10000E-004	1.00000E-004	0.00000E+000	2.51240E-001	2.51240E-001	8.00000E-005	0.00000E+000	2.52950E-001
Tractors/Loaders/Backhoes	2.47000E-003	2.48900E-002	3.84200E-002	5.00000E-005	1.14000E-003	1.05000E-003	0.00000E+000	4.70522E+000	4.70522E+000	1.52000E-003	0.00000E+000	4.73718E+000
Trenchers	1.22000E-003	1.13400E-002	9.31000E-003	1.00000E-005	7.80000E-004	7.20000E-004	0.00000E+000	1.06542E+000	1.06542E+000	3.40000E-004	0.00000E+000	1.07265E+000

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	1.36000E-003	7.31000E-003	1.35800E-002	2.00000E-005	4.60000E-004	4.60000E-004	0.00000E+000	1.91494E+000	1.91494E+000	1.10000E-004	0.00000E+000	1.91720E+000
Excavators	2.80000E-004	1.29000E-003	5.02000E-003	1.00000E-005	1.10000E-004	1.00000E-004	0.00000E+000	6.97980E-001	6.97980E-001	2.30000E-004	0.00000E+000	7.02720E-001
Forklifts	3.80000E-004	1.44000E-003	4.63000E-003	1.00000E-005	2.10000E-004	1.90000E-004	0.00000E+000	5.45560E-001	5.45560E-001	1.80000E-004	0.00000E+000	5.49260E-001
Generator Sets	1.16000E-003	4.13000E-003	1.48800E-002	3.00000E-005	4.50000E-004	4.50000E-004	0.00000E+000	2.29615E+000	2.29615E+000	9.00000E-005	0.00000E+000	2.29810E+000
Graders	6.90000E-004	4.83000E-003	6.48000E-003	1.00000E-005	3.30000E-004	3.10000E-004	0.00000E+000	8.19260E-001	8.19260E-001	2.60000E-004	0.00000E+000	8.24830E-001
Pavers	7.90000E-004	4.52000E-003	1.25200E-002	2.00000E-005	3.50000E-004	3.20000E-004	0.00000E+000	1.78665E+000	1.78665E+000	5.80000E-004	0.00000E+000	1.79879E+000
Paving Equipment	7.30000E-004	3.98000E-003	1.13900E-002	2.00000E-005	3.20000E-004	2.90000E-004	0.00000E+000	1.58594E+000	1.58594E+000	5.10000E-004	0.00000E+000	1.59671E+000
Rollers	6.60000E-004	4.12000E-003	8.33000E-003	1.00000E-005	3.60000E-004	3.30000E-004	0.00000E+000	1.03751E+000	1.03751E+000	3.40000E-004	0.00000E+000	1.04455E+000
Rubber Tired Dozers	1.12000E-003	8.70000E-003	9.33000E-003	1.00000E-005	4.90000E-004	4.50000E-004	0.00000E+000	1.17355E+000	1.17355E+000	3.80000E-004	0.00000E+000	1.18153E+000
Scrapers	1.12000E-003	6.81000E-003	8.80000E-003	2.00000E-005	4.50000E-004	4.10000E-004	0.00000E+000	1.96643E+000	1.96643E+000	6.40000E-004	0.00000E+000	1.97979E+000
Sweepers/Scrubbers	1.90000E-004	1.81000E-003	2.16000E-003	0.00000E+000	1.10000E-004	1.00000E-004	0.00000E+000	2.51240E-001	2.51240E-001	8.00000E-005	0.00000E+000	2.52950E-001
Tractors/Loaders/Balckhoes	2.47000E-003	1.32900E-002	3.84200E-002	5.00000E-005	1.14000E-003	1.05000E-003	0.00000E+000	4.70521E+000	4.70521E+000	1.52000E-003	0.00000E+000	4.73717E+000
Trenchers	1.22000E-003	9.07000E-003	9.31000E-003	1.00000E-005	7.80000E-004	7.20000E-004	0.00000E+000	1.06542E+000	1.06542E+000	3.40000E-004	0.00000E+000	1.07265E+000

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	2.00219E-001	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
Excavators	0.00000E+000	4.02778E-001	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
Forklifts	0.00000E+000	5.98886E-001	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
Generator Sets	0.00000E+000	6.00580E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.35510E-006	4.35510E-006	0.00000E+000	0.00000E+000	4.35140E-006
Graders	0.00000E+000	2.00331E-001	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	4.00531E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.59704E-006	5.59704E-006	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	3.99698E-001	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	3.99417E-001	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
Rubber Tired Dozers	0.00000E+000	2.00368E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.52108E-006	8.52108E-006	0.00000E+000	0.00000E+000	0.00000E+000
Scrapers	0.00000E+000	4.00000E-001	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
Sweepers/Scrubbers	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/Balckhoes	0.00000E+000	4.66051E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.12530E-006	2.12530E-006	0.00000E+000	0.00000E+000	2.11096E-006
Trenchers	0.00000E+000	2.00176E-001	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

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
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	0.01	0.00	0.01	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	0.13	0.04	0.13	0.04	0.00	0.00
Grading	Fugitive Dust	0.01	0.01	0.01	0.00	0.55	0.55
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
Trenching	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Trenching	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.34	5.34	5.36	5.39	5.34
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	14.81	15.00	14.99	16.67	15.18	15.18	0.00	15.00	15.00	14.75	15.25	15.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
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			

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
No	Commute	Provide Ride Sharing Program			
	Commute	Commute 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	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	15.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher	Single Family Housing	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	5.00	5.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

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