

ARC CalEEMod  
On-Site Construction

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**ARC - Construction Phase I (Overlap)**  
**Yolo County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	540.00	1000sqft	12.40	540,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	568.00	Space	5.11	227,200.00	0
Unenclosed Parking with Elevator	723.00	Space	6.51	289,200.00	0
Apartments Mid Rise	181.00	Dwelling Unit	4.76	181,000.00	518
Condo/Townhouse	28.00	Dwelling Unit	1.75	28,000.00	80

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2028
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	198.63	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Based on Phase I of ARC

Construction Phase - Construction schedule adjusted based on applicant provided information and to account for overlap of building construction

Trips and VMT - Haul truck trip lengths adjusted per project-specific route of material movement; number of haul trucks based on 12 CY capacity trucks

Grading - Grading area updated for project construction information and off-site improvement areas

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	1,782.00
tblConstructionPhase	NumDays	35.00	365.00
tblConstructionPhase	NumDays	500.00	1,782.00
tblConstructionPhase	NumDays	500.00	365.00
tblConstructionPhase	NumDays	45.00	28.00
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	70.00	112.50
tblGrading	MaterialExported	0.00	130,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	198.63
tblTripsAndVMT	HaulingTripLength	20.00	2.15
tblTripsAndVMT	HaulingTripNumber	16,250.00	10,833.00

**2.0 Emissions Summary**

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**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.0686	5.1152	4.0958	0.0148	61.7044	0.1277	61.8321	6.3273	0.1199	6.4472	0.0000	1,352.5808	1,352.5808	0.1321	0.0000	1,355.8829
2023	7.5037	12.1892	12.0782	0.0454	221.5068	0.2975	221.8043	22.4685	0.2813	22.7498	0.0000	4,148.6074	4,148.6074	0.2986	0.0000	4,156.0714
2024	1.9589	5.8886	5.8886	0.0225	111.9347	0.1321	112.0667	11.3540	0.1248	11.4788	0.0000	2,055.8870	2,055.8870	0.1469	0.0000	2,059.5594
2025	1.7113	5.6253	5.6542	0.0220	111.0457	0.1137	111.1594	11.2638	0.1074	11.3713	0.0000	2,011.7389	2,011.7389	0.1435	0.0000	2,015.3265
2026	1.6940	5.5830	5.5071	0.0217	111.0457	0.1135	111.1592	11.2638	0.1073	11.3711	0.0000	1,982.4939	1,982.4939	0.1418	0.0000	1,986.0384
2027	0.5995	1.8465	1.8049	7.1600e-003	37.3971	0.0379	37.4350	3.7933	0.0359	3.8291	0.0000	654.1367	654.1367	0.0466	0.0000	655.3019
<b>Maximum</b>	<b>7.5037</b>	<b>12.1892</b>	<b>12.0782</b>	<b>0.0454</b>	<b>221.5068</b>	<b>0.2975</b>	<b>221.8043</b>	<b>22.4685</b>	<b>0.2813</b>	<b>22.7498</b>	<b>0.0000</b>	<b>4,148.6074</b>	<b>4,148.6074</b>	<b>0.2986</b>	<b>0.0000</b>	<b>4,156.0714</b>

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**2.1 Overall Construction**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.0686	5.1152	4.0958	0.0148	0.8282	0.1277	0.9559	0.2527	0.1199	0.3726	0.0000	1,352.580 3	1,352.580 3	0.1321	0.0000	1,355.882 4
2023	7.5037	12.1892	12.0782	0.0454	2.1193	0.2975	2.4168	0.5764	0.2813	0.8577	0.0000	4,148.606 3	4,148.606 3	0.2986	0.0000	4,156.070 3
2024	1.9589	5.8886	5.8886	0.0225	1.0706	0.1320	1.2027	0.2911	0.1248	0.4160	0.0000	2,055.886 4	2,055.886 4	0.1469	0.0000	2,059.558 8
2025	1.7113	5.6253	5.6542	0.0220	1.0623	0.1137	1.1760	0.2889	0.1074	0.3963	0.0000	2,011.738 3	2,011.7383	0.1435	0.0000	2,015.325 9
2026	1.6940	5.5830	5.5071	0.0217	1.0623	0.1135	1.1758	0.2889	0.1073	0.3961	0.0000	1,982.493 3	1,982.493 3	0.1418	0.0000	1,986.037 9
2027	0.5995	1.8465	1.8049	7.1600e-003	0.3575	0.0379	0.3954	0.0972	0.0359	0.1331	0.0000	654.1365	654.1365	0.0466	0.0000	655.3017
<b>Maximum</b>	<b>7.5037</b>	<b>12.1892</b>	<b>12.0782</b>	<b>0.0454</b>	<b>2.1193</b>	<b>0.2975</b>	<b>2.4168</b>	<b>0.5764</b>	<b>0.2813</b>	<b>0.8577</b>	<b>0.0000</b>	<b>4,148.606 3</b>	<b>4,148.606 3</b>	<b>0.2986</b>	<b>0.0000</b>	<b>4,156.070 3</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>99.01</b>	<b>0.00</b>	<b>98.88</b>	<b>97.30</b>	<b>0.00</b>	<b>96.18</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2022	7-31-2022	2.4690	2.4690
2	8-1-2022	10-31-2022	2.2348	2.2348
3	11-1-2022	1-31-2023	3.9972	3.9972
4	2-1-2023	4-30-2023	7.8020	7.8020
5	5-1-2023	7-31-2023	8.0435	8.0435

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6	8-1-2023	10-31-2023	8.0544	8.0544
7	11-1-2023	1-31-2024	6.6857	6.6857
8	2-1-2024	4-30-2024	3.2455	3.2455
9	5-1-2024	7-31-2024	3.3104	3.3104
10	8-1-2024	10-31-2024	3.3141	3.3141
11	11-1-2024	1-31-2025	2.8282	2.8282
12	2-1-2025	4-30-2025	1.7944	1.7944
13	5-1-2025	7-31-2025	1.8485	1.8485
14	8-1-2025	10-31-2025	1.8517	1.8517
15	11-1-2025	1-31-2026	1.8528	1.8528
16	2-1-2026	4-30-2026	1.7794	1.7794
17	5-1-2026	7-31-2026	1.8333	1.8333
18	8-1-2026	10-31-2026	1.8364	1.8364
19	11-1-2026	1-31-2027	1.8374	1.8374
20	2-1-2027	4-30-2027	1.7650	1.7650
21	5-1-2027	7-31-2027	0.0725	0.0725
		Highest	8.0544	8.0544

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**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	22.9464	0.3606	25.5777	0.0435		3.3757	3.3757		3.3757	3.3757	320.9072	93.1080	414.0152	0.3024	0.0244	428.8313
Energy	0.0669	0.6012	0.4604	3.6500e-003		0.0462	0.0462		0.0462	0.0462	0.0000	1,213.3022	1,213.3022	0.0932	0.0288	1,224.2110
Mobile	0.9100	8.0909	9.2300	0.0493	246.8486	0.0293	246.8779	25.2555	0.0273	25.2828	0.0000	4,570.7389	4,570.7389	0.1488	0.0000	4,574.4594
Waste						0.0000	0.0000		0.0000	0.0000	27.8463	0.0000	27.8463	1.6457	0.0000	68.9880
Water						0.0000	0.0000		0.0000	0.0000	88.5557	138.7882	227.3438	9.1158	0.2190	520.4876
<b>Total</b>	<b>23.9233</b>	<b>9.0527</b>	<b>35.2680</b>	<b>0.0964</b>	<b>246.8486</b>	<b>3.4511</b>	<b>250.2998</b>	<b>25.2555</b>	<b>3.4492</b>	<b>28.7047</b>	<b>437.3091</b>	<b>6,015.9372</b>	<b>6,453.2464</b>	<b>11.3059</b>	<b>0.2721</b>	<b>6,816.9772</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	22.9464	0.3606	25.5777	0.0435		3.3757	3.3757		3.3757	3.3757	320.9072	93.1080	414.0152	0.3024	0.0244	428.8313
Energy	0.0669	0.6012	0.4604	3.6500e-003		0.0462	0.0462		0.0462	0.0462	0.0000	1,213.3022	1,213.3022	0.0932	0.0288	1,224.2110
Mobile	0.9100	8.0909	9.2300	0.0493	246.8486	0.0293	246.8779	25.2555	0.0273	25.2828	0.0000	4,570.7389	4,570.7389	0.1488	0.0000	4,574.4594
Waste						0.0000	0.0000		0.0000	0.0000	27.8463	0.0000	27.8463	1.6457	0.0000	68.9880
Water						0.0000	0.0000		0.0000	0.0000	88.5557	138.7882	227.3438	9.1158	0.2190	520.4876
<b>Total</b>	<b>23.9233</b>	<b>9.0527</b>	<b>35.2680</b>	<b>0.0964</b>	<b>246.8486</b>	<b>3.4511</b>	<b>250.2998</b>	<b>25.2555</b>	<b>3.4492</b>	<b>28.7047</b>	<b>437.3091</b>	<b>6,015.9372</b>	<b>6,453.2464</b>	<b>11.3059</b>	<b>0.2721</b>	<b>6,816.9772</b>

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

**3.0 Construction Detail**

**Construction Phase**



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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2022	5/7/2022	7	7	
2	Grading	Grading	5/8/2022	6/4/2022	7	28	
3	Paving	Paving	6/5/2022	6/14/2022	7	10	
4	Building Construction	Building Construction	6/15/2022	5/1/2027	7	1782	
5	Architectural Coating	Architectural Coating	6/29/2022	5/15/2027	7	1782	
6	Building Construction 2	Building Construction	1/1/2023	12/31/2023	7	365	
7	Architectural Coating 2	Architectural Coating	1/15/2023	1/14/2024	7	365	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 12.22**

**Residential Indoor: 423,225; Residential Outdoor: 141,075; Non-Residential Indoor: 810,000; Non-Residential Outdoor: 270,000; Striped Parking Area: 32,552 (Architectural Coating – sqft)**

**OffRoad Equipment**

## ARC - Construction Phase I (Overlap) - Yolo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction 2	Cranes	1	7.00	231	0.29
Building Construction 2	Forklifts	3	8.00	89	0.20
Building Construction 2	Generator Sets	1	8.00	84	0.74
Building Construction 2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction 2	Welders	1	8.00	46	0.45
Architectural Coating 2	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	10,833.00	10.00	7.00	2.15	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	200.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	200.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1158	0.0689	1.3000e-004		5.6400e-003	5.6400e-003		5.1900e-003	5.1900e-003	0.0000	11.7038	11.7038	3.7900e-003	0.0000	11.7984
<b>Total</b>	<b>0.0111</b>	<b>0.1158</b>	<b>0.0689</b>	<b>1.3000e-004</b>	<b>0.0632</b>	<b>5.6400e-003</b>	<b>0.0689</b>	<b>0.0348</b>	<b>5.1900e-003</b>	<b>0.0400</b>	<b>0.0000</b>	<b>11.7038</b>	<b>11.7038</b>	<b>3.7900e-003</b>	<b>0.0000</b>	<b>11.7984</b>

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**3.2 Site Preparation - 2022**

**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	1.9000e-004	1.2000e-004	1.2800e-003	0.0000	0.0478	0.0000	0.0478	4.8500e-003	0.0000	4.8500e-003	0.0000	0.3789	0.3789	1.0000e-005	0.0000	0.3791
<b>Total</b>	<b>1.9000e-004</b>	<b>1.2000e-004</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>0.0478</b>	<b>0.0000</b>	<b>0.0478</b>	<b>4.8500e-003</b>	<b>0.0000</b>	<b>4.8500e-003</b>	<b>0.0000</b>	<b>0.3789</b>	<b>0.3789</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3791</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1158	0.0689	1.3000e-004		5.6400e-003	5.6400e-003		5.1900e-003	5.1900e-003	0.0000	11.7038	11.7038	3.7900e-003	0.0000	11.7984
<b>Total</b>	<b>0.0111</b>	<b>0.1158</b>	<b>0.0689</b>	<b>1.3000e-004</b>	<b>0.0632</b>	<b>5.6400e-003</b>	<b>0.0689</b>	<b>0.0348</b>	<b>5.1900e-003</b>	<b>0.0400</b>	<b>0.0000</b>	<b>11.7038</b>	<b>11.7038</b>	<b>3.7900e-003</b>	<b>0.0000</b>	<b>11.7984</b>

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**3.2 Site Preparation - 2022**

**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	1.9000e-004	1.2000e-004	1.2800e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3789	0.3789	1.0000e-005	0.0000	0.3791
<b>Total</b>	<b>1.9000e-004</b>	<b>1.2000e-004</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3789</b>	<b>0.3789</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3791</b>

**3.3 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1758	0.0000	0.1758	0.0576	0.0000	0.0576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0508	0.5438	0.4066	8.7000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	76.3484	76.3484	0.0247	0.0000	76.9658
<b>Total</b>	<b>0.0508</b>	<b>0.5438</b>	<b>0.4066</b>	<b>8.7000e-004</b>	<b>0.1758</b>	<b>0.0229</b>	<b>0.1987</b>	<b>0.0576</b>	<b>0.0211</b>	<b>0.0787</b>	<b>0.0000</b>	<b>76.3484</b>	<b>76.3484</b>	<b>0.0247</b>	<b>0.0000</b>	<b>76.9658</b>

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**3.3 Grading - 2022**

**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	0.0124	0.5787	0.0741	1.0000e-003	0.8857	7.0000e-004	0.8864	0.0901	6.7000e-004	0.0907	0.0000	94.6380	94.6380	0.0111	0.0000	94.9159
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	5.3000e-004	5.7100e-003	2.0000e-005	0.2126	1.0000e-005	0.2126	0.0215	1.0000e-005	0.0216	0.0000	1.6841	1.6841	4.0000e-005	0.0000	1.6850
<b>Total</b>	<b>0.0132</b>	<b>0.5792</b>	<b>0.0798</b>	<b>1.0200e-003</b>	<b>1.0983</b>	<b>7.1000e-004</b>	<b>1.0990</b>	<b>0.1116</b>	<b>6.8000e-004</b>	<b>0.1123</b>	<b>0.0000</b>	<b>96.3221</b>	<b>96.3221</b>	<b>0.0112</b>	<b>0.0000</b>	<b>96.6010</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1758	0.0000	0.1758	0.0576	0.0000	0.0576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0508	0.5438	0.4066	8.7000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	76.3484	76.3484	0.0247	0.0000	76.9657
<b>Total</b>	<b>0.0508</b>	<b>0.5438</b>	<b>0.4066</b>	<b>8.7000e-004</b>	<b>0.1758</b>	<b>0.0229</b>	<b>0.1987</b>	<b>0.0576</b>	<b>0.0211</b>	<b>0.0787</b>	<b>0.0000</b>	<b>76.3484</b>	<b>76.3484</b>	<b>0.0247</b>	<b>0.0000</b>	<b>76.9657</b>

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**3.3 Grading - 2022**

**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	0.0124	0.5787	0.0741	1.0000e-003	9.4800e-003	7.0000e-004	0.0102	2.6200e-003	6.7000e-004	3.2900e-003	0.0000	94.6380	94.6380	0.0111	0.0000	94.9159
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	5.3000e-004	5.7100e-003	2.0000e-005	1.9500e-003	1.0000e-005	1.9700e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.6841	1.6841	4.0000e-005	0.0000	1.6850
<b>Total</b>	<b>0.0132</b>	<b>0.5792</b>	<b>0.0798</b>	<b>1.0200e-003</b>	<b>0.0114</b>	<b>7.1000e-004</b>	<b>0.0122</b>	<b>3.1400e-003</b>	<b>6.8000e-004</b>	<b>3.8200e-003</b>	<b>0.0000</b>	<b>96.3221</b>	<b>96.3221</b>	<b>0.0112</b>	<b>0.0000</b>	<b>96.6010</b>

**3.4 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5100e-003	0.0556	0.0729	1.1000e-004		2.8400e-003	2.8400e-003		2.6100e-003	2.6100e-003	0.0000	10.0138	10.0138	3.2400e-003	0.0000	10.0948
Paving	7.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0130</b>	<b>0.0556</b>	<b>0.0729</b>	<b>1.1000e-004</b>		<b>2.8400e-003</b>	<b>2.8400e-003</b>		<b>2.6100e-003</b>	<b>2.6100e-003</b>	<b>0.0000</b>	<b>10.0138</b>	<b>10.0138</b>	<b>3.2400e-003</b>	<b>0.0000</b>	<b>10.0948</b>

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**3.4 Paving - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.4000e-004	1.5300e-003	0.0000	0.0570	0.0000	0.0570	5.7700e-003	0.0000	5.7700e-003	0.0000	0.4511	0.4511	1.0000e-005	0.0000	0.4514
<b>Total</b>	<b>2.3000e-004</b>	<b>1.4000e-004</b>	<b>1.5300e-003</b>	<b>0.0000</b>	<b>0.0570</b>	<b>0.0000</b>	<b>0.0570</b>	<b>5.7700e-003</b>	<b>0.0000</b>	<b>5.7700e-003</b>	<b>0.0000</b>	<b>0.4511</b>	<b>0.4511</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4514</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5100e-003	0.0556	0.0729	1.1000e-004		2.8400e-003	2.8400e-003		2.6100e-003	2.6100e-003	0.0000	10.0138	10.0138	3.2400e-003	0.0000	10.0947
Paving	7.4800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0130</b>	<b>0.0556</b>	<b>0.0729</b>	<b>1.1000e-004</b>		<b>2.8400e-003</b>	<b>2.8400e-003</b>		<b>2.6100e-003</b>	<b>2.6100e-003</b>	<b>0.0000</b>	<b>10.0138</b>	<b>10.0138</b>	<b>3.2400e-003</b>	<b>0.0000</b>	<b>10.0947</b>



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**3.4 Paving - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.4000e-004	1.5300e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4511	0.4511	1.0000e-005	0.0000	0.4514
<b>Total</b>	<b>2.3000e-004</b>	<b>1.4000e-004</b>	<b>1.5300e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4511</b>	<b>0.4511</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4514</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1706	1.5616	1.6363	2.6900e-003		0.0809	0.0809		0.0761	0.0761	0.0000	231.7252	231.7252	0.0555	0.0000	233.1131
<b>Total</b>	<b>0.1706</b>	<b>1.5616</b>	<b>1.6363</b>	<b>2.6900e-003</b>		<b>0.0809</b>	<b>0.0809</b>		<b>0.0761</b>	<b>0.0761</b>	<b>0.0000</b>	<b>231.7252</b>	<b>231.7252</b>	<b>0.0555</b>	<b>0.0000</b>	<b>233.1131</b>

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**3.5 Building Construction - 2022**

**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	0.0499	2.0039	0.3286	5.3600e-003	10.6539	4.0600e-003	10.6580	1.0862	3.8900e-003	1.0901	0.0000	508.9523	508.9523	0.0236	0.0000	509.5419
Worker	0.1690	0.1046	1.1227	3.6600e-003	41.8402	2.5300e-003	41.8428	4.2395	2.3300e-003	4.2418	0.0000	331.4095	331.4095	7.2100e-003	0.0000	331.5898
<b>Total</b>	<b>0.2189</b>	<b>2.1085</b>	<b>1.4513</b>	<b>9.0200e-003</b>	<b>52.4941</b>	<b>6.5900e-003</b>	<b>52.5007</b>	<b>5.3256</b>	<b>6.2200e-003</b>	<b>5.3319</b>	<b>0.0000</b>	<b>840.3618</b>	<b>840.3618</b>	<b>0.0308</b>	<b>0.0000</b>	<b>841.1317</b>

**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	0.1706	1.5616	1.6363	2.6900e-003		0.0809	0.0809		0.0761	0.0761	0.0000	231.7250	231.7250	0.0555	0.0000	233.1128
<b>Total</b>	<b>0.1706</b>	<b>1.5616</b>	<b>1.6363</b>	<b>2.6900e-003</b>		<b>0.0809</b>	<b>0.0809</b>		<b>0.0761</b>	<b>0.0761</b>	<b>0.0000</b>	<b>231.7250</b>	<b>231.7250</b>	<b>0.0555</b>	<b>0.0000</b>	<b>233.1128</b>

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**3.5 Building Construction - 2022**

**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	0.0499	2.0039	0.3286	5.3600e-003	0.1207	4.0600e-003	0.1248	0.0351	3.8900e-003	0.0390	0.0000	508.9523	508.9523	0.0236	0.0000	509.5419
Worker	0.1690	0.1046	1.1227	3.6600e-003	0.3846	2.5300e-003	0.3872	0.1027	2.3300e-003	0.1050	0.0000	331.4095	331.4095	7.2100e-003	0.0000	331.5898
<b>Total</b>	<b>0.2189</b>	<b>2.1085</b>	<b>1.4513</b>	<b>9.0200e-003</b>	<b>0.5053</b>	<b>6.5900e-003</b>	<b>0.5119</b>	<b>0.1378</b>	<b>6.2200e-003</b>	<b>0.1440</b>	<b>0.0000</b>	<b>840.3618</b>	<b>840.3618</b>	<b>0.0308</b>	<b>0.0000</b>	<b>841.1317</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2870	2.6252	2.9645	4.9200e-003		0.1277	0.1277		0.1202	0.1202	0.0000	423.0437	423.0437	0.1006	0.0000	425.5596
<b>Total</b>	<b>0.2870</b>	<b>2.6252</b>	<b>2.9645</b>	<b>4.9200e-003</b>		<b>0.1277</b>	<b>0.1277</b>		<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>423.0437</b>	<b>423.0437</b>	<b>0.1006</b>	<b>0.0000</b>	<b>425.5596</b>

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**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0669	3.0310	0.5026	9.5700e-003	19.4433	2.9600e-003	19.4463	1.9823	2.8300e-003	1.9851	0.0000	909.5964	909.5964	0.0318	0.0000	910.3916
Worker	0.2887	0.1716	1.8797	6.4300e-003	76.3584	4.5200e-003	76.3630	7.7370	4.1600e-003	7.7412	0.0000	581.9999	581.9999	0.0118	0.0000	582.2948
<b>Total</b>	<b>0.3556</b>	<b>3.2025</b>	<b>2.3823</b>	<b>0.0160</b>	<b>95.8018</b>	<b>7.4800e-003</b>	<b>95.8093</b>	<b>9.7193</b>	<b>6.9900e-003</b>	<b>9.7263</b>	<b>0.0000</b>	<b>1,491.5963</b>	<b>1,491.5963</b>	<b>0.0436</b>	<b>0.0000</b>	<b>1,492.6864</b>

**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	0.2870	2.6252	2.9645	4.9200e-003		0.1277	0.1277		0.1202	0.1202	0.0000	423.0432	423.0432	0.1006	0.0000	425.5590
<b>Total</b>	<b>0.2870</b>	<b>2.6252</b>	<b>2.9645</b>	<b>4.9200e-003</b>		<b>0.1277</b>	<b>0.1277</b>		<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>423.0432</b>	<b>423.0432</b>	<b>0.1006</b>	<b>0.0000</b>	<b>425.5590</b>

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**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0669	3.0310	0.5026	9.5700e-003	0.2203	2.9600e-003	0.2232	0.0640	2.8300e-003	0.0669	0.0000	909.5964	909.5964	0.0318	0.0000	910.3916
Worker	0.2887	0.1716	1.8797	6.4300e-003	0.7019	4.5200e-003	0.7065	0.1874	4.1600e-003	0.1916	0.0000	581.9999	581.9999	0.0118	0.0000	582.2948
<b>Total</b>	<b>0.3556</b>	<b>3.2025</b>	<b>2.3823</b>	<b>0.0160</b>	<b>0.9222</b>	<b>7.4800e-003</b>	<b>0.9297</b>	<b>0.2515</b>	<b>6.9900e-003</b>	<b>0.2585</b>	<b>0.0000</b>	<b>1,491.5963</b>	<b>1,491.5963</b>	<b>0.0436</b>	<b>0.0000</b>	<b>1,492.6864</b>

**3.5 Building Construction - 2024**

**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	0.2693	2.4602	2.9585	4.9300e-003		0.1122	0.1122		0.1056	0.1056	0.0000	424.2839	424.2839	0.1003	0.0000	426.7921
<b>Total</b>	<b>0.2693</b>	<b>2.4602</b>	<b>2.9585</b>	<b>4.9300e-003</b>		<b>0.1122</b>	<b>0.1122</b>		<b>0.1056</b>	<b>0.1056</b>	<b>0.0000</b>	<b>424.2839</b>	<b>424.2839</b>	<b>0.1003</b>	<b>0.0000</b>	<b>426.7921</b>

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**3.5 Building Construction - 2024**

**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	0.0651	3.0095	0.4808	9.5400e-003	19.4966	2.8900e-003	19.4995	1.9877	2.7600e-003	1.9904	0.0000	906.0438	906.0438	0.0310	0.0000	906.8181
Worker	0.2723	0.1552	1.7438	6.2000e-003	76.5676	4.4300e-003	76.5721	7.7582	4.0800e-003	7.7623	0.0000	560.8071	560.8071	0.0107	0.0000	561.0735
<b>Total</b>	<b>0.3374</b>	<b>3.1647</b>	<b>2.2247</b>	<b>0.0157</b>	<b>96.0642</b>	<b>7.3200e-003</b>	<b>96.0715</b>	<b>9.7459</b>	<b>6.8400e-003</b>	<b>9.7527</b>	<b>0.0000</b>	<b>1,466.8509</b>	<b>1,466.8509</b>	<b>0.0416</b>	<b>0.0000</b>	<b>1,467.8916</b>

**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	0.2693	2.4602	2.9585	4.9300e-003		0.1122	0.1122		0.1056	0.1056	0.0000	424.2834	424.2834	0.1003	0.0000	426.7916
<b>Total</b>	<b>0.2693</b>	<b>2.4602</b>	<b>2.9585</b>	<b>4.9300e-003</b>		<b>0.1122</b>	<b>0.1122</b>		<b>0.1056</b>	<b>0.1056</b>	<b>0.0000</b>	<b>424.2834</b>	<b>424.2834</b>	<b>0.1003</b>	<b>0.0000</b>	<b>426.7916</b>

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**3.5 Building Construction - 2024**

**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	0.0651	3.0095	0.4808	9.5400e-003	0.2209	2.8900e-003	0.2238	0.0642	2.7600e-003	0.0670	0.0000	906.0438	906.0438	0.0310	0.0000	906.8181
Worker	0.2723	0.1552	1.7438	6.2000e-003	0.7039	4.4300e-003	0.7083	0.1880	4.0800e-003	0.1920	0.0000	560.8071	560.8071	0.0107	0.0000	561.0735
<b>Total</b>	<b>0.3374</b>	<b>3.1647</b>	<b>2.2247</b>	<b>0.0157</b>	<b>0.9247</b>	<b>7.3200e-003</b>	<b>0.9321</b>	<b>0.2522</b>	<b>6.8400e-003</b>	<b>0.2590</b>	<b>0.0000</b>	<b>1,466.8509</b>	<b>1,466.8509</b>	<b>0.0416</b>	<b>0.0000</b>	<b>1,467.8916</b>

**3.5 Building Construction - 2025**

**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	0.2496	2.2757	2.9355	4.9200e-003		0.0963	0.0963		0.0906	0.0906	0.0000	423.2530	423.2530	0.0995	0.0000	425.7403
<b>Total</b>	<b>0.2496</b>	<b>2.2757</b>	<b>2.9355</b>	<b>4.9200e-003</b>		<b>0.0963</b>	<b>0.0963</b>		<b>0.0906</b>	<b>0.0906</b>	<b>0.0000</b>	<b>423.2530</b>	<b>423.2530</b>	<b>0.0995</b>	<b>0.0000</b>	<b>425.7403</b>

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**3.5 Building Construction - 2025**

**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	0.0631	2.9722	0.4593	9.4500e-003	19.4433	2.8100e-003	19.4461	1.9822	2.6900e-003	1.9849	0.0000	897.9538	897.9538	0.0299	0.0000	898.7023
Worker	0.2563	0.1403	1.6083	5.9300e-003	76.3584	4.3300e-003	76.3628	7.7370	3.9900e-003	7.7410	0.0000	536.7750	536.7750	9.6100e-003	0.0000	537.0152
<b>Total</b>	<b>0.3194</b>	<b>3.1125</b>	<b>2.0675</b>	<b>0.0154</b>	<b>95.8017</b>	<b>7.1400e-003</b>	<b>95.8089</b>	<b>9.7192</b>	<b>6.6800e-003</b>	<b>9.7259</b>	<b>0.0000</b>	<b>1,434.7288</b>	<b>1,434.7288</b>	<b>0.0396</b>	<b>0.0000</b>	<b>1,435.7176</b>

**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	0.2496	2.2757	2.9355	4.9200e-003		0.0963	0.0963		0.0906	0.0906	0.0000	423.2525	423.2525	0.0995	0.0000	425.7398
<b>Total</b>	<b>0.2496</b>	<b>2.2757</b>	<b>2.9355</b>	<b>4.9200e-003</b>		<b>0.0963</b>	<b>0.0963</b>		<b>0.0906</b>	<b>0.0906</b>	<b>0.0000</b>	<b>423.2525</b>	<b>423.2525</b>	<b>0.0995</b>	<b>0.0000</b>	<b>425.7398</b>



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**3.5 Building Construction - 2025**

**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	0.0631	2.9722	0.4593	9.4500e-003	0.2202	2.8100e-003	0.2230	0.0640	2.6900e-003	0.0667	0.0000	897.9538	897.9538	0.0299	0.0000	898.7023
Worker	0.2563	0.1403	1.6083	5.9300e-003	0.7019	4.3300e-003	0.7063	0.1874	3.9900e-003	0.1914	0.0000	536.7750	536.7750	9.6100e-003	0.0000	537.0152
<b>Total</b>	<b>0.3194</b>	<b>3.1125</b>	<b>2.0675</b>	<b>0.0154</b>	<b>0.9222</b>	<b>7.1400e-003</b>	<b>0.9293</b>	<b>0.2515</b>	<b>6.6800e-003</b>	<b>0.2582</b>	<b>0.0000</b>	<b>1,434.7288</b>	<b>1,434.7288</b>	<b>0.0396</b>	<b>0.0000</b>	<b>1,435.7176</b>

**3.5 Building Construction - 2026**

**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	0.2496	2.2757	2.9355	4.9200e-003		0.0963	0.0963		0.0906	0.0906	0.0000	423.2530	423.2530	0.0995	0.0000	425.7403
<b>Total</b>	<b>0.2496</b>	<b>2.2757</b>	<b>2.9355</b>	<b>4.9200e-003</b>		<b>0.0963</b>	<b>0.0963</b>		<b>0.0906</b>	<b>0.0906</b>	<b>0.0000</b>	<b>423.2530</b>	<b>423.2530</b>	<b>0.0995</b>	<b>0.0000</b>	<b>425.7403</b>

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**3.5 Building Construction - 2026**

**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	0.0618	2.9446	0.4461	9.3900e-003	19.4433	2.7500e-003	19.4460	1.9822	2.6300e-003	1.9849	0.0000	892.6791	892.6791	0.0293	0.0000	893.4105
Worker	0.2430	0.1281	1.4966	5.7100e-003	76.3584	4.2100e-003	76.3626	7.7370	3.8800e-003	7.7409	0.0000	516.7938	516.7938	8.7500e-003	0.0000	517.0124
<b>Total</b>	<b>0.3047</b>	<b>3.0727</b>	<b>1.9427</b>	<b>0.0151</b>	<b>95.8017</b>	<b>6.9600e-003</b>	<b>95.8087</b>	<b>9.7192</b>	<b>6.5100e-003</b>	<b>9.7258</b>	<b>0.0000</b>	<b>1,409.4728</b>	<b>1,409.4728</b>	<b>0.0380</b>	<b>0.0000</b>	<b>1,410.4228</b>

**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	0.2496	2.2757	2.9355	4.9200e-003		0.0963	0.0963		0.0906	0.0906	0.0000	423.2525	423.2525	0.0995	0.0000	425.7398
<b>Total</b>	<b>0.2496</b>	<b>2.2757</b>	<b>2.9355</b>	<b>4.9200e-003</b>		<b>0.0963</b>	<b>0.0963</b>		<b>0.0906</b>	<b>0.0906</b>	<b>0.0000</b>	<b>423.2525</b>	<b>423.2525</b>	<b>0.0995</b>	<b>0.0000</b>	<b>425.7398</b>

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**3.5 Building Construction - 2026**

**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	0.0618	2.9446	0.4461	9.3900e-003	0.2202	2.7500e-003	0.2230	0.0640	2.6300e-003	0.0667	0.0000	892.6791	892.6791	0.0293	0.0000	893.4105
Worker	0.2430	0.1281	1.4966	5.7100e-003	0.7019	4.2100e-003	0.7062	0.1874	3.8800e-003	0.1913	0.0000	516.7938	516.7938	8.7500e-003	0.0000	517.0124
<b>Total</b>	<b>0.3047</b>	<b>3.0727</b>	<b>1.9427</b>	<b>0.0151</b>	<b>0.9222</b>	<b>6.9600e-003</b>	<b>0.9291</b>	<b>0.2515</b>	<b>6.5100e-003</b>	<b>0.2580</b>	<b>0.0000</b>	<b>1,409.4728</b>	<b>1,409.4728</b>	<b>0.0380</b>	<b>0.0000</b>	<b>1,410.4228</b>

**3.5 Building Construction - 2027**

**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	0.0827	0.7544	0.9731	1.6300e-003		0.0319	0.0319		0.0300	0.0300	0.0000	140.3113	140.3113	0.0330	0.0000	141.1358
<b>Total</b>	<b>0.0827</b>	<b>0.7544</b>	<b>0.9731</b>	<b>1.6300e-003</b>		<b>0.0319</b>	<b>0.0319</b>		<b>0.0300</b>	<b>0.0300</b>	<b>0.0000</b>	<b>140.3113</b>	<b>140.3113</b>	<b>0.0330</b>	<b>0.0000</b>	<b>141.1358</b>

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**3.5 Building Construction - 2027**

**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	0.0201	0.9673	0.1442	3.1000e-003	6.4456	8.9000e-004	6.4465	0.6571	8.6000e-004	0.6580	0.0000	294.3435	294.3435	9.4600e-003	0.0000	294.5799
Worker	0.0761	0.0388	0.4625	1.8300e-003	25.3133	1.3300e-003	25.3147	2.5649	1.2200e-003	2.5661	0.0000	165.4058	165.4058	2.6400e-003	0.0000	165.4718
<b>Total</b>	<b>0.0962</b>	<b>1.0061</b>	<b>0.6067</b>	<b>4.9300e-003</b>	<b>31.7589</b>	<b>2.2200e-003</b>	<b>31.7611</b>	<b>3.2220</b>	<b>2.0800e-003</b>	<b>3.2241</b>	<b>0.0000</b>	<b>459.7492</b>	<b>459.7492</b>	<b>0.0121</b>	<b>0.0000</b>	<b>460.0516</b>

**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	0.0827	0.7544	0.9731	1.6300e-003		0.0319	0.0319		0.0300	0.0300	0.0000	140.3111	140.3111	0.0330	0.0000	141.1357
<b>Total</b>	<b>0.0827</b>	<b>0.7544</b>	<b>0.9731</b>	<b>1.6300e-003</b>		<b>0.0319</b>	<b>0.0319</b>		<b>0.0300</b>	<b>0.0300</b>	<b>0.0000</b>	<b>140.3111</b>	<b>140.3111</b>	<b>0.0330</b>	<b>0.0000</b>	<b>141.1357</b>

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**3.5 Building Construction - 2027**

**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	0.0201	0.9673	0.1442	3.1000e-003	0.0730	8.9000e-004	0.0739	0.0212	8.6000e-004	0.0221	0.0000	294.3435	294.3435	9.4600e-003	0.0000	294.5799
Worker	0.0761	0.0388	0.4625	1.8300e-003	0.2327	1.3300e-003	0.2340	0.0621	1.2200e-003	0.0634	0.0000	165.4058	165.4058	2.6400e-003	0.0000	165.4718
<b>Total</b>	<b>0.0962</b>	<b>1.0061</b>	<b>0.6067</b>	<b>4.9300e-003</b>	<b>0.3057</b>	<b>2.2200e-003</b>	<b>0.3079</b>	<b>0.0834</b>	<b>2.0800e-003</b>	<b>0.0854</b>	<b>0.0000</b>	<b>459.7492</b>	<b>459.7492</b>	<b>0.0121</b>	<b>0.0000</b>	<b>460.0516</b>

**3.6 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5402					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0190	0.1310	0.1687	2.8000e-004		7.6000e-003	7.6000e-003		7.6000e-003	7.6000e-003	0.0000	23.7453	23.7453	1.5500e-003	0.0000	23.7839
<b>Total</b>	<b>0.5592</b>	<b>0.1310</b>	<b>0.1687</b>	<b>2.8000e-004</b>		<b>7.6000e-003</b>	<b>7.6000e-003</b>		<b>7.6000e-003</b>	<b>7.6000e-003</b>	<b>0.0000</b>	<b>23.7453</b>	<b>23.7453</b>	<b>1.5500e-003</b>	<b>0.0000</b>	<b>23.7839</b>

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**3.6 Architectural Coating - 2022**

**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	0.0314	0.0194	0.2084	6.8000e-004	7.7682	4.7000e-004	7.7686	0.7871	4.3000e-004	0.7875	0.0000	61.5303	61.5303	1.3400e-003	0.0000	61.5638
<b>Total</b>	<b>0.0314</b>	<b>0.0194</b>	<b>0.2084</b>	<b>6.8000e-004</b>	<b>7.7682</b>	<b>4.7000e-004</b>	<b>7.7686</b>	<b>0.7871</b>	<b>4.3000e-004</b>	<b>0.7875</b>	<b>0.0000</b>	<b>61.5303</b>	<b>61.5303</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>61.5638</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5402					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0190	0.1310	0.1687	2.8000e-004		7.6000e-003	7.6000e-003		7.6000e-003	7.6000e-003	0.0000	23.7452	23.7452	1.5500e-003	0.0000	23.7839
<b>Total</b>	<b>0.5592</b>	<b>0.1310</b>	<b>0.1687</b>	<b>2.8000e-004</b>		<b>7.6000e-003</b>	<b>7.6000e-003</b>		<b>7.6000e-003</b>	<b>7.6000e-003</b>	<b>0.0000</b>	<b>23.7452</b>	<b>23.7452</b>	<b>1.5500e-003</b>	<b>0.0000</b>	<b>23.7839</b>

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**3.6 Architectural Coating - 2022**

**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	0.0314	0.0194	0.2084	6.8000e-004	0.0714	4.7000e-004	0.0719	0.0191	4.3000e-004	0.0195	0.0000	61.5303	61.5303	1.3400e-003	0.0000	61.5638
<b>Total</b>	<b>0.0314</b>	<b>0.0194</b>	<b>0.2084</b>	<b>6.8000e-004</b>	<b>0.0714</b>	<b>4.7000e-004</b>	<b>0.0719</b>	<b>0.0191</b>	<b>4.3000e-004</b>	<b>0.0195</b>	<b>0.0000</b>	<b>61.5303</b>	<b>61.5303</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>61.5638</b>

**3.6 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0350	0.2378	0.3305	5.4000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	46.5969	46.5969	2.7900e-003	0.0000	46.6666
<b>Total</b>	<b>1.0950</b>	<b>0.2378</b>	<b>0.3305</b>	<b>5.4000e-004</b>		<b>0.0129</b>	<b>0.0129</b>		<b>0.0129</b>	<b>0.0129</b>	<b>0.0000</b>	<b>46.5969</b>	<b>46.5969</b>	<b>2.7900e-003</b>	<b>0.0000</b>	<b>46.6666</b>

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**3.6 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0576	0.0343	0.3753	1.2800e-003	15.2440	9.0000e-004	15.2449	1.5446	8.3000e-004	1.5454	0.0000	116.1887	116.1887	2.3500e-003	0.0000	116.2476
<b>Total</b>	<b>0.0576</b>	<b>0.0343</b>	<b>0.3753</b>	<b>1.2800e-003</b>	<b>15.2440</b>	<b>9.0000e-004</b>	<b>15.2449</b>	<b>1.5446</b>	<b>8.3000e-004</b>	<b>1.5454</b>	<b>0.0000</b>	<b>116.1887</b>	<b>116.1887</b>	<b>2.3500e-003</b>	<b>0.0000</b>	<b>116.2476</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0350	0.2378	0.3305	5.4000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	46.5968	46.5968	2.7900e-003	0.0000	46.6665
<b>Total</b>	<b>1.0950</b>	<b>0.2378</b>	<b>0.3305</b>	<b>5.4000e-004</b>		<b>0.0129</b>	<b>0.0129</b>		<b>0.0129</b>	<b>0.0129</b>	<b>0.0000</b>	<b>46.5968</b>	<b>46.5968</b>	<b>2.7900e-003</b>	<b>0.0000</b>	<b>46.6665</b>



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**3.6 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0576	0.0343	0.3753	1.2800e-003	0.1401	9.0000e-004	0.1410	0.0374	8.3000e-004	0.0383	0.0000	116.1887	116.1887	2.3500e-003	0.0000	116.2476
<b>Total</b>	<b>0.0576</b>	<b>0.0343</b>	<b>0.3753</b>	<b>1.2800e-003</b>	<b>0.1401</b>	<b>9.0000e-004</b>	<b>0.1410</b>	<b>0.0374</b>	<b>8.3000e-004</b>	<b>0.0383</b>	<b>0.0000</b>	<b>116.1887</b>	<b>116.1887</b>	<b>2.3500e-003</b>	<b>0.0000</b>	<b>116.2476</b>

**3.6 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0629					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.2230	0.3313	5.4000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	46.7245	46.7245	2.6300e-003	0.0000	46.7903
<b>Total</b>	<b>1.0960</b>	<b>0.2230</b>	<b>0.3313</b>	<b>5.4000e-004</b>		<b>0.0112</b>	<b>0.0112</b>		<b>0.0112</b>	<b>0.0112</b>	<b>0.0000</b>	<b>46.7245</b>	<b>46.7245</b>	<b>2.6300e-003</b>	<b>0.0000</b>	<b>46.7903</b>

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**3.6 Architectural Coating - 2024**

**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	0.0544	0.0310	0.3481	1.2400e-003	15.2857	8.8000e-004	15.2866	1.5488	8.1000e-004	1.5496	0.0000	111.9579	111.9579	2.1300e-003	0.0000	112.0110
<b>Total</b>	<b>0.0544</b>	<b>0.0310</b>	<b>0.3481</b>	<b>1.2400e-003</b>	<b>15.2857</b>	<b>8.8000e-004</b>	<b>15.2866</b>	<b>1.5488</b>	<b>8.1000e-004</b>	<b>1.5496</b>	<b>0.0000</b>	<b>111.9579</b>	<b>111.9579</b>	<b>2.1300e-003</b>	<b>0.0000</b>	<b>112.0110</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0629					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.2230	0.3313	5.4000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	46.7245	46.7245	2.6300e-003	0.0000	46.7903
<b>Total</b>	<b>1.0960</b>	<b>0.2230</b>	<b>0.3313</b>	<b>5.4000e-004</b>		<b>0.0112</b>	<b>0.0112</b>		<b>0.0112</b>	<b>0.0112</b>	<b>0.0000</b>	<b>46.7245</b>	<b>46.7245</b>	<b>2.6300e-003</b>	<b>0.0000</b>	<b>46.7903</b>

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**3.6 Architectural Coating - 2024**

**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	0.0544	0.0310	0.3481	1.2400e-003	0.1405	8.8000e-004	0.1414	0.0375	8.1000e-004	0.0383	0.0000	111.9579	111.9579	2.1300e-003	0.0000	112.0110
<b>Total</b>	<b>0.0544</b>	<b>0.0310</b>	<b>0.3481</b>	<b>1.2400e-003</b>	<b>0.1405</b>	<b>8.8000e-004</b>	<b>0.1414</b>	<b>0.0375</b>	<b>8.1000e-004</b>	<b>0.0383</b>	<b>0.0000</b>	<b>111.9579</b>	<b>111.9579</b>	<b>2.1300e-003</b>	<b>0.0000</b>	<b>112.0110</b>

**3.6 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.2091	0.3302	5.4000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	46.5969	46.5969	2.5400e-003	0.0000	46.6604
<b>Total</b>	<b>1.0912</b>	<b>0.2091</b>	<b>0.3302</b>	<b>5.4000e-004</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>	<b>0.0000</b>	<b>46.5969</b>	<b>46.5969</b>	<b>2.5400e-003</b>	<b>0.0000</b>	<b>46.6604</b>

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**3.6 Architectural Coating - 2025**

**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	0.0512	0.0280	0.3211	1.1800e-003	15.2440	8.7000e-004	15.2448	1.5446	8.0000e-004	1.5454	0.0000	107.1602	107.1602	1.9200e-003	0.0000	107.2081
<b>Total</b>	<b>0.0512</b>	<b>0.0280</b>	<b>0.3211</b>	<b>1.1800e-003</b>	<b>15.2440</b>	<b>8.7000e-004</b>	<b>15.2448</b>	<b>1.5446</b>	<b>8.0000e-004</b>	<b>1.5454</b>	<b>0.0000</b>	<b>107.1602</b>	<b>107.1602</b>	<b>1.9200e-003</b>	<b>0.0000</b>	<b>107.2081</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.2091	0.3302	5.4000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	46.5968	46.5968	2.5400e-003	0.0000	46.6604
<b>Total</b>	<b>1.0912</b>	<b>0.2091</b>	<b>0.3302</b>	<b>5.4000e-004</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>	<b>0.0000</b>	<b>46.5968</b>	<b>46.5968</b>	<b>2.5400e-003</b>	<b>0.0000</b>	<b>46.6604</b>

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**3.6 Architectural Coating - 2025**

**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	0.0512	0.0280	0.3211	1.1800e-003	0.1401	8.7000e-004	0.1410	0.0374	8.0000e-004	0.0382	0.0000	107.1602	107.1602	1.9200e-003	0.0000	107.2081
<b>Total</b>	<b>0.0512</b>	<b>0.0280</b>	<b>0.3211</b>	<b>1.1800e-003</b>	<b>0.1401</b>	<b>8.7000e-004</b>	<b>0.1410</b>	<b>0.0374</b>	<b>8.0000e-004</b>	<b>0.0382</b>	<b>0.0000</b>	<b>107.1602</b>	<b>107.1602</b>	<b>1.9200e-003</b>	<b>0.0000</b>	<b>107.2081</b>

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.2091	0.3302	5.4000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	46.5969	46.5969	2.5400e-003	0.0000	46.6604
<b>Total</b>	<b>1.0912</b>	<b>0.2091</b>	<b>0.3302</b>	<b>5.4000e-004</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>	<b>0.0000</b>	<b>46.5969</b>	<b>46.5969</b>	<b>2.5400e-003</b>	<b>0.0000</b>	<b>46.6604</b>

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**3.6 Architectural Coating - 2026**

**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	0.0485	0.0256	0.2988	1.1400e-003	15.2440	8.4000e-004	15.2448	1.5446	7.7000e-004	1.5454	0.0000	103.1712	103.1712	1.7500e-003	0.0000	103.2148
<b>Total</b>	<b>0.0485</b>	<b>0.0256</b>	<b>0.2988</b>	<b>1.1400e-003</b>	<b>15.2440</b>	<b>8.4000e-004</b>	<b>15.2448</b>	<b>1.5446</b>	<b>7.7000e-004</b>	<b>1.5454</b>	<b>0.0000</b>	<b>103.1712</b>	<b>103.1712</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>103.2148</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.2091	0.3302	5.4000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	46.5968	46.5968	2.5400e-003	0.0000	46.6604
<b>Total</b>	<b>1.0912</b>	<b>0.2091</b>	<b>0.3302</b>	<b>5.4000e-004</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>	<b>0.0000</b>	<b>46.5968</b>	<b>46.5968</b>	<b>2.5400e-003</b>	<b>0.0000</b>	<b>46.6604</b>

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**3.6 Architectural Coating - 2026**

**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	0.0485	0.0256	0.2988	1.1400e-003	0.1401	8.4000e-004	0.1410	0.0374	7.7000e-004	0.0382	0.0000	103.1712	103.1712	1.7500e-003	0.0000	103.2148
<b>Total</b>	<b>0.0485</b>	<b>0.0256</b>	<b>0.2988</b>	<b>1.1400e-003</b>	<b>0.1401</b>	<b>8.4000e-004</b>	<b>0.1410</b>	<b>0.0374</b>	<b>7.7000e-004</b>	<b>0.0382</b>	<b>0.0000</b>	<b>103.1712</b>	<b>103.1712</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>103.2148</b>

**3.6 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3921					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.0773	0.1221	2.0000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	17.2345	17.2345	9.4000e-004	0.0000	17.2580
<b>Total</b>	<b>0.4036</b>	<b>0.0773</b>	<b>0.1221</b>	<b>2.0000e-004</b>		<b>3.4800e-003</b>	<b>3.4800e-003</b>		<b>3.4800e-003</b>	<b>3.4800e-003</b>	<b>0.0000</b>	<b>17.2345</b>	<b>17.2345</b>	<b>9.4000e-004</b>	<b>0.0000</b>	<b>17.2580</b>

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**3.6 Architectural Coating - 2027**

**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	0.0170	8.6400e-003	0.1030	4.1000e-004	5.6382	3.0000e-004	5.6385	0.5713	2.7000e-004	0.5716	0.0000	36.8418	36.8418	5.9000e-004	0.0000	36.8564
<b>Total</b>	<b>0.0170</b>	<b>8.6400e-003</b>	<b>0.1030</b>	<b>4.1000e-004</b>	<b>5.6382</b>	<b>3.0000e-004</b>	<b>5.6385</b>	<b>0.5713</b>	<b>2.7000e-004</b>	<b>0.5716</b>	<b>0.0000</b>	<b>36.8418</b>	<b>36.8418</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>36.8564</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3921					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.0773	0.1221	2.0000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	17.2344	17.2344	9.4000e-004	0.0000	17.2580
<b>Total</b>	<b>0.4036</b>	<b>0.0773</b>	<b>0.1221</b>	<b>2.0000e-004</b>		<b>3.4800e-003</b>	<b>3.4800e-003</b>		<b>3.4800e-003</b>	<b>3.4800e-003</b>	<b>0.0000</b>	<b>17.2344</b>	<b>17.2344</b>	<b>9.4000e-004</b>	<b>0.0000</b>	<b>17.2580</b>



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**3.6 Architectural Coating - 2027**

**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	0.0170	8.6400e-003	0.1030	4.1000e-004	0.0518	3.0000e-004	0.0521	0.0138	2.7000e-004	0.0141	0.0000	36.8418	36.8418	5.9000e-004	0.0000	36.8564
<b>Total</b>	<b>0.0170</b>	<b>8.6400e-003</b>	<b>0.1030</b>	<b>4.1000e-004</b>	<b>0.0518</b>	<b>3.0000e-004</b>	<b>0.0521</b>	<b>0.0138</b>	<b>2.7000e-004</b>	<b>0.0141</b>	<b>0.0000</b>	<b>36.8418</b>	<b>36.8418</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>36.8564</b>

**3.7 Building Construction 2 - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2870	2.6252	2.9645	4.9200e-003		0.1277	0.1277		0.1202	0.1202	0.0000	423.0437	423.0437	0.1006	0.0000	425.5596
<b>Total</b>	<b>0.2870</b>	<b>2.6252</b>	<b>2.9645</b>	<b>4.9200e-003</b>		<b>0.1277</b>	<b>0.1277</b>		<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>423.0437</b>	<b>423.0437</b>	<b>0.1006</b>	<b>0.0000</b>	<b>425.5596</b>

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**3.7 Building Construction 2 - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0669	3.0310	0.5026	9.5700e-003	19.4433	2.9600e-003	19.4463	1.9823	2.8300e-003	1.9851	0.0000	909.5964	909.5964	0.0318	0.0000	910.3916
Worker	0.2887	0.1716	1.8797	6.4300e-003	76.3584	4.5200e-003	76.3630	7.7370	4.1600e-003	7.7412	0.0000	581.9999	581.9999	0.0118	0.0000	582.2948
<b>Total</b>	<b>0.3556</b>	<b>3.2025</b>	<b>2.3823</b>	<b>0.0160</b>	<b>95.8018</b>	<b>7.4800e-003</b>	<b>95.8093</b>	<b>9.7193</b>	<b>6.9900e-003</b>	<b>9.7263</b>	<b>0.0000</b>	<b>1,491.5963</b>	<b>1,491.5963</b>	<b>0.0436</b>	<b>0.0000</b>	<b>1,492.6864</b>

**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	0.2870	2.6252	2.9645	4.9200e-003		0.1277	0.1277		0.1202	0.1202	0.0000	423.0432	423.0432	0.1006	0.0000	425.5590
<b>Total</b>	<b>0.2870</b>	<b>2.6252</b>	<b>2.9645</b>	<b>4.9200e-003</b>		<b>0.1277</b>	<b>0.1277</b>		<b>0.1202</b>	<b>0.1202</b>	<b>0.0000</b>	<b>423.0432</b>	<b>423.0432</b>	<b>0.1006</b>	<b>0.0000</b>	<b>425.5590</b>

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**3.7 Building Construction 2 - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0669	3.0310	0.5026	9.5700e-003	0.2203	2.9600e-003	0.2232	0.0640	2.8300e-003	0.0669	0.0000	909.5964	909.5964	0.0318	0.0000	910.3916
Worker	0.2887	0.1716	1.8797	6.4300e-003	0.7019	4.5200e-003	0.7065	0.1874	4.1600e-003	0.1916	0.0000	581.9999	581.9999	0.0118	0.0000	582.2948
<b>Total</b>	<b>0.3556</b>	<b>3.2025</b>	<b>2.3823</b>	<b>0.0160</b>	<b>0.9222</b>	<b>7.4800e-003</b>	<b>0.9297</b>	<b>0.2515</b>	<b>6.9900e-003</b>	<b>0.2585</b>	<b>0.0000</b>	<b>1,491.5963</b>	<b>1,491.5963</b>	<b>0.0436</b>	<b>0.0000</b>	<b>1,492.6864</b>

**3.8 Architectural Coating 2 - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.9768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0336	0.2287	0.3179	5.2000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	44.8096	44.8096	2.6800e-003	0.0000	44.8766
<b>Total</b>	<b>5.0104</b>	<b>0.2287</b>	<b>0.3179</b>	<b>5.2000e-004</b>		<b>0.0124</b>	<b>0.0124</b>		<b>0.0124</b>	<b>0.0124</b>	<b>0.0000</b>	<b>44.8096</b>	<b>44.8096</b>	<b>2.6800e-003</b>	<b>0.0000</b>	<b>44.8766</b>

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**3.8 Architectural Coating 2 - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0554	0.0329	0.3609	1.2400e-003	14.6593	8.7000e-004	14.6601	1.4854	8.0000e-004	1.4862	0.0000	111.7322	111.7322	2.2600e-003	0.0000	111.7888
<b>Total</b>	<b>0.0554</b>	<b>0.0329</b>	<b>0.3609</b>	<b>1.2400e-003</b>	<b>14.6593</b>	<b>8.7000e-004</b>	<b>14.6601</b>	<b>1.4854</b>	<b>8.0000e-004</b>	<b>1.4862</b>	<b>0.0000</b>	<b>111.7322</b>	<b>111.7322</b>	<b>2.2600e-003</b>	<b>0.0000</b>	<b>111.7888</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.9768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0336	0.2287	0.3179	5.2000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	44.8096	44.8096	2.6800e-003	0.0000	44.8766
<b>Total</b>	<b>5.0104</b>	<b>0.2287</b>	<b>0.3179</b>	<b>5.2000e-004</b>		<b>0.0124</b>	<b>0.0124</b>		<b>0.0124</b>	<b>0.0124</b>	<b>0.0000</b>	<b>44.8096</b>	<b>44.8096</b>	<b>2.6800e-003</b>	<b>0.0000</b>	<b>44.8766</b>

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**3.8 Architectural Coating 2 - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0554	0.0329	0.3609	1.2400e-003	0.1348	8.7000e-004	0.1356	0.0360	8.0000e-004	0.0368	0.0000	111.7322	111.7322	2.2600e-003	0.0000	111.7888
<b>Total</b>	<b>0.0554</b>	<b>0.0329</b>	<b>0.3609</b>	<b>1.2400e-003</b>	<b>0.1348</b>	<b>8.7000e-004</b>	<b>0.1356</b>	<b>0.0360</b>	<b>8.0000e-004</b>	<b>0.0368</b>	<b>0.0000</b>	<b>111.7322</b>	<b>111.7322</b>	<b>2.2600e-003</b>	<b>0.0000</b>	<b>111.7888</b>

**3.8 Architectural Coating 2 - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1985					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	8.5300e-003	0.0127	2.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	1.7873	1.7873	1.0000e-004	0.0000	1.7898
<b>Total</b>	<b>0.1998</b>	<b>8.5300e-003</b>	<b>0.0127</b>	<b>2.0000e-005</b>		<b>4.3000e-004</b>	<b>4.3000e-004</b>		<b>4.3000e-004</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>1.7873</b>	<b>1.7873</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.7898</b>

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**3.8 Architectural Coating 2 - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0800e-003	1.1900e-003	0.0133	5.0000e-005	0.5847	3.0000e-005	0.5847	0.0592	3.0000e-005	0.0593	0.0000	4.2825	4.2825	8.0000e-005	0.0000	4.2846
<b>Total</b>	<b>2.0800e-003</b>	<b>1.1900e-003</b>	<b>0.0133</b>	<b>5.0000e-005</b>	<b>0.5847</b>	<b>3.0000e-005</b>	<b>0.5847</b>	<b>0.0592</b>	<b>3.0000e-005</b>	<b>0.0593</b>	<b>0.0000</b>	<b>4.2825</b>	<b>4.2825</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>4.2846</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1985					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	8.5300e-003	0.0127	2.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	1.7873	1.7873	1.0000e-004	0.0000	1.7898
<b>Total</b>	<b>0.1998</b>	<b>8.5300e-003</b>	<b>0.0127</b>	<b>2.0000e-005</b>		<b>4.3000e-004</b>	<b>4.3000e-004</b>		<b>4.3000e-004</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>1.7873</b>	<b>1.7873</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.7898</b>

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**3.8 Architectural Coating 2 - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0800e-003	1.1900e-003	0.0133	5.0000e-005	5.3800e-003	3.0000e-005	5.4100e-003	1.4400e-003	3.0000e-005	1.4700e-003	0.0000	4.2825	4.2825	8.0000e-005	0.0000	4.2846
<b>Total</b>	<b>2.0800e-003</b>	<b>1.1900e-003</b>	<b>0.0133</b>	<b>5.0000e-005</b>	<b>5.3800e-003</b>	<b>3.0000e-005</b>	<b>5.4100e-003</b>	<b>1.4400e-003</b>	<b>3.0000e-005</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>4.2825</b>	<b>4.2825</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>4.2846</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

ARC - Construction Phase I (Overlap) - Yolo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9100	8.0909	9.2300	0.0493	246.8486	0.0293	246.8779	25.2555	0.0273	25.2828	0.0000	4,570.7389	4,570.7389	0.1488	0.0000	4,574.4594
Unmitigated	0.9100	8.0909	9.2300	0.0493	246.8486	0.0293	246.8779	25.2555	0.0273	25.2828	0.0000	4,570.7389	4,570.7389	0.1488	0.0000	4,574.4594

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	3,087,440	3,087,440
Condo/Townhouse	162.68	158.76	135.52	415,263	415,263
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Research & Development	4,379.40	1,026.00	599.40	7,377,182	7,377,182
Unenclosed Parking with Elevator	0.00	0.00	0.00		
<b>Total</b>	<b>5,745.73</b>	<b>2,341.35</b>	<b>1,795.58</b>	<b>10,879,884</b>	<b>10,879,884</b>

4.3 Trip Type Information



ARC - Construction Phase I (Overlap) - Yolo County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Condo/Townhouse	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Research & Development	10.00	5.00	7.00	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Condo/Townhouse	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Other Asphalt Surfaces	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Parking Lot	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Research & Development	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Unenclosed Parking with Elevator	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC - Construction Phase I (Overlap) - Yolo County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	551.3006	551.3006	0.0805	0.0167	558.2754
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	551.3006	551.3006	0.0805	0.0167	558.2754
NaturalGas Mitigated	0.0669	0.6012	0.4604	3.6500e-003			0.0462	0.0462		0.0462	0.0000	662.0016	662.0016	0.0127	0.0121	665.9355
NaturalGas Unmitigated	0.0669	0.6012	0.4604	3.6500e-003			0.0462	0.0462		0.0462	0.0000	662.0016	662.0016	0.0127	0.0121	665.9355

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**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					
Apartments Mid Rise	1.76441e+006	9.5100e-003	0.0813	0.0346	5.2000e-004		6.5700e-003	6.5700e-003		6.5700e-003	6.5700e-003	0.0000	94.1554	94.1554	1.8000e-003	1.7300e-003	94.7150
Condo/Townhouse	575435	3.1000e-003	0.0265	0.0113	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.7074	30.7074	5.9000e-004	5.6000e-004	30.8899
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Research & Development	1.00656e+007	0.0543	0.4934	0.4145	2.9600e-003		0.0375	0.0375		0.0375	0.0375	0.0000	537.1388	537.1388	0.0103	9.8500e-003	540.3307
Unenclosed Parking with Elevator	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
<b>Total</b>		<b>0.0669</b>	<b>0.6012</b>	<b>0.4604</b>	<b>3.6500e-003</b>		<b>0.0462</b>	<b>0.0462</b>		<b>0.0462</b>	<b>0.0462</b>	<b>0.0000</b>	<b>662.0016</b>	<b>662.0016</b>	<b>0.0127</b>	<b>0.0121</b>	<b>665.9355</b>

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**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					
Apartments Mid Rise	1.76441e+006	9.5100e-003	0.0813	0.0346	5.2000e-004		6.5700e-003	6.5700e-003		6.5700e-003	6.5700e-003	0.0000	94.1554	94.1554	1.8000e-003	1.7300e-003	94.7150
Condo/Townhouse	575435	3.1000e-003	0.0265	0.0113	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.7074	30.7074	5.9000e-004	5.6000e-004	30.8899
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Research & Development	1.00656e+007	0.0543	0.4934	0.4145	2.9600e-003		0.0375	0.0375		0.0375	0.0375	0.0000	537.1388	537.1388	0.0103	9.8500e-003	540.3307
Unenclosed Parking with Elevator	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
<b>Total</b>		<b>0.0669</b>	<b>0.6012</b>	<b>0.4604</b>	<b>3.6500e-003</b>		<b>0.0462</b>	<b>0.0462</b>		<b>0.0462</b>	<b>0.0462</b>	<b>0.0000</b>	<b>662.0016</b>	<b>662.0016</b>	<b>0.0127</b>	<b>0.0121</b>	<b>665.9355</b>

## ARC - Construction Phase I (Overlap) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	770419	69.4125	0.0101	2.1000e-003	70.2907
Condo/Townhouse	144976	13.0619	1.9100e-003	3.9000e-004	13.2272
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	79520	7.1645	1.0500e-003	2.2000e-004	7.2552
Research & Development	4.563e+006	411.1129	0.0600	0.0124	416.3141
Unenclosed Parking with Elevator	561048	50.5488	7.3800e-003	1.5300e-003	51.1883
<b>Total</b>		<b>551.3006</b>	<b>0.0805</b>	<b>0.0167</b>	<b>558.2754</b>

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	770419	69.4125	0.0101	2.1000e-003	70.2907
Condo/Townhouse	144976	13.0619	1.9100e-003	3.9000e-004	13.2272
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	79520	7.1645	1.0500e-003	2.2000e-004	7.2552
Research & Development	4.563e+006	411.1129	0.0600	0.0124	416.3141
Unenclosed Parking with Elevator	561048	50.5488	7.3800e-003	1.5300e-003	51.1883
<b>Total</b>		<b>551.3006</b>	<b>0.0805</b>	<b>0.0167</b>	<b>558.2754</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

ARC - Construction Phase I (Overlap) - Yolo County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	22.9464	0.3606	25.5777	0.0435		3.3757	3.3757		3.3757	3.3757	320.9072	93.1080	414.0152	0.3024	0.0244	428.8313
Unmitigated	22.9464	0.3606	25.5777	0.0435		3.3757	3.3757		3.3757	3.3757	320.9072	93.1080	414.0152	0.3024	0.0244	428.8313

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	19.4205	0.3426	24.0105	0.0434		3.3670	3.3670		3.3670	3.3670	320.9072	90.5404	411.4475	0.2999	0.0244	426.2008
Landscaping	0.0481	0.0180	1.5672	8.0000e-005		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003	0.0000	2.5677	2.5677	2.5100e-003	0.0000	2.6305
<b>Total</b>	<b>22.9465</b>	<b>0.3606</b>	<b>25.5777</b>	<b>0.0435</b>		<b>3.3757</b>	<b>3.3757</b>		<b>3.3757</b>	<b>3.3757</b>	<b>320.9072</b>	<b>93.1080</b>	<b>414.0152</b>	<b>0.3024</b>	<b>0.0244</b>	<b>428.8312</b>

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	19.4205	0.3426	24.0105	0.0434		3.3670	3.3670		3.3670	3.3670	320.9072	90.5404	411.4475	0.2999	0.0244	426.2008
Landscaping	0.0481	0.0180	1.5672	8.0000e-005		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003	0.0000	2.5677	2.5677	2.5100e-003	0.0000	2.6305
<b>Total</b>	<b>22.9465</b>	<b>0.3606</b>	<b>25.5777</b>	<b>0.0435</b>		<b>3.3757</b>	<b>3.3757</b>		<b>3.3757</b>	<b>3.3757</b>	<b>320.9072</b>	<b>93.1080</b>	<b>414.0152</b>	<b>0.3024</b>	<b>0.0244</b>	<b>428.8312</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



ARC - Construction Phase I (Overlap) - Yolo County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	227.3438	9.1158	0.2190	520.4876
Unmitigated	227.3438	9.1158	0.2190	520.4876

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	11.7929 / 7.43464	11.8350	0.3855	9.3200e-003	24.2481
Condo/Townhouse	1.82431 / 1.15011	1.8308	0.0596	1.4400e-003	3.7511
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	265.515 / 0	213.6780	8.6707	0.2082	492.4885
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>227.3438</b>	<b>9.1158</b>	<b>0.2190</b>	<b>520.4876</b>

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	11.7929 / 7.43464	11.8350	0.3855	9.3200e-003	24.2481
Condo/Townhouse	1.82431 / 1.15011	1.8308	0.0596	1.4400e-003	3.7511
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	265.515 / 0	213.6780	8.6707	0.2082	492.4885
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>227.3438</b>	<b>9.1158</b>	<b>0.2190</b>	<b>520.4876</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.8463	1.6457	0.0000	68.9880
Unmitigated	27.8463	1.6457	0.0000	68.9880

## ARC - Construction Phase I (Overlap) - Yolo County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	83.26	16.9010	0.9988	0.0000	41.8716
Condo/Townhouse	12.88	2.6145	0.1545	0.0000	6.4774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	41.04	8.3308	0.4923	0.0000	20.6391
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>27.8463</b>	<b>1.6457</b>	<b>0.0000</b>	<b>68.9880</b>

ARC - Construction Phase I (Overlap) - Yolo County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	83.26	16.9010	0.9988	0.0000	41.8716
Condo/Townhouse	12.88	2.6145	0.1545	0.0000	6.4774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	41.04	8.3308	0.4923	0.0000	20.6391
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>27.8463</b>	<b>1.6457</b>	<b>0.0000</b>	<b>68.9880</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

ARC - Construction Phase I (Overlap) - Yolo County, Annual

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC - Construction Phase I (Overlap) - Yolo County, Summer

**ARC - Construction Phase I (Overlap)**  
**Yolo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	540.00	1000sqft	12.40	540,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	568.00	Space	5.11	227,200.00	0
Unenclosed Parking with Elevator	723.00	Space	6.51	289,200.00	0
Apartments Mid Rise	181.00	Dwelling Unit	4.76	181,000.00	518
Condo/Townhouse	28.00	Dwelling Unit	1.75	28,000.00	80

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2028
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	198.63	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



ARC - Construction Phase I (Overlap) - Yolo County, Summer

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Based on Phase I of ARC

Construction Phase - Construction schedule adjusted based on applicant provided information and to account for overlap of building construction

Trips and VMT - Haul truck trip lengths adjusted per project-specific route of material movement; number of haul trucks based on 12 CY capacity trucks

Grading - Grading area updated for project construction information and off-site improvement areas

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	1,782.00
tblConstructionPhase	NumDays	35.00	365.00
tblConstructionPhase	NumDays	500.00	1,782.00
tblConstructionPhase	NumDays	500.00	365.00
tblConstructionPhase	NumDays	45.00	28.00
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	70.00	112.50
tblGrading	MaterialExported	0.00	130,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	198.63
tblTripsAndVMT	HaulingTripLength	20.00	2.15
tblTripsAndVMT	HaulingTripNumber	16,250.00	10,833.00

**2.0 Emissions Summary**

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**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	lb/day										lb/day					
2022	10.5394	80.4459	36.9034	0.1371	713.2940	1.6822	714.2548	72.2067	1.5493	73.1155	0.0000	13,862.6509	13,862.6509	2.7734	0.0000	13,931.9864
2023	42.7734	66.2819	70.1063	0.2592	1,426.5877	1.6323	1,428.2200	144.4133	1.5436	145.9569	0.0000	26,085.0405	26,085.0405	1.8031	0.0000	26,130.1175
2024	38.7364	33.2295	37.8386	0.1378	811.2177	0.7845	812.0022	82.1103	0.7447	82.8550	0.0000	13,848.2237	13,848.2237	0.9124	0.0000	13,871.0347
2025	9.6165	30.5688	32.6295	0.1253	713.2936	0.6227	713.9163	72.2066	0.5885	72.7951	0.0000	12,610.0914	12,610.0914	0.8649	0.0000	12,631.7136
2026	9.5061	30.3482	31.7218	0.1234	713.2935	0.6216	713.9152	72.2065	0.5875	72.7940	0.0000	12,417.7491	12,417.7491	0.8540	0.0000	12,439.1000
2027	9.3972	30.1400	30.9027	0.1216	713.2934	0.6200	713.9134	72.2065	0.5859	72.7925	0.0000	12,245.7684	12,245.7684	0.8436	0.0000	12,266.8577
<b>Maximum</b>	<b>42.7734</b>	<b>80.4459</b>	<b>70.1063</b>	<b>0.2592</b>	<b>1,426.5877</b>	<b>1.6822</b>	<b>1,428.2200</b>	<b>144.4133</b>	<b>1.5493</b>	<b>145.9569</b>	<b>0.0000</b>	<b>26,085.0405</b>	<b>26,085.0405</b>	<b>2.7734</b>	<b>0.0000</b>	<b>26,130.1175</b>



ARC - Construction Phase I (Overlap) - Yolo County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992
Energy	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918
Mobile	7.6540	53.2449	67.6986	0.3483	1,646.3740	0.1950	1,646.5690	168.5624	0.1821	168.7445		35,559.1919	35,559.1919	1.0954		35,586.5775
<b>Total</b>	<b>501.2828</b>	<b>65.0945</b>	<b>673.2556</b>	<b>1.4270</b>	<b>1,646.3740</b>	<b>82.6662</b>	<b>1,729.0402</b>	<b>168.5624</b>	<b>82.6533</b>	<b>251.2157</b>	<b>8,627.7949</b>	<b>42,023.4061</b>	<b>50,651.2010</b>	<b>9.2662</b>	<b>0.7279</b>	<b>51,099.7686</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992
Energy	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918
Mobile	7.6540	53.2449	67.6986	0.3483	1,646.3740	0.1950	1,646.5690	168.5624	0.1821	168.7445		35,559.1919	35,559.1919	1.0954		35,586.5775
<b>Total</b>	<b>501.2828</b>	<b>65.0945</b>	<b>673.2556</b>	<b>1.4270</b>	<b>1,646.3740</b>	<b>82.6662</b>	<b>1,729.0402</b>	<b>168.5624</b>	<b>82.6533</b>	<b>251.2157</b>	<b>8,627.7949</b>	<b>42,023.4061</b>	<b>50,651.2010</b>	<b>9.2662</b>	<b>0.7279</b>	<b>51,099.7686</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2022	5/7/2022	7	7	
2	Grading	Grading	5/8/2022	6/4/2022	7	28	
3	Paving	Paving	6/5/2022	6/14/2022	7	10	
4	Building Construction	Building Construction	6/15/2022	5/1/2027	7	1782	
5	Architectural Coating	Architectural Coating	6/29/2022	5/15/2027	7	1782	
6	Building Construction 2	Building Construction	1/1/2023	12/31/2023	7	365	
7	Architectural Coating 2	Architectural Coating	1/15/2023	1/14/2024	7	365	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 12.22

Residential Indoor: 423,225; Residential Outdoor: 141,075; Non-Residential Indoor: 810,000; Non-Residential Outdoor: 270,000; Striped Parking Area: 32,552 (Architectural Coating – sqft)

#### OffRoad Equipment

ARC - Construction Phase I (Overlap) - Yolo County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction 2	Cranes	1	7.00	231	0.29
Building Construction 2	Forklifts	3	8.00	89	0.20
Building Construction 2	Generator Sets	1	8.00	84	0.74
Building Construction 2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction 2	Welders	1	8.00	46	0.45
Architectural Coating 2	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

ARC - Construction Phase I (Overlap) - Yolo County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	10,833.00	10.00	7.00	2.15	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	200.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	200.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.2 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0635	0.0309	0.4274	1.3200e-003	16.0239	8.3000e-004	16.0247	1.6206	7.6000e-004	1.6214		131.4614	131.4614	2.8800e-003		131.5335
<b>Total</b>	<b>0.0635</b>	<b>0.0309</b>	<b>0.4274</b>	<b>1.3200e-003</b>	<b>16.0239</b>	<b>8.3000e-004</b>	<b>16.0247</b>	<b>1.6206</b>	<b>7.6000e-004</b>	<b>1.6214</b>		<b>131.4614</b>	<b>131.4614</b>	<b>2.8800e-003</b>		<b>131.5335</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>



ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.2 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0635	0.0309	0.4274	1.3200e-003	0.1298	8.3000e-004	0.1306	0.0346	7.6000e-004	0.0353		131.4614	131.4614	2.8800e-003		131.5335
<b>Total</b>	<b>0.0635</b>	<b>0.0309</b>	<b>0.4274</b>	<b>1.3200e-003</b>	<b>0.1298</b>	<b>8.3000e-004</b>	<b>0.1306</b>	<b>0.0346</b>	<b>7.6000e-004</b>	<b>0.0353</b>		<b>131.4614</b>	<b>131.4614</b>	<b>2.8800e-003</b>		<b>131.5335</b>

**3.3 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5598	0.0000	12.5598	4.1151	0.0000	4.1151			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>12.5598</b>	<b>1.6349</b>	<b>14.1947</b>	<b>4.1151</b>	<b>1.5041</b>	<b>5.6192</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.3 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8460	41.5681	4.5384	0.0735	74.1468	0.0464	74.1932	7.5215	0.0444	7.5658		7,705.172 2	7,705.172 2	0.8260		7,725.822 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0344	0.4749	1.4700e-003	17.8044	9.2000e-004	17.8053	1.8007	8.5000e-004	1.8015		146.0682	146.0682	3.2100e-003		146.1483
<b>Total</b>	<b>0.9165</b>	<b>41.6024</b>	<b>5.0133</b>	<b>0.0750</b>	<b>91.9512</b>	<b>0.0473</b>	<b>91.9985</b>	<b>9.3222</b>	<b>0.0452</b>	<b>9.3674</b>		<b>7,851.240 4</b>	<b>7,851.240 4</b>	<b>0.8292</b>		<b>7,871.970 6</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5598	0.0000	12.5598	4.1151	0.0000	4.1151			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.015 8
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>12.5598</b>	<b>1.6349</b>	<b>14.1947</b>	<b>4.1151</b>	<b>1.5041</b>	<b>5.6192</b>	<b>0.0000</b>	<b>6,011.410 5</b>	<b>6,011.410 5</b>	<b>1.9442</b>		<b>6,060.015 8</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.3 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8460	41.5681	4.5384	0.0735	0.6966	0.0464	0.7429	0.1921	0.0444	0.2364		7,705.172 2	7,705.172 2	0.8260		7,725.822 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0344	0.4749	1.4700e-003	0.1442	9.2000e-004	0.1451	0.0384	8.5000e-004	0.0393		146.0682	146.0682	3.2100e-003		146.1483
<b>Total</b>	<b>0.9165</b>	<b>41.6024</b>	<b>5.0133</b>	<b>0.0750</b>	<b>0.8408</b>	<b>0.0473</b>	<b>0.8881</b>	<b>0.2305</b>	<b>0.0452</b>	<b>0.2757</b>		<b>7,851.240 4</b>	<b>7,851.240 4</b>	<b>0.8292</b>		<b>7,871.970 6</b>

**3.4 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	1.4960					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5988</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>		<b>2,207.660 3</b>	<b>2,207.660 3</b>	<b>0.7140</b>		<b>2,225.510 4</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.4 Paving - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0529	0.0258	0.3561	1.1000e-003	13.3533	6.9000e-004	13.3540	1.3505	6.4000e-004	1.3511		109.5512	109.5512	2.4000e-003		109.6113
<b>Total</b>	<b>0.0529</b>	<b>0.0258</b>	<b>0.3561</b>	<b>1.1000e-003</b>	<b>13.3533</b>	<b>6.9000e-004</b>	<b>13.3540</b>	<b>1.3505</b>	<b>6.4000e-004</b>	<b>1.3511</b>		<b>109.5512</b>	<b>109.5512</b>	<b>2.4000e-003</b>		<b>109.6113</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.4960					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5988</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>	<b>0.0000</b>	<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>		<b>2,225.5104</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.4 Paving - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0529	0.0258	0.3561	1.1000e-003	0.1082	6.9000e-004	0.1088	0.0288	6.4000e-004	0.0294		109.5512	109.5512	2.4000e-003		109.6113
<b>Total</b>	<b>0.0529</b>	<b>0.0258</b>	<b>0.3561</b>	<b>1.1000e-003</b>	<b>0.1082</b>	<b>6.9000e-004</b>	<b>0.1088</b>	<b>0.0288</b>	<b>6.4000e-004</b>	<b>0.0294</b>		<b>109.5512</b>	<b>109.5512</b>	<b>2.4000e-003</b>		<b>109.6113</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4886	19.7673	3.0324	0.0542	124.8603	0.0397	124.9000	12.6947	0.0379	12.7326		5,678.6591	5,678.6591	0.2462		5,684.8134
Worker	1.9436	0.9467	13.0823	0.0404	490.5098	0.0253	490.5351	49.6084	0.0233	49.6317		4,024.1788	4,024.1788	0.0883		4,026.3866
<b>Total</b>	<b>2.4322</b>	<b>20.7140</b>	<b>16.1147</b>	<b>0.0946</b>	<b>615.3701</b>	<b>0.0650</b>	<b>615.4351</b>	<b>62.3031</b>	<b>0.0613</b>	<b>62.3643</b>		<b>9,702.8379</b>	<b>9,702.8379</b>	<b>0.3345</b>		<b>9,711.1999</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4886	19.7673	3.0324	0.0542	1.2393	0.0397	1.2790	0.3589	0.0379	0.3968		5,678.6591	5,678.6591	0.2462		5,684.8134
Worker	1.9436	0.9467	13.0823	0.0404	3.9729	0.0253	3.9982	1.0582	0.0233	1.0815		4,024.1788	4,024.1788	0.0883		4,026.3866
<b>Total</b>	<b>2.4322</b>	<b>20.7140</b>	<b>16.1147</b>	<b>0.0946</b>	<b>5.2122</b>	<b>0.0650</b>	<b>5.2772</b>	<b>1.4170</b>	<b>0.0613</b>	<b>1.4783</b>		<b>9,702.8379</b>	<b>9,702.8379</b>	<b>0.3345</b>		<b>9,711.1999</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3591	16.4321	2.5654	0.0531	124.8602	0.0159	124.8760	12.6946	0.0152	12.7098		5,560.6960	5,560.6960	0.1819		5,565.2442
Worker	1.8174	0.8511	12.0308	0.0388	490.5098	0.0248	490.5346	49.6084	0.0228	49.6312		3,872.1431	3,872.1431	0.0791		3,874.1214
<b>Total</b>	<b>2.1764</b>	<b>17.2832</b>	<b>14.5962</b>	<b>0.0919</b>	<b>615.3700</b>	<b>0.0406</b>	<b>615.4106</b>	<b>62.3030</b>	<b>0.0380</b>	<b>62.3410</b>		<b>9,432.8392</b>	<b>9,432.8392</b>	<b>0.2611</b>		<b>9,439.3656</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>



ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3591	16.4321	2.5654	0.0531	1.2392	0.0159	1.2551	0.3588	0.0152	0.3740		5,560.6960	5,560.6960	0.1819		5,565.2442
Worker	1.8174	0.8511	12.0308	0.0388	3.9729	0.0248	3.9977	1.0582	0.0228	1.0810		3,872.1431	3,872.1431	0.0791		3,874.1214
<b>Total</b>	<b>2.1764</b>	<b>17.2832</b>	<b>14.5962</b>	<b>0.0919</b>	<b>5.2121</b>	<b>0.0406</b>	<b>5.2527</b>	<b>1.4170</b>	<b>0.0380</b>	<b>1.4550</b>		<b>9,432.8392</b>	<b>9,432.8392</b>	<b>0.2611</b>		<b>9,439.3656</b>

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3484	16.2733	2.4490	0.0527	124.8600	0.0155	124.8755	12.6946	0.0148	12.7094		5,523.2803	5,523.2803	0.1767		5,527.6966
Worker	1.7072	0.7682	11.1504	0.0373	490.5098	0.0242	490.5340	49.6084	0.0223	49.6307		3,720.7497	3,720.7497	0.0713		3,722.5317
<b>Total</b>	<b>2.0556</b>	<b>17.0414</b>	<b>13.5994</b>	<b>0.0901</b>	<b>615.3698</b>	<b>0.0397</b>	<b>615.4095</b>	<b>62.3030</b>	<b>0.0371</b>	<b>62.3401</b>		<b>9,244.0299</b>	<b>9,244.0299</b>	<b>0.2479</b>		<b>9,250.2283</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3484	16.2733	2.4490	0.0527	1.2390	0.0155	1.2546	0.3588	0.0148	0.3736		5,523.2803	5,523.2803	0.1767		5,527.6966
Worker	1.7072	0.7682	11.1504	0.0373	3.9729	0.0242	3.9971	1.0582	0.0223	1.0805		3,720.7497	3,720.7497	0.0713		3,722.5317
<b>Total</b>	<b>2.0556</b>	<b>17.0414</b>	<b>13.5994</b>	<b>0.0901</b>	<b>5.2119</b>	<b>0.0397</b>	<b>5.2517</b>	<b>1.4169</b>	<b>0.0371</b>	<b>1.4540</b>		<b>9,244.0299</b>	<b>9,244.0299</b>	<b>0.2479</b>		<b>9,250.2283</b>

**3.5 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3390	16.1181	2.3469	0.0524	124.8599	0.0152	124.8751	12.6945	0.0145	12.7090		5,488.4154	5,488.4154	0.1712		5,492.6959
Worker	1.6095	0.6965	10.3271	0.0358	490.5098	0.0238	490.5336	49.6084	0.0219	49.6303		3,570.8748	3,570.8748	0.0645		3,572.4871
<b>Total</b>	<b>1.9485</b>	<b>16.8146</b>	<b>12.6741</b>	<b>0.0882</b>	<b>615.3697</b>	<b>0.0389</b>	<b>615.4086</b>	<b>62.3029</b>	<b>0.0364</b>	<b>62.3393</b>		<b>9,059.2902</b>	<b>9,059.2902</b>	<b>0.2357</b>		<b>9,065.1830</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3390	16.1181	2.3469	0.0524	1.2389	0.0152	1.2541	0.3587	0.0145	0.3732		5,488.4154	5,488.4154	0.1712		5,492.6959
Worker	1.6095	0.6965	10.3271	0.0358	3.9729	0.0238	3.9967	1.0582	0.0219	1.0800		3,570.8748	3,570.8748	0.0645		3,572.4871
<b>Total</b>	<b>1.9485</b>	<b>16.8146</b>	<b>12.6741</b>	<b>0.0882</b>	<b>5.2118</b>	<b>0.0389</b>	<b>5.2507</b>	<b>1.4169</b>	<b>0.0364</b>	<b>1.4532</b>		<b>9,059.2902</b>	<b>9,059.2902</b>	<b>0.2357</b>		<b>9,065.1830</b>

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3316	15.9699	2.2814	0.0521	124.8598	0.0149	124.8747	12.6945	0.0142	12.7087		5,455.6204	5,455.6204	0.1673		5,459.8022
Worker	1.5237	0.6361	9.6251	0.0345	490.5098	0.0231	490.5329	49.6084	0.0213	49.6296		3,437.8784	3,437.8784	0.0587		3,439.3469
<b>Total</b>	<b>1.8553</b>	<b>16.6060</b>	<b>11.9065</b>	<b>0.0866</b>	<b>615.3696</b>	<b>0.0380</b>	<b>615.4076</b>	<b>62.3029</b>	<b>0.0355</b>	<b>62.3383</b>		<b>8,893.4989</b>	<b>8,893.4989</b>	<b>0.2260</b>		<b>8,899.1491</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3316	15.9699	2.2814	0.0521	1.2388	0.0149	1.2537	0.3587	0.0142	0.3729		5,455.6204	5,455.6204	0.1673		5,459.8022
Worker	1.5237	0.6361	9.6251	0.0345	3.9729	0.0231	3.9960	1.0582	0.0213	1.0794		3,437.8784	3,437.8784	0.0587		3,439.3469
<b>Total</b>	<b>1.8553</b>	<b>16.6060</b>	<b>11.9065</b>	<b>0.0866</b>	<b>5.2117</b>	<b>0.0380</b>	<b>5.2497</b>	<b>1.4169</b>	<b>0.0355</b>	<b>1.4523</b>		<b>8,893.4989</b>	<b>8,893.4989</b>	<b>0.2260</b>		<b>8,899.1491</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3252	15.8272	2.2250	0.0518	124.8597	0.0146	124.8743	12.6944	0.0140	12.7084		5,425.9135	5,425.9135	0.1631		5,429.9904
Worker	1.4382	0.5815	8.9893	0.0333	490.5098	0.0219	490.5317	49.6084	0.0202	49.6286		3,319.2811	3,319.2811	0.0535		3,320.6189
<b>Total</b>	<b>1.7634</b>	<b>16.4087</b>	<b>11.2143</b>	<b>0.0851</b>	<b>615.3695</b>	<b>0.0365</b>	<b>615.4060</b>	<b>62.3028</b>	<b>0.0341</b>	<b>62.3370</b>		<b>8,745.1946</b>	<b>8,745.1946</b>	<b>0.2166</b>		<b>8,750.6093</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>



ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.5 Building Construction - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3252	15.8272	2.2250	0.0518	1.2387	0.0146	1.2533	0.3586	0.0140	0.3726		5,425.9135	5,425.9135	0.1631		5,429.9904
Worker	1.4382	0.5815	8.9893	0.0333	3.9729	0.0219	3.9948	1.0582	0.0202	1.0784		3,319.2811	3,319.2811	0.0535		3,320.6189
<b>Total</b>	<b>1.7634</b>	<b>16.4087</b>	<b>11.2143</b>	<b>0.0851</b>	<b>5.2116</b>	<b>0.0365</b>	<b>5.2482</b>	<b>1.4168</b>	<b>0.0341</b>	<b>1.4510</b>		<b>8,745.1946</b>	<b>8,745.1946</b>	<b>0.2166</b>		<b>8,750.6093</b>

**3.6 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>6.0129</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3880	0.1890	2.6117	8.0600e-003	97.9239	5.0600e-003	97.9290	9.9037	4.6600e-003	9.9083		803.3751	803.3751	0.0176		803.8158
<b>Total</b>	<b>0.3880</b>	<b>0.1890</b>	<b>2.6117</b>	<b>8.0600e-003</b>	<b>97.9239</b>	<b>5.0600e-003</b>	<b>97.9290</b>	<b>9.9037</b>	<b>4.6600e-003</b>	<b>9.9083</b>		<b>803.3751</b>	<b>803.3751</b>	<b>0.0176</b>		<b>803.8158</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>6.0129</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3880	0.1890	2.6117	8.0600e-003	0.7931	5.0600e-003	0.7982	0.2113	4.6600e-003	0.2159		803.3751	803.3751	0.0176		803.8158
<b>Total</b>	<b>0.3880</b>	<b>0.1890</b>	<b>2.6117</b>	<b>8.0600e-003</b>	<b>0.7931</b>	<b>5.0600e-003</b>	<b>0.7982</b>	<b>0.2113</b>	<b>4.6600e-003</b>	<b>0.2159</b>		<b>803.3751</b>	<b>803.3751</b>	<b>0.0176</b>		<b>803.8158</b>

**3.6 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.0001</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3628	0.1699	2.4018	7.7500e-003	97.9239	4.9400e-003	97.9289	9.9037	4.5500e-003	9.9082		773.0231	773.0231	0.0158		773.4181
<b>Total</b>	<b>0.3628</b>	<b>0.1699</b>	<b>2.4018</b>	<b>7.7500e-003</b>	<b>97.9239</b>	<b>4.9400e-003</b>	<b>97.9289</b>	<b>9.9037</b>	<b>4.5500e-003</b>	<b>9.9082</b>		<b>773.0231</b>	<b>773.0231</b>	<b>0.0158</b>		<b>773.4181</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.0001</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3628	0.1699	2.4018	7.7500e-003	0.7931	4.9400e-003	0.7981	0.2113	4.5500e-003	0.2158		773.0231	773.0231	0.0158		773.4181
<b>Total</b>	<b>0.3628</b>	<b>0.1699</b>	<b>2.4018</b>	<b>7.7500e-003</b>	<b>0.7931</b>	<b>4.9400e-003</b>	<b>0.7981</b>	<b>0.2113</b>	<b>4.5500e-003</b>	<b>0.2158</b>		<b>773.0231</b>	<b>773.0231</b>	<b>0.0158</b>		<b>773.4181</b>

**3.6 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>5.9892</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3408	0.1534	2.2260	7.4500e-003	97.9239	4.8300e-003	97.9288	9.9037	4.4500e-003	9.9081		742.7994	742.7994	0.0142		743.1552
<b>Total</b>	<b>0.3408</b>	<b>0.1534</b>	<b>2.2260</b>	<b>7.4500e-003</b>	<b>97.9239</b>	<b>4.8300e-003</b>	<b>97.9288</b>	<b>9.9037</b>	<b>4.4500e-003</b>	<b>9.9081</b>		<b>742.7994</b>	<b>742.7994</b>	<b>0.0142</b>		<b>743.1552</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>5.9892</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3408	0.1534	2.2260	7.4500e-003	0.7931	4.8300e-003	0.7980	0.2113	4.4500e-003	0.2157		742.7994	742.7994	0.0142		743.1552
<b>Total</b>	<b>0.3408</b>	<b>0.1534</b>	<b>2.2260</b>	<b>7.4500e-003</b>	<b>0.7931</b>	<b>4.8300e-003</b>	<b>0.7980</b>	<b>0.2113</b>	<b>4.4500e-003</b>	<b>0.2157</b>		<b>742.7994</b>	<b>742.7994</b>	<b>0.0142</b>		<b>743.1552</b>

**3.6 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3213	0.1390	2.0617	7.1500e-003	97.9239	4.7400e-003	97.9287	9.9037	4.3600e-003	9.9080		712.8788	712.8788	0.0129		713.2007
<b>Total</b>	<b>0.3213</b>	<b>0.1390</b>	<b>2.0617</b>	<b>7.1500e-003</b>	<b>97.9239</b>	<b>4.7400e-003</b>	<b>97.9287</b>	<b>9.9037</b>	<b>4.3600e-003</b>	<b>9.9080</b>		<b>712.8788</b>	<b>712.8788</b>	<b>0.0129</b>		<b>713.2007</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>



ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3213	0.1390	2.0617	7.1500e-003	0.7931	4.7400e-003	0.7979	0.2113	4.3600e-003	0.2156		712.8788	712.8788	0.0129		713.2007
<b>Total</b>	<b>0.3213</b>	<b>0.1390</b>	<b>2.0617</b>	<b>7.1500e-003</b>	<b>0.7931</b>	<b>4.7400e-003</b>	<b>0.7979</b>	<b>0.2113</b>	<b>4.3600e-003</b>	<b>0.2156</b>		<b>712.8788</b>	<b>712.8788</b>	<b>0.0129</b>		<b>713.2007</b>

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3042	0.1270	1.9215	6.8800e-003	97.9239	4.6100e-003	97.9285	9.9037	4.2400e-003	9.9079		686.3278	686.3278	0.0117		686.6210
<b>Total</b>	<b>0.3042</b>	<b>0.1270</b>	<b>1.9215</b>	<b>6.8800e-003</b>	<b>97.9239</b>	<b>4.6100e-003</b>	<b>97.9285</b>	<b>9.9037</b>	<b>4.2400e-003</b>	<b>9.9079</b>		<b>686.3278</b>	<b>686.3278</b>	<b>0.0117</b>		<b>686.6210</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3042	0.1270	1.9215	6.8800e-003	0.7931	4.6100e-003	0.7978	0.2113	4.2400e-003	0.2155		686.3278	686.3278	0.0117		686.6210
<b>Total</b>	<b>0.3042</b>	<b>0.1270</b>	<b>1.9215</b>	<b>6.8800e-003</b>	<b>0.7931</b>	<b>4.6100e-003</b>	<b>0.7978</b>	<b>0.2113</b>	<b>4.2400e-003</b>	<b>0.2155</b>		<b>686.3278</b>	<b>686.3278</b>	<b>0.0117</b>		<b>686.6210</b>

**3.6 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2871	0.1161	1.7946	6.6400e-003	97.9239	4.3800e-003	97.9283	9.9037	4.0300e-003	9.9077		662.6514	662.6514	0.0107		662.9185
<b>Total</b>	<b>0.2871</b>	<b>0.1161</b>	<b>1.7946</b>	<b>6.6400e-003</b>	<b>97.9239</b>	<b>4.3800e-003</b>	<b>97.9283</b>	<b>9.9037</b>	<b>4.0300e-003</b>	<b>9.9077</b>		<b>662.6514</b>	<b>662.6514</b>	<b>0.0107</b>		<b>662.9185</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.6 Architectural Coating - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2871	0.1161	1.7946	6.6400e-003	0.7931	4.3800e-003	0.7975	0.2113	4.0300e-003	0.2153		662.6514	662.6514	0.0107		662.9185
<b>Total</b>	<b>0.2871</b>	<b>0.1161</b>	<b>1.7946</b>	<b>6.6400e-003</b>	<b>0.7931</b>	<b>4.3800e-003</b>	<b>0.7975</b>	<b>0.2113</b>	<b>4.0300e-003</b>	<b>0.2153</b>		<b>662.6514</b>	<b>662.6514</b>	<b>0.0107</b>		<b>662.9185</b>

**3.7 Building Construction 2 - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.7 Building Construction 2 - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3591	16.4321	2.5654	0.0531	124.8602	0.0159	124.8760	12.6946	0.0152	12.7098		5,560.6960	5,560.6960	0.1819		5,565.2442
Worker	1.8174	0.8511	12.0308	0.0388	490.5098	0.0248	490.5346	49.6084	0.0228	49.6312		3,872.1431	3,872.1431	0.0791		3,874.1214
<b>Total</b>	<b>2.1764</b>	<b>17.2832</b>	<b>14.5962</b>	<b>0.0919</b>	<b>615.3700</b>	<b>0.0406</b>	<b>615.4106</b>	<b>62.3030</b>	<b>0.0380</b>	<b>62.3410</b>		<b>9,432.8392</b>	<b>9,432.8392</b>	<b>0.2611</b>		<b>9,439.3656</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.7 Building Construction 2 - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3591	16.4321	2.5654	0.0531	1.2392	0.0159	1.2551	0.3588	0.0152	0.3740		5,560.6960	5,560.6960	0.1819		5,565.2442
Worker	1.8174	0.8511	12.0308	0.0388	3.9729	0.0248	3.9977	1.0582	0.0228	1.0810		3,872.1431	3,872.1431	0.0791		3,874.1214
<b>Total</b>	<b>2.1764</b>	<b>17.2832</b>	<b>14.5962</b>	<b>0.0919</b>	<b>5.2121</b>	<b>0.0406</b>	<b>5.2527</b>	<b>1.4170</b>	<b>0.0380</b>	<b>1.4550</b>		<b>9,432.8392</b>	<b>9,432.8392</b>	<b>0.2611</b>		<b>9,439.3656</b>

**3.8 Architectural Coating 2 - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>28.5493</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.8 Architectural Coating 2 - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3628	0.1699	2.4018	7.7500e-003	97.9239	4.9400e-003	97.9289	9.9037	4.5500e-003	9.9082		773.0231	773.0231	0.0158		773.4181
<b>Total</b>	<b>0.3628</b>	<b>0.1699</b>	<b>2.4018</b>	<b>7.7500e-003</b>	<b>97.9239</b>	<b>4.9400e-003</b>	<b>97.9289</b>	<b>9.9037</b>	<b>4.5500e-003</b>	<b>9.9082</b>		<b>773.0231</b>	<b>773.0231</b>	<b>0.0158</b>		<b>773.4181</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>28.5493</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>



ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.8 Architectural Coating 2 - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3628	0.1699	2.4018	7.7500e-003	0.7931	4.9400e-003	0.7981	0.2113	4.5500e-003	0.2158		773.0231	773.0231	0.0158		773.4181
<b>Total</b>	<b>0.3628</b>	<b>0.1699</b>	<b>2.4018</b>	<b>7.7500e-003</b>	<b>0.7931</b>	<b>4.9400e-003</b>	<b>0.7981</b>	<b>0.2113</b>	<b>4.5500e-003</b>	<b>0.2158</b>		<b>773.0231</b>	<b>773.0231</b>	<b>0.0158</b>		<b>773.4181</b>

**3.8 Architectural Coating 2 - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>28.5384</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.8 Architectural Coating 2 - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3408	0.1534	2.2260	7.4500e-003	97.9239	4.8300e-003	97.9288	9.9037	4.4500e-003	9.9081		742.7994	742.7994	0.0142		743.1552
<b>Total</b>	<b>0.3408</b>	<b>0.1534</b>	<b>2.2260</b>	<b>7.4500e-003</b>	<b>97.9239</b>	<b>4.8300e-003</b>	<b>97.9288</b>	<b>9.9037</b>	<b>4.4500e-003</b>	<b>9.9081</b>		<b>742.7994</b>	<b>742.7994</b>	<b>0.0142</b>		<b>743.1552</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>28.5384</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**3.8 Architectural Coating 2 - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3408	0.1534	2.2260	7.4500e-003	0.7931	4.8300e-003	0.7980	0.2113	4.4500e-003	0.2157		742.7994	742.7994	0.0142		743.1552
<b>Total</b>	<b>0.3408</b>	<b>0.1534</b>	<b>2.2260</b>	<b>7.4500e-003</b>	<b>0.7931</b>	<b>4.8300e-003</b>	<b>0.7980</b>	<b>0.2113</b>	<b>4.4500e-003</b>	<b>0.2157</b>		<b>742.7994</b>	<b>742.7994</b>	<b>0.0142</b>		<b>743.1552</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

ARC - Construction Phase I (Overlap) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.6540	53.2449	67.6986	0.3483	1,646.3740	0.1950	1,646.5690	168.5624	0.1821	168.7445		35,559.1919	35,559.1919	1.0954		35,586.5775
Unmitigated	7.6540	53.2449	67.6986	0.3483	1,646.3740	0.1950	1,646.5690	168.5624	0.1821	168.7445		35,559.1919	35,559.1919	1.0954		35,586.5775

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	3,087,440	3,087,440
Condo/Townhouse	162.68	158.76	135.52	415,263	415,263
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Research & Development	4,379.40	1,026.00	599.40	7,377,182	7,377,182
Unenclosed Parking with Elevator	0.00	0.00	0.00		
<b>Total</b>	<b>5,745.73</b>	<b>2,341.35</b>	<b>1,795.58</b>	<b>10,879,884</b>	<b>10,879,884</b>

4.3 Trip Type Information

ARC - Construction Phase I (Overlap) - Yolo County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Condo/Townhouse	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Research & Development	10.00	5.00	7.00	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Condo/Townhouse	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Other Asphalt Surfaces	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Parking Lot	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Research & Development	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Unenclosed Parking with Elevator	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC - Construction Phase I (Overlap) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918
NaturalGas Unmitigated	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4833.99	0.0521	0.4455	0.1896	2.8400e-003		0.0360	0.0360		0.0360	0.0360		568.7046	568.7046	0.0109	0.0104	572.0842
Condo/Townhouse	1576.53	0.0170	0.1453	0.0618	9.3000e-004		0.0118	0.0118		0.0118	0.0118		185.4746	185.4746	3.5500e-003	3.4000e-003	186.5768
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Research & Development	27577	0.2974	2.7036	2.2711	0.0162		0.2055	0.2055		0.2055	0.2055		3,244.3513	3,244.3513	0.0622	0.0595	3,263.6309
Unenclosed Parking with Elevator	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
<b>Total</b>		<b>0.3665</b>	<b>3.2944</b>	<b>2.5224</b>	<b>0.0200</b>		<b>0.2533</b>	<b>0.2533</b>		<b>0.2533</b>	<b>0.2533</b>		<b>3,998.5306</b>	<b>3,998.5306</b>	<b>0.0766</b>	<b>0.0733</b>	<b>4,022.2918</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.83399	0.0521	0.4455	0.1896	2.8400e-003		0.0360	0.0360		0.0360	0.0360		568.7046	568.7046	0.0109	0.0104	572.0842
Condo/Townhouse	1.57653	0.0170	0.1453	0.0618	9.3000e-004		0.0118	0.0118		0.0118	0.0118		185.4746	185.4746	3.5500e-003	3.4000e-003	186.5768
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Research & Development	27.577	0.2974	2.7036	2.2711	0.0162		0.2055	0.2055		0.2055	0.2055		3,244.3513	3,244.3513	0.0622	0.0595	3,263.6309
Unenclosed Parking with Elevator	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
<b>Total</b>		<b>0.3665</b>	<b>3.2944</b>	<b>2.5224</b>	<b>0.0200</b>		<b>0.2533</b>	<b>0.2533</b>		<b>0.2533</b>	<b>0.2533</b>		<b>3,998.5306</b>	<b>3,998.5306</b>	<b>0.0766</b>	<b>0.0733</b>	<b>4,022.2918</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



ARC - Construction Phase I (Overlap) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992
Unmitigated	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.2208					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	473.6714	8.3550	585.6216	1.0578		82.1217	82.1217		82.1217	82.1217	8,627.7949	2,434.2353	11,062.0302	8.0633	0.6546	11,458.6816
Landscaping	0.5344	0.2001	17.4130	9.2000e-004		0.0963	0.0963		0.0963	0.0963		31.4483	31.4483	0.0308		32.2176
<b>Total</b>	<b>493.2623</b>	<b>8.5551</b>	<b>603.0346</b>	<b>1.0587</b>		<b>82.2180</b>	<b>82.2180</b>		<b>82.2180</b>	<b>82.2180</b>	<b>8,627.7949</b>	<b>2,465.6836</b>	<b>11,093.4784</b>	<b>8.0941</b>	<b>0.6546</b>	<b>11,490.8992</b>

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.2208					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	473.6714	8.3550	585.6216	1.0578		82.1217	82.1217		82.1217	82.1217	8,627.7949	2,434.2353	11,062.0302	8.0633	0.6546	11,458.6816
Landscaping	0.5344	0.2001	17.4130	9.2000e-004		0.0963	0.0963		0.0963	0.0963		31.4483	31.4483	0.0308		32.2176
<b>Total</b>	<b>493.2623</b>	<b>8.5551</b>	<b>603.0346</b>	<b>1.0587</b>		<b>82.2180</b>	<b>82.2180</b>		<b>82.2180</b>	<b>82.2180</b>	<b>8,627.7949</b>	<b>2,465.6836</b>	<b>11,093.4784</b>	<b>8.0941</b>	<b>0.6546</b>	<b>11,490.8992</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

ARC - Construction Phase I (Overlap) - Yolo County, Summer

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC - Construction Phase I (Overlap) - Yolo County, Winter

**ARC - Construction Phase I (Overlap)**  
**Yolo County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	540.00	1000sqft	12.40	540,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	568.00	Space	5.11	227,200.00	0
Unenclosed Parking with Elevator	723.00	Space	6.51	289,200.00	0
Apartments Mid Rise	181.00	Dwelling Unit	4.76	181,000.00	518
Condo/Townhouse	28.00	Dwelling Unit	1.75	28,000.00	80

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2028
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	198.63	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

ARC - Construction Phase I (Overlap) - Yolo County, Winter

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Based on Phase I of ARC

Construction Phase - Construction schedule adjusted based on applicant provided information and to account for overlap of building construction

Trips and VMT - Haul truck trip lengths adjusted per project-specific route of material movement; number of haul trucks based on 12 CY capacity trucks

Grading - Grading area updated for project construction information and off-site improvement areas

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	1,782.00
tblConstructionPhase	NumDays	35.00	365.00
tblConstructionPhase	NumDays	500.00	1,782.00
tblConstructionPhase	NumDays	500.00	365.00
tblConstructionPhase	NumDays	45.00	28.00
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	70.00	112.50
tblGrading	MaterialExported	0.00	130,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	198.63
tblTripsAndVMT	HaulingTripLength	20.00	2.15
tblTripsAndVMT	HaulingTripNumber	16,250.00	10,833.00

**2.0 Emissions Summary**

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**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	lb/day										lb/day					
2022	10.4005	79.5431	35.8187	0.1311	713.2940	1.6900	714.2571	72.2067	1.5568	73.1178	0.0000	13,241.4644	13,241.4644	2.8912	0.0000	13,313.7447
2023	42.5103	67.0169	67.2247	0.2453	1,426.5877	1.6338	1,428.2215	144.4133	1.5450	145.9584	0.0000	24,678.9474	24,678.9474	1.8302	0.0000	24,724.7026
2024	38.5948	33.6065	36.1700	0.1302	811.2177	0.7852	812.0028	82.1103	0.7454	82.8557	0.0000	13,082.1319	13,082.1319	0.9246	0.0000	13,105.2474
2025	9.5091	30.8845	31.3391	0.1188	713.2936	0.6233	713.9169	72.2066	0.5890	72.7956	0.0000	11,954.5805	11,954.5805	0.8787	0.0000	11,976.5485
2026	9.4101	30.6437	30.5016	0.1171	713.2935	0.6221	713.9157	72.2065	0.5880	72.7945	0.0000	11,783.2394	11,783.2394	0.8681	0.0000	11,804.9411
2027	9.3120	30.4165	29.7451	0.1155	713.2934	0.6204	713.9139	72.2065	0.5864	72.7929	0.0000	11,629.7137	11,629.7137	0.8577	0.0000	11,651.1558
<b>Maximum</b>	<b>42.5103</b>	<b>79.5431</b>	<b>67.2247</b>	<b>0.2453</b>	<b>1,426.5877</b>	<b>1.6900</b>	<b>1,428.2215</b>	<b>144.4133</b>	<b>1.5568</b>	<b>145.9584</b>	<b>0.0000</b>	<b>24,678.9474</b>	<b>24,678.9474</b>	<b>2.8912</b>	<b>0.0000</b>	<b>24,724.7026</b>



ARC - Construction Phase I (Overlap) - Yolo County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992
Energy	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918
Mobile	5.7325	54.7854	64.6460	0.3225	1,646.3740	0.1961	1,646.5701	168.5624	0.1831	168.7455		32,960.4231	32,960.4231	1.1411		32,988.9502
<b>Total</b>	<b>499.3613</b>	<b>66.6350</b>	<b>670.2030</b>	<b>1.4012</b>	<b>1,646.3740</b>	<b>82.6673</b>	<b>1,729.0413</b>	<b>168.5624</b>	<b>82.6543</b>	<b>251.2167</b>	<b>8,627.7949</b>	<b>39,424.6373</b>	<b>48,052.4321</b>	<b>9.3118</b>	<b>0.7279</b>	<b>48,502.1413</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992
Energy	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918
Mobile	5.7325	54.7854	64.6460	0.3225	1,646.3740	0.1961	1,646.5701	168.5624	0.1831	168.7455		32,960.4231	32,960.4231	1.1411		32,988.9502
<b>Total</b>	<b>499.3613</b>	<b>66.6350</b>	<b>670.2030</b>	<b>1.4012</b>	<b>1,646.3740</b>	<b>82.6673</b>	<b>1,729.0413</b>	<b>168.5624</b>	<b>82.6543</b>	<b>251.2167</b>	<b>8,627.7949</b>	<b>39,424.6373</b>	<b>48,052.4321</b>	<b>9.3118</b>	<b>0.7279</b>	<b>48,502.1413</b>



ARC - Construction Phase I (Overlap) - Yolo County, Winter

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2022	5/7/2022	7	7	
2	Grading	Grading	5/8/2022	6/4/2022	7	28	
3	Paving	Paving	6/5/2022	6/14/2022	7	10	
4	Building Construction	Building Construction	6/15/2022	5/1/2027	7	1782	
5	Architectural Coating	Architectural Coating	6/29/2022	5/15/2027	7	1782	
6	Building Construction 2	Building Construction	1/1/2023	12/31/2023	7	365	
7	Architectural Coating 2	Architectural Coating	1/15/2023	1/14/2024	7	365	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 12.22**

**Residential Indoor: 423,225; Residential Outdoor: 141,075; Non-Residential Indoor: 810,000; Non-Residential Outdoor: 270,000; Striped Parking Area: 32,552 (Architectural Coating – sqft)**

**OffRoad Equipment**

## ARC - Construction Phase I (Overlap) - Yolo County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction 2	Cranes	1	7.00	231	0.29
Building Construction 2	Forklifts	3	8.00	89	0.20
Building Construction 2	Generator Sets	1	8.00	84	0.74
Building Construction 2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction 2	Welders	1	8.00	46	0.45
Architectural Coating 2	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

ARC - Construction Phase I (Overlap) - Yolo County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	10,833.00	10.00	7.00	2.15	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	200.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	200.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.2 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0589	0.0385	0.3731	1.1600e-003	16.0239	8.3000e-004	16.0247	1.6206	7.6000e-004	1.6214		116.0494	116.0494	2.5700e-003		116.1137
<b>Total</b>	<b>0.0589</b>	<b>0.0385</b>	<b>0.3731</b>	<b>1.1600e-003</b>	<b>16.0239</b>	<b>8.3000e-004</b>	<b>16.0247</b>	<b>1.6206</b>	<b>7.6000e-004</b>	<b>1.6214</b>		<b>116.0494</b>	<b>116.0494</b>	<b>2.5700e-003</b>		<b>116.1137</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.2 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0589	0.0385	0.3731	1.1600e-003	0.1298	8.3000e-004	0.1306	0.0346	7.6000e-004	0.0353		116.0494	116.0494	2.5700e-003		116.1137
<b>Total</b>	<b>0.0589</b>	<b>0.0385</b>	<b>0.3731</b>	<b>1.1600e-003</b>	<b>0.1298</b>	<b>8.3000e-004</b>	<b>0.1306</b>	<b>0.0346</b>	<b>7.6000e-004</b>	<b>0.0353</b>		<b>116.0494</b>	<b>116.0494</b>	<b>2.5700e-003</b>		<b>116.1137</b>

**3.3 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5598	0.0000	12.5598	4.1151	0.0000	4.1151			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>12.5598</b>	<b>1.6349</b>	<b>14.1947</b>	<b>4.1151</b>	<b>1.5041</b>	<b>5.6192</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.3 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9361	40.6569	6.3627	0.0678	74.1468	0.0542	74.2010	7.5215	0.0519	7.5733		7,101.1102	7,101.1102	0.9441		7,124.7137
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0428	0.4145	1.2900e-003	17.8044	9.2000e-004	17.8053	1.8007	8.5000e-004	1.8015		128.9438	128.9438	2.8600e-003		129.0152
<b>Total</b>	<b>1.0016</b>	<b>40.6996</b>	<b>6.7772</b>	<b>0.0691</b>	<b>91.9512</b>	<b>0.0551</b>	<b>92.0063</b>	<b>9.3222</b>	<b>0.0527</b>	<b>9.3749</b>		<b>7,230.0539</b>	<b>7,230.0539</b>	<b>0.9470</b>		<b>7,253.7288</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5598	0.0000	12.5598	4.1151	0.0000	4.1151			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>12.5598</b>	<b>1.6349</b>	<b>14.1947</b>	<b>4.1151</b>	<b>1.5041</b>	<b>5.6192</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.3 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9361	40.6569	6.3627	0.0678	0.6966	0.0542	0.7508	0.1921	0.0519	0.2439		7,101.110 2	7,101.110 2	0.9441		7,124.713 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0428	0.4145	1.2900e-003	0.1442	9.2000e-004	0.1451	0.0384	8.5000e-004	0.0393		128.9438	128.9438	2.8600e-003		129.0152
<b>Total</b>	<b>1.0016</b>	<b>40.6996</b>	<b>6.7772</b>	<b>0.0691</b>	<b>0.8408</b>	<b>0.0551</b>	<b>0.8959</b>	<b>0.2305</b>	<b>0.0527</b>	<b>0.2832</b>		<b>7,230.053 9</b>	<b>7,230.053 9</b>	<b>0.9470</b>		<b>7,253.728 8</b>

**3.4 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	1.4960					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5988</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>		<b>2,207.660 3</b>	<b>2,207.660 3</b>	<b>0.7140</b>		<b>2,225.510 4</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.4 Paving - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0491	0.0321	0.3109	9.7000e-004	13.3533	6.9000e-004	13.3540	1.3505	6.4000e-004	1.3511		96.7078	96.7078	2.1400e-003		96.7614
<b>Total</b>	<b>0.0491</b>	<b>0.0321</b>	<b>0.3109</b>	<b>9.7000e-004</b>	<b>13.3533</b>	<b>6.9000e-004</b>	<b>13.3540</b>	<b>1.3505</b>	<b>6.4000e-004</b>	<b>1.3511</b>		<b>96.7078</b>	<b>96.7078</b>	<b>2.1400e-003</b>		<b>96.7614</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.4960					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5988</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>	<b>0.0000</b>	<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>		<b>2,225.5104</b>



ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.4 Paving - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0491	0.0321	0.3109	9.7000e-004	0.1082	6.9000e-004	0.1088	0.0288	6.4000e-004	0.0294		96.7078	96.7078	2.1400e-003		96.7614
<b>Total</b>	<b>0.0491</b>	<b>0.0321</b>	<b>0.3109</b>	<b>9.7000e-004</b>	<b>0.1082</b>	<b>6.9000e-004</b>	<b>0.1088</b>	<b>0.0288</b>	<b>6.4000e-004</b>	<b>0.0294</b>		<b>96.7078</b>	<b>96.7078</b>	<b>2.1400e-003</b>		<b>96.7614</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5171	19.9745	3.6491	0.0527	124.8603	0.0420	124.9023	12.6947	0.0402	12.7348		5,515.7864	5,515.7864	0.2790		5,522.7619
Worker	1.8041	1.1778	11.4194	0.0356	490.5098	0.0253	490.5351	49.6084	0.0233	49.6317		3,552.4004	3,552.4004	0.0787		3,554.3681
<b>Total</b>	<b>2.3212</b>	<b>21.1523</b>	<b>15.0685</b>	<b>0.0883</b>	<b>615.3701</b>	<b>0.0673</b>	<b>615.4374</b>	<b>62.3031</b>	<b>0.0635</b>	<b>62.3666</b>		<b>9,068.1868</b>	<b>9,068.1868</b>	<b>0.3577</b>		<b>9,077.1299</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5171	19.9745	3.6491	0.0527	1.2393	0.0420	1.2813	0.3589	0.0402	0.3990		5,515.786 4	5,515.786 4	0.2790		5,522.761 9
Worker	1.8041	1.1778	11.4194	0.0356	3.9729	0.0253	3.9982	1.0582	0.0233	1.0815		3,552.400 4	3,552.400 4	0.0787		3,554.368 1
<b>Total</b>	<b>2.3212</b>	<b>21.1523</b>	<b>15.0685</b>	<b>0.0883</b>	<b>5.2122</b>	<b>0.0673</b>	<b>5.2795</b>	<b>1.4170</b>	<b>0.0635</b>	<b>1.4805</b>		<b>9,068.186 8</b>	<b>9,068.186 8</b>	<b>0.3577</b>		<b>9,077.129 9</b>

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3796	16.5512	3.0220	0.0516	124.8602	0.0167	124.8768	12.6946	0.0159	12.7105		5,401.9711	5,401.9711	0.2061		5,407.1222
Worker	1.6906	1.0581	10.4492	0.0343	490.5098	0.0248	490.5346	49.6084	0.0228	49.6312		3,418.4046	3,418.4046	0.0703		3,420.1629
<b>Total</b>	<b>2.0702</b>	<b>17.6093</b>	<b>13.4712</b>	<b>0.0859</b>	<b>615.3700</b>	<b>0.0414</b>	<b>615.4114</b>	<b>62.3030</b>	<b>0.0387</b>	<b>62.3417</b>		<b>8,820.3756</b>	<b>8,820.3756</b>	<b>0.2764</b>		<b>8,827.2851</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3796	16.5512	3.0220	0.0516	1.2392	0.0167	1.2558	0.3588	0.0159	0.3747		5,401.9711	5,401.9711	0.2061		5,407.1222
Worker	1.6906	1.0581	10.4492	0.0343	3.9729	0.0248	3.9977	1.0582	0.0228	1.0810		3,418.4046	3,418.4046	0.0703		3,420.1629
<b>Total</b>	<b>2.0702</b>	<b>17.6093</b>	<b>13.4712</b>	<b>0.0859</b>	<b>5.2121</b>	<b>0.0414</b>	<b>5.2535</b>	<b>1.4170</b>	<b>0.0387</b>	<b>1.4557</b>		<b>8,820.3756</b>	<b>8,820.3756</b>	<b>0.2764</b>		<b>8,827.2851</b>

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3679	16.3894	2.8800	0.0512	124.8600	0.0162	124.8762	12.6946	0.0155	12.7100		5,366.946 3	5,366.946 3	0.2001		5,371.949 3
Worker	1.5921	0.9546	9.6500	0.0329	490.5098	0.0242	490.5340	49.6084	0.0223	49.6307		3,284.982 3	3,284.982 3	0.0632		3,286.562 7
<b>Total</b>	<b>1.9600</b>	<b>17.3440</b>	<b>12.5299</b>	<b>0.0842</b>	<b>615.3698</b>	<b>0.0404</b>	<b>615.4102</b>	<b>62.3030</b>	<b>0.0378</b>	<b>62.3407</b>		<b>8,651.928 7</b>	<b>8,651.928 7</b>	<b>0.2633</b>		<b>8,658.512 1</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.698 9</b>	<b>2,555.698 9</b>	<b>0.6044</b>		<b>2,570.807 7</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3679	16.3894	2.8800	0.0512	1.2390	0.0162	1.2552	0.3588	0.0155	0.3742		5,366.946 3	5,366.946 3	0.2001		5,371.949 3
Worker	1.5921	0.9546	9.6500	0.0329	3.9729	0.0242	3.9971	1.0582	0.0223	1.0805		3,284.982 3	3,284.982 3	0.0632		3,286.562 7
<b>Total</b>	<b>1.9600</b>	<b>17.3440</b>	<b>12.5299</b>	<b>0.0842</b>	<b>5.2119</b>	<b>0.0404</b>	<b>5.2523</b>	<b>1.4169</b>	<b>0.0378</b>	<b>1.4547</b>		<b>8,651.928 7</b>	<b>8,651.928 7</b>	<b>0.2633</b>		<b>8,658.512 1</b>

**3.5 Building Construction - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.474 4</b>	<b>2,556.474 4</b>	<b>0.6010</b>		<b>2,571.498 1</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3576	16.2314	2.7550	0.0509	124.8599	0.0157	124.8756	12.6945	0.0151	12.7096		5,334.3498	5,334.3498	0.1940		5,339.1986
Worker	1.5045	0.8651	8.9112	0.0316	490.5098	0.0238	490.5336	49.6084	0.0219	49.6303		3,152.8772	3,152.8772	0.0571		3,154.3041
<b>Total</b>	<b>1.8621</b>	<b>17.0966</b>	<b>11.6663</b>	<b>0.0825</b>	<b>615.3697</b>	<b>0.0395</b>	<b>615.4092</b>	<b>62.3029</b>	<b>0.0369</b>	<b>62.3398</b>		<b>8,487.2270</b>	<b>8,487.2270</b>	<b>0.2510</b>		<b>8,493.5027</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>



ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3576	16.2314	2.7550	0.0509	1.2389	0.0157	1.2547	0.3587	0.0151	0.3738		5,334.3498	5,334.3498	0.1940		5,339.1986
Worker	1.5045	0.8651	8.9112	0.0316	3.9729	0.0238	3.9967	1.0582	0.0219	1.0800		3,152.8772	3,152.8772	0.0571		3,154.3041
<b>Total</b>	<b>1.8621</b>	<b>17.0966</b>	<b>11.6663</b>	<b>0.0825</b>	<b>5.2118</b>	<b>0.0395</b>	<b>5.2513</b>	<b>1.4169</b>	<b>0.0369</b>	<b>1.4538</b>		<b>8,487.2270</b>	<b>8,487.2270</b>	<b>0.2510</b>		<b>8,493.5027</b>

**3.5 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3496	16.0809	2.6738	0.0506	124.8598	0.0154	124.8752	12.6945	0.0147	12.7092		5,303.7806	5,303.7806	0.1895		5,308.5189
Worker	1.4286	0.7899	8.2809	0.0304	490.5098	0.0231	490.5329	49.6084	0.0213	49.6296		3,035.5318	3,035.5318	0.0519		3,036.8288
<b>Total</b>	<b>1.7782</b>	<b>16.8708</b>	<b>10.9547</b>	<b>0.0811</b>	<b>615.3696</b>	<b>0.0385</b>	<b>615.4081</b>	<b>62.3029</b>	<b>0.0360</b>	<b>62.3388</b>		<b>8,339.3125</b>	<b>8,339.3125</b>	<b>0.2414</b>		<b>8,345.3477</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3496	16.0809	2.6738	0.0506	1.2388	0.0154	1.2542	0.3587	0.0147	0.3734		5,303.7806	5,303.7806	0.1895		5,308.5189
Worker	1.4286	0.7899	8.2809	0.0304	3.9729	0.0231	3.9960	1.0582	0.0213	1.0794		3,035.5318	3,035.5318	0.0519		3,036.8288
<b>Total</b>	<b>1.7782</b>	<b>16.8708</b>	<b>10.9547</b>	<b>0.0811</b>	<b>5.2117</b>	<b>0.0385</b>	<b>5.2502</b>	<b>1.4169</b>	<b>0.0360</b>	<b>1.4528</b>		<b>8,339.3125</b>	<b>8,339.3125</b>	<b>0.2414</b>		<b>8,345.3477</b>

**3.5 Building Construction - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3426	15.9353	2.6043	0.0504	124.8597	0.0151	124.8748	12.6944	0.0144	12.7089		5,276.0108	5,276.0108	0.1848		5,280.6313
Worker	1.3527	0.7219	7.7082	0.0294	490.5098	0.0219	490.5317	49.6084	0.0202	49.6286		2,930.7035	2,930.7035	0.0472		2,931.8823
<b>Total</b>	<b>1.6953</b>	<b>16.6572</b>	<b>10.3125</b>	<b>0.0797</b>	<b>615.3695</b>	<b>0.0370</b>	<b>615.4065</b>	<b>62.3028</b>	<b>0.0346</b>	<b>62.3374</b>		<b>8,206.7143</b>	<b>8,206.7143</b>	<b>0.2320</b>		<b>8,212.5136</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.5 Building Construction - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3426	15.9353	2.6043	0.0504	1.2387	0.0151	1.2538	0.3586	0.0144	0.3730		5,276.0108	5,276.0108	0.1848		5,280.6313
Worker	1.3527	0.7219	7.7082	0.0294	3.9729	0.0219	3.9948	1.0582	0.0202	1.0784		2,930.7035	2,930.7035	0.0472		2,931.8823
<b>Total</b>	<b>1.6953</b>	<b>16.6572</b>	<b>10.3125</b>	<b>0.0797</b>	<b>5.2116</b>	<b>0.0370</b>	<b>5.2486</b>	<b>1.4168</b>	<b>0.0346</b>	<b>1.4514</b>		<b>8,206.7143</b>	<b>8,206.7143</b>	<b>0.2320</b>		<b>8,212.5136</b>

**3.6 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>6.0129</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3602	0.2351	2.2797	7.1200e-003	97.9239	5.0600e-003	97.9290	9.9037	4.6600e-003	9.9083		709.1906	709.1906	0.0157		709.5835
<b>Total</b>	<b>0.3602</b>	<b>0.2351</b>	<b>2.2797</b>	<b>7.1200e-003</b>	<b>97.9239</b>	<b>5.0600e-003</b>	<b>97.9290</b>	<b>9.9037</b>	<b>4.6600e-003</b>	<b>9.9083</b>		<b>709.1906</b>	<b>709.1906</b>	<b>0.0157</b>		<b>709.5835</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>6.0129</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3602	0.2351	2.2797	7.1200e-003	0.7931	5.0600e-003	0.7982	0.2113	4.6600e-003	0.2159		709.1906	709.1906	0.0157		709.5835
<b>Total</b>	<b>0.3602</b>	<b>0.2351</b>	<b>2.2797</b>	<b>7.1200e-003</b>	<b>0.7931</b>	<b>5.0600e-003</b>	<b>0.7982</b>	<b>0.2113</b>	<b>4.6600e-003</b>	<b>0.2159</b>		<b>709.1906</b>	<b>709.1906</b>	<b>0.0157</b>		<b>709.5835</b>

**3.6 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.0001</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3375	0.2112	2.0861	6.8500e-003	97.9239	4.9400e-003	97.9289	9.9037	4.5500e-003	9.9082		682.4401	682.4401	0.0140		682.7911
<b>Total</b>	<b>0.3375</b>	<b>0.2112</b>	<b>2.0861</b>	<b>6.8500e-003</b>	<b>97.9239</b>	<b>4.9400e-003</b>	<b>97.9289</b>	<b>9.9037</b>	<b>4.5500e-003</b>	<b>9.9082</b>		<b>682.4401</b>	<b>682.4401</b>	<b>0.0140</b>		<b>682.7911</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.0001</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>



ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3375	0.2112	2.0861	6.8500e-003	0.7931	4.9400e-003	0.7981	0.2113	4.5500e-003	0.2158		682.4401	682.4401	0.0140		682.7911
<b>Total</b>	<b>0.3375</b>	<b>0.2112</b>	<b>2.0861</b>	<b>6.8500e-003</b>	<b>0.7931</b>	<b>4.9400e-003</b>	<b>0.7981</b>	<b>0.2113</b>	<b>4.5500e-003</b>	<b>0.2158</b>		<b>682.4401</b>	<b>682.4401</b>	<b>0.0140</b>		<b>682.7911</b>

**3.6 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>5.9892</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3178	0.1906	1.9265	6.5800e-003	97.9239	4.8300e-003	97.9288	9.9037	4.4500e-003	9.9081		655.8041	655.8041	0.0126		656.1196
<b>Total</b>	<b>0.3178</b>	<b>0.1906</b>	<b>1.9265</b>	<b>6.5800e-003</b>	<b>97.9239</b>	<b>4.8300e-003</b>	<b>97.9288</b>	<b>9.9037</b>	<b>4.4500e-003</b>	<b>9.9081</b>		<b>655.8041</b>	<b>655.8041</b>	<b>0.0126</b>		<b>656.1196</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>5.9892</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3178	0.1906	1.9265	6.5800e-003	0.7931	4.8300e-003	0.7980	0.2113	4.4500e-003	0.2157		655.8041	655.8041	0.0126		656.1196
<b>Total</b>	<b>0.3178</b>	<b>0.1906</b>	<b>1.9265</b>	<b>6.5800e-003</b>	<b>0.7931</b>	<b>4.8300e-003</b>	<b>0.7980</b>	<b>0.2113</b>	<b>4.4500e-003</b>	<b>0.2157</b>		<b>655.8041</b>	<b>655.8041</b>	<b>0.0126</b>		<b>656.1196</b>

**3.6 Architectural Coating - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3004	0.1727	1.7790	6.3100e-003	97.9239	4.7400e-003	97.9287	9.9037	4.3600e-003	9.9080		629.4310	629.4310	0.0114		629.7159
<b>Total</b>	<b>0.3004</b>	<b>0.1727</b>	<b>1.7790</b>	<b>6.3100e-003</b>	<b>97.9239</b>	<b>4.7400e-003</b>	<b>97.9287</b>	<b>9.9037</b>	<b>4.3600e-003</b>	<b>9.9080</b>		<b>629.4310</b>	<b>629.4310</b>	<b>0.0114</b>		<b>629.7159</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2025**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3004	0.1727	1.7790	6.3100e-003	0.7931	4.7400e-003	0.7979	0.2113	4.3600e-003	0.2156		629.4310	629.4310	0.0114		629.7159
<b>Total</b>	<b>0.3004</b>	<b>0.1727</b>	<b>1.7790</b>	<b>6.3100e-003</b>	<b>0.7931</b>	<b>4.7400e-003</b>	<b>0.7979</b>	<b>0.2113</b>	<b>4.3600e-003</b>	<b>0.2156</b>		<b>629.4310</b>	<b>629.4310</b>	<b>0.0114</b>		<b>629.7159</b>

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2852	0.1577	1.6532	6.0700e-003	97.9239	4.6100e-003	97.9285	9.9037	4.2400e-003	9.9079		606.0045	606.0045	0.0104		606.2635
<b>Total</b>	<b>0.2852</b>	<b>0.1577</b>	<b>1.6532</b>	<b>6.0700e-003</b>	<b>97.9239</b>	<b>4.6100e-003</b>	<b>97.9285</b>	<b>9.9037</b>	<b>4.2400e-003</b>	<b>9.9079</b>		<b>606.0045</b>	<b>606.0045</b>	<b>0.0104</b>		<b>606.2635</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2852	0.1577	1.6532	6.0700e-003	0.7931	4.6100e-003	0.7978	0.2113	4.2400e-003	0.2155		606.0045	606.0045	0.0104		606.2635
<b>Total</b>	<b>0.2852</b>	<b>0.1577</b>	<b>1.6532</b>	<b>6.0700e-003</b>	<b>0.7931</b>	<b>4.6100e-003</b>	<b>0.7978</b>	<b>0.2113</b>	<b>4.2400e-003</b>	<b>0.2155</b>		<b>606.0045</b>	<b>606.0045</b>	<b>0.0104</b>		<b>606.2635</b>

**3.6 Architectural Coating - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2701	0.1441	1.5389	5.8600e-003	97.9239	4.3800e-003	97.9283	9.9037	4.0300e-003	9.9077		585.0769	585.0769	9.4100e-003		585.3123
<b>Total</b>	<b>0.2701</b>	<b>0.1441</b>	<b>1.5389</b>	<b>5.8600e-003</b>	<b>97.9239</b>	<b>4.3800e-003</b>	<b>97.9283</b>	<b>9.9037</b>	<b>4.0300e-003</b>	<b>9.9077</b>		<b>585.0769</b>	<b>585.0769</b>	<b>9.4100e-003</b>		<b>585.3123</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8084					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>5.9793</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>



ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.6 Architectural Coating - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2701	0.1441	1.5389	5.8600e-003	0.7931	4.3800e-003	0.7975	0.2113	4.0300e-003	0.2153		585.0769	585.0769	9.4100e-003		585.3123
<b>Total</b>	<b>0.2701</b>	<b>0.1441</b>	<b>1.5389</b>	<b>5.8600e-003</b>	<b>0.7931</b>	<b>4.3800e-003</b>	<b>0.7975</b>	<b>0.2113</b>	<b>4.0300e-003</b>	<b>0.2153</b>		<b>585.0769</b>	<b>585.0769</b>	<b>9.4100e-003</b>		<b>585.3123</b>

**3.7 Building Construction 2 - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.7 Building Construction 2 - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3796	16.5512	3.0220	0.0516	124.8602	0.0167	124.8768	12.6946	0.0159	12.7105		5,401.971 1	5,401.971 1	0.2061		5,407.122 2
Worker	1.6906	1.0581	10.4492	0.0343	490.5098	0.0248	490.5346	49.6084	0.0228	49.6312		3,418.404 6	3,418.404 6	0.0703		3,420.162 9
<b>Total</b>	<b>2.0702</b>	<b>17.6093</b>	<b>13.4712</b>	<b>0.0859</b>	<b>615.3700</b>	<b>0.0414</b>	<b>615.4114</b>	<b>62.3030</b>	<b>0.0387</b>	<b>62.3417</b>		<b>8,820.375 6</b>	<b>8,820.375 6</b>	<b>0.2764</b>		<b>8,827.285 1</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.7 Building Construction 2 - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3796	16.5512	3.0220	0.0516	1.2392	0.0167	1.2558	0.3588	0.0159	0.3747		5,401.9711	5,401.9711	0.2061		5,407.1222
Worker	1.6906	1.0581	10.4492	0.0343	3.9729	0.0248	3.9977	1.0582	0.0228	1.0810		3,418.4046	3,418.4046	0.0703		3,420.1629
<b>Total</b>	<b>2.0702</b>	<b>17.6093</b>	<b>13.4712</b>	<b>0.0859</b>	<b>5.2121</b>	<b>0.0414</b>	<b>5.2535</b>	<b>1.4170</b>	<b>0.0387</b>	<b>1.4557</b>		<b>8,820.3756</b>	<b>8,820.3756</b>	<b>0.2764</b>		<b>8,827.2851</b>

**3.8 Architectural Coating 2 - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>28.5493</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.8 Architectural Coating 2 - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3375	0.2112	2.0861	6.8500e-003	97.9239	4.9400e-003	97.9289	9.9037	4.5500e-003	9.9082		682.4401	682.4401	0.0140		682.7911
<b>Total</b>	<b>0.3375</b>	<b>0.2112</b>	<b>2.0861</b>	<b>6.8500e-003</b>	<b>97.9239</b>	<b>4.9400e-003</b>	<b>97.9289</b>	<b>9.9037</b>	<b>4.5500e-003</b>	<b>9.9082</b>		<b>682.4401</b>	<b>682.4401</b>	<b>0.0140</b>		<b>682.7911</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>28.5493</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.8 Architectural Coating 2 - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3375	0.2112	2.0861	6.8500e-003	0.7931	4.9400e-003	0.7981	0.2113	4.5500e-003	0.2158		682.4401	682.4401	0.0140		682.7911
<b>Total</b>	<b>0.3375</b>	<b>0.2112</b>	<b>2.0861</b>	<b>6.8500e-003</b>	<b>0.7931</b>	<b>4.9400e-003</b>	<b>0.7981</b>	<b>0.2113</b>	<b>4.5500e-003</b>	<b>0.2158</b>		<b>682.4401</b>	<b>682.4401</b>	<b>0.0140</b>		<b>682.7911</b>

**3.8 Architectural Coating 2 - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>28.5384</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.8 Architectural Coating 2 - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3178	0.1906	1.9265	6.5800e-003	97.9239	4.8300e-003	97.9288	9.9037	4.4500e-003	9.9081		655.8041	655.8041	0.0126		656.1196
<b>Total</b>	<b>0.3178</b>	<b>0.1906</b>	<b>1.9265</b>	<b>6.5800e-003</b>	<b>97.9239</b>	<b>4.8300e-003</b>	<b>97.9288</b>	<b>9.9037</b>	<b>4.4500e-003</b>	<b>9.9081</b>		<b>655.8041</b>	<b>655.8041</b>	<b>0.0126</b>		<b>656.1196</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>28.5384</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**3.8 Architectural Coating 2 - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3178	0.1906	1.9265	6.5800e-003	0.7931	4.8300e-003	0.7980	0.2113	4.4500e-003	0.2157		655.8041	655.8041	0.0126		656.1196
<b>Total</b>	<b>0.3178</b>	<b>0.1906</b>	<b>1.9265</b>	<b>6.5800e-003</b>	<b>0.7931</b>	<b>4.8300e-003</b>	<b>0.7980</b>	<b>0.2113</b>	<b>4.4500e-003</b>	<b>0.2157</b>		<b>655.8041</b>	<b>655.8041</b>	<b>0.0126</b>		<b>656.1196</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

ARC - Construction Phase I (Overlap) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7325	54.7854	64.6460	0.3225	1,646.3740	0.1961	1,646.5701	168.5624	0.1831	168.7455		32,960.4231	32,960.4231	1.1411		32,988.9502
Unmitigated	5.7325	54.7854	64.6460	0.3225	1,646.3740	0.1961	1,646.5701	168.5624	0.1831	168.7455		32,960.4231	32,960.4231	1.1411		32,988.9502

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	3,087,440	3,087,440
Condo/Townhouse	162.68	158.76	135.52	415,263	415,263
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Research & Development	4,379.40	1,026.00	599.40	7,377,182	7,377,182
Unenclosed Parking with Elevator	0.00	0.00	0.00		
<b>Total</b>	<b>5,745.73</b>	<b>2,341.35</b>	<b>1,795.58</b>	<b>10,879,884</b>	<b>10,879,884</b>

4.3 Trip Type Information



ARC - Construction Phase I (Overlap) - Yolo County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Condo/Townhouse	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Research & Development	10.00	5.00	7.00	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Condo/Townhouse	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Other Asphalt Surfaces	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Parking Lot	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Research & Development	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608
Unenclosed Parking with Elevator	0.505773	0.035704	0.212085	0.105468	0.014725	0.004480	0.068989	0.043685	0.001015	0.001418	0.005344	0.000705	0.000608

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC - Construction Phase I (Overlap) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918
NaturalGas Unmitigated	0.3665	3.2944	2.5224	0.0200		0.2532	0.2532		0.2532	0.2532		3,998.5306	3,998.5306	0.0766	0.0733	4,022.2918

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4833.99	0.0521	0.4455	0.1896	2.8400e-003		0.0360	0.0360		0.0360	0.0360		568.7046	568.7046	0.0109	0.0104	572.0842
Condo/Townhouse	1576.53	0.0170	0.1453	0.0618	9.3000e-004		0.0118	0.0118		0.0118	0.0118		185.4746	185.4746	3.5500e-003	3.4000e-003	186.5768
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Research & Development	27577	0.2974	2.7036	2.2711	0.0162		0.2055	0.2055		0.2055	0.2055		3,244.3513	3,244.3513	0.0622	0.0595	3,263.6309
Unenclosed Parking with Elevator	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
<b>Total</b>		<b>0.3665</b>	<b>3.2944</b>	<b>2.5224</b>	<b>0.0200</b>		<b>0.2533</b>	<b>0.2533</b>		<b>0.2533</b>	<b>0.2533</b>		<b>3,998.5306</b>	<b>3,998.5306</b>	<b>0.0766</b>	<b>0.0733</b>	<b>4,022.2918</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.83399	0.0521	0.4455	0.1896	2.8400e-003		0.0360	0.0360		0.0360	0.0360		568.7046	568.7046	0.0109	0.0104	572.0842
Condo/Townhouse	1.57653	0.0170	0.1453	0.0618	9.3000e-004		0.0118	0.0118		0.0118	0.0118		185.4746	185.4746	3.5500e-003	3.4000e-003	186.5768
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Research & Development	27.577	0.2974	2.7036	2.2711	0.0162		0.2055	0.2055		0.2055	0.2055		3,244.3513	3,244.3513	0.0622	0.0595	3,263.6309
Unenclosed Parking with Elevator	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
<b>Total</b>		<b>0.3665</b>	<b>3.2944</b>	<b>2.5224</b>	<b>0.0200</b>		<b>0.2533</b>	<b>0.2533</b>		<b>0.2533</b>	<b>0.2533</b>		<b>3,998.5306</b>	<b>3,998.5306</b>	<b>0.0766</b>	<b>0.0733</b>	<b>4,022.2918</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

ARC - Construction Phase I (Overlap) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992
Unmitigated	493.2623	8.5551	603.0346	1.0588		82.2180	82.2180		82.2180	82.2180	8,627.7949	2,465.6836	11,093.4784	8.0941	0.6546	11,490.8992

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.2208					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	473.6714	8.3550	585.6216	1.0578		82.1217	82.1217		82.1217	82.1217	8,627.7949	2,434.2353	11,062.0302	8.0633	0.6546	11,458.6816
Landscaping	0.5344	0.2001	17.4130	9.2000e-004		0.0963	0.0963		0.0963	0.0963		31.4483	31.4483	0.0308		32.2176
<b>Total</b>	<b>493.2623</b>	<b>8.5551</b>	<b>603.0346</b>	<b>1.0587</b>		<b>82.2180</b>	<b>82.2180</b>		<b>82.2180</b>	<b>82.2180</b>	<b>8,627.7949</b>	<b>2,465.6836</b>	<b>11,093.4784</b>	<b>8.0941</b>	<b>0.6546</b>	<b>11,490.8992</b>

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.2208					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	473.6714	8.3550	585.6216	1.0578		82.1217	82.1217		82.1217	82.1217	8,627.7949	2,434.2353	11,062.0302	8.0633	0.6546	11,458.6816
Landscaping	0.5344	0.2001	17.4130	9.2000e-004		0.0963	0.0963		0.0963	0.0963		31.4483	31.4483	0.0308		32.2176
<b>Total</b>	<b>493.2623</b>	<b>8.5551</b>	<b>603.0346</b>	<b>1.0587</b>		<b>82.2180</b>	<b>82.2180</b>		<b>82.2180</b>	<b>82.2180</b>	<b>8,627.7949</b>	<b>2,465.6836</b>	<b>11,093.4784</b>	<b>8.0941</b>	<b>0.6546</b>	<b>11,490.8992</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

ARC - Construction Phase I (Overlap) - Yolo County, Winter

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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**ARC - Construction Phase I (Overlap)**  
**Yolo 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**



Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	2	No Change	0.00
Cranes	Diesel	No Change	0	2	No Change	0.00
Excavators	Diesel	No Change	0	2	No Change	0.00
Forklifts	Diesel	No Change	0	6	No Change	0.00
Generator Sets	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	12	No Change	0.00
Welders	Diesel	No Change	0	2	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	1.95880E-001	1.32446E+000	1.94342E+000	3.19000E-003	6.68000E-002	6.68000E-002	0.00000E+000	2.74092E+002	2.74092E+002	1.57700E-002	0.00000E+000	2.74486E+002
Cranes	3.14450E-001	3.32529E+000	1.68213E+000	5.42000E-003	1.39570E-001	1.28410E-001	0.00000E+000	4.76188E+002	4.76188E+002	1.54010E-001	0.00000E+000	4.80038E+002
Excavators	5.67000E-003	4.97600E-002	9.11400E-002	1.40000E-004	2.41000E-003	2.21000E-003	0.00000E+000	1.27010E+001	1.27010E+001	4.11000E-003	0.00000E+000	1.28037E+001
Forklifts	3.08990E-001	2.89723E+000	3.67238E+000	4.92000E-003	1.69850E-001	1.56260E-001	0.00000E+000	4.32485E+002	4.32485E+002	1.39870E-001	0.00000E+000	4.35982E+002
Generator Sets	3.10160E-001	2.76892E+000	3.93452E+000	7.06000E-003	1.22360E-001	1.22360E-001	0.00000E+000	6.06750E+002	6.06750E+002	2.48300E-002	0.00000E+000	6.07371E+002
Graders	5.81000E-003	7.36100E-002	2.41000E-002	9.00000E-005	2.34000E-003	2.15000E-003	0.00000E+000	8.14462E+000	8.14462E+000	2.63000E-003	0.00000E+000	8.21047E+000
Pavers	2.07000E-003	2.09900E-002	2.88400E-002	5.00000E-005	1.00000E-003	9.20000E-004	0.00000E+000	4.13003E+000	4.13003E+000	1.34000E-003	0.00000E+000	4.16342E+000
Paving Equipment	1.78000E-003	1.73800E-002	2.54600E-002	4.00000E-005	8.50000E-004	7.80000E-004	0.00000E+000	3.57856E+000	3.57856E+000	1.16000E-003	0.00000E+000	3.60749E+000
Rollers	1.66000E-003	1.72600E-002	1.86000E-002	3.00000E-005	9.90000E-004	9.20000E-004	0.00000E+000	2.30519E+000	2.30519E+000	7.50000E-004	0.00000E+000	2.32383E+000
Rubber Tired Dozers	2.05100E-002	2.15440E-001	8.77600E-002	2.10000E-004	1.02300E-002	9.41000E-003	0.00000E+000	1.83817E+001	1.83817E+001	5.95000E-003	0.00000E+000	1.85303E+001
Scrapers	2.29400E-002	2.50420E-001	1.78520E-001	4.30000E-004	9.78000E-003	8.99000E-003	0.00000E+000	3.73472E+001	3.73472E+001	1.20800E-002	0.00000E+000	3.76492E+001
Tractors/Loaders/Backhoes	4.11890E-001	4.16852E+000	6.38366E+000	8.91000E-003	1.92430E-001	1.77040E-001	0.00000E+000	7.82913E+002	7.82913E+002	2.53210E-001	0.00000E+000	7.89243E+002
Welders	2.57230E-001	1.48851E+000	1.78926E+000	2.74000E-003	5.25900E-002	5.25900E-002	0.00000E+000	2.02055E+002	2.02055E+002	2.08700E-002	0.00000E+000	2.02577E+002

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	1.95880E-001	1.32446E+000	1.94342E+000	3.19000E-003	6.68000E-002	6.68000E-002	0.00000E+000	2.74091E+002	2.74091E+002	1.57700E-002	0.00000E+000	2.74486E+002
Cranes	3.14450E-001	3.32529E+000	1.68213E+000	5.42000E-003	1.39570E-001	1.28410E-001	0.00000E+000	4.76188E+002	4.76188E+002	1.54010E-001	0.00000E+000	4.80038E+002
Excavators	5.67000E-003	4.97600E-002	9.11400E-002	1.40000E-004	2.41000E-003	2.21000E-003	0.00000E+000	1.27010E+001	1.27010E+001	4.11000E-003	0.00000E+000	1.28037E+001
Forklifts	3.08990E-001	2.89723E+000	3.67238E+000	4.92000E-003	1.69850E-001	1.56260E-001	0.00000E+000	4.32485E+002	4.32485E+002	1.39870E-001	0.00000E+000	4.35982E+002
Generator Sets	3.10160E-001	2.76892E+000	3.93452E+000	7.06000E-003	1.22360E-001	1.22360E-001	0.00000E+000	6.06749E+002	6.06749E+002	2.48300E-002	0.00000E+000	6.07370E+002
Graders	5.81000E-003	7.36100E-002	2.41000E-002	9.00000E-005	2.34000E-003	2.15000E-003	0.00000E+000	8.14461E+000	8.14461E+000	2.63000E-003	0.00000E+000	8.21046E+000
Pavers	2.07000E-003	2.09900E-002	2.88400E-002	5.00000E-005	1.00000E-003	9.20000E-004	0.00000E+000	4.13003E+000	4.13003E+000	1.34000E-003	0.00000E+000	4.16342E+000
Paving Equipment	1.78000E-003	1.73800E-002	2.54600E-002	4.00000E-005	8.50000E-004	7.80000E-004	0.00000E+000	3.57855E+000	3.57855E+000	1.16000E-003	0.00000E+000	3.60749E+000
Rollers	1.66000E-003	1.72600E-002	1.86000E-002	3.00000E-005	9.90000E-004	9.20000E-004	0.00000E+000	2.30519E+000	2.30519E+000	7.50000E-004	0.00000E+000	2.32383E+000
Rubber Tired Dozers	2.05100E-002	2.15440E-001	8.77600E-002	2.10000E-004	1.02300E-002	9.41000E-003	0.00000E+000	1.83817E+001	1.83817E+001	5.95000E-003	0.00000E+000	1.85303E+001
Scrapers	2.29400E-002	2.50420E-001	1.78520E-001	4.30000E-004	9.78000E-003	8.99000E-003	0.00000E+000	3.73472E+001	3.73472E+001	1.20800E-002	0.00000E+000	3.76491E+001
Tractors/Loaders/Balkhoes	4.11890E-001	4.16852E+000	6.38365E+000	8.91000E-003	1.92430E-001	1.77040E-001	0.00000E+000	7.82912E+002	7.82912E+002	2.53210E-001	0.00000E+000	7.89242E+002
Welders	2.57230E-001	1.48851E+000	1.78926E+000	2.74000E-003	5.25900E-002	5.25900E-002	0.00000E+000	2.02055E+002	2.02055E+002	2.08700E-002	0.00000E+000	2.02576E+002

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20398E-006	1.20398E-006	0.00000E+000	0.00000E+000	1.20225E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19701E-006	1.19701E-006	0.00000E+000	0.00000E+000	1.18741E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.87341E-007	7.87341E-007	0.00000E+000	0.00000E+000	1.56205E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20235E-006	1.20235E-006	0.00000E+000	0.00000E+000	1.19271E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18665E-006	1.18665E-006	0.00000E+000	0.00000E+000	1.18544E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22780E-006	1.22780E-006	0.00000E+000	0.00000E+000	1.21796E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.79442E-006	2.79442E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.08804E-006	1.08804E-006	0.00000E+000	0.00000E+000	1.07931E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07103E-006	1.07103E-006	0.00000E+000	0.00000E+000	1.06244E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	1.56650E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18787E-006	1.18787E-006	0.00000E+000	0.00000E+000	1.19101E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23729E-006	1.23729E-006	0.00000E+000	0.00000E+000	1.18474E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

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

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

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	74.42	7.54	0.68	0.18	0.99	0.98
Architectural Coating 2	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating 2	Roads	15.24	1.54	0.14	0.04	0.99	0.98
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	467.72	47.45	4.50	1.23	0.99	0.97
Building Construction 2	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction 2	Roads	95.80	9.72	0.92	0.25	0.99	0.97
Grading	Fugitive Dust	0.18	0.06	0.18	0.06	0.00	0.00
Grading	Roads	1.10	0.11	0.01	0.00	0.99	0.97
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.06	0.01	0.00	0.00	0.99	0.98
Site Preparation	Fugitive Dust	0.06	0.03	0.06	0.03	0.00	0.00
Site Preparation	Roads	0.05	0.00	0.00	0.00	0.99	0.98

**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	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.19	0.47		
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)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

### Energy Mitigation Measures

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



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

**Water Mitigation Measures**

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

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**ARC CalEEMod  
Off-Site Construction**

ARC - Off-site Drainage Basin - Yuba County, Annual

**ARC - Off-site Drainage Basin**  
**Yuba County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	100.00	Acre	100.00	4,356,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	72
<b>Climate Zone</b>	2			<b>Operational Year</b>	2022
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	269.5	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity Factory adjusted for PG&E's calculated progress towards RPS

Land Use -

Construction Phase - Based on applicant provided construction information

Grading - Based on project information

ARC - Off-site Drainage Basin - Yuba County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155.00	91.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	PhaseEndDate	6/15/2023	6/30/2022
tblConstructionPhase	PhaseStartDate	11/11/2022	4/1/2022
tblGrading	AcresOfGrading	227.50	100.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

**2.0 Emissions Summary**

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ARC - Off-site Drainage Basin - Yuba County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2022	6-30-2022	1.9411	1.9411
		Highest	1.9411	1.9411

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4331	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.4331</b>	<b>1.0000e-005</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7900e-003</b>	<b>1.7900e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9000e-003</b>

ARC - Off-site Drainage Basin - Yuba County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4331	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.4331</b>	<b>1.0000e-005</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7900e-003</b>	<b>1.7900e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9000e-003</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2022	6/30/2022	7	91	

**Acres of Grading (Site Preparation Phase): 0**



ARC - Off-site Drainage Basin - Yuba County, Annual

**Acres of Grading (Grading Phase): 100**

**Acres of Paving: 100**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Scrapers	2	8.00	367	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

ARC - Off-site Drainage Basin - Yuba County, Annual

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3270	0.0000	0.3270	0.1563	0.0000	0.1563	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1649	1.7674	1.3214	2.8200e-003		0.0744	0.0744		0.0684	0.0684	0.0000	248.1324	248.1324	0.0803	0.0000	250.1387
<b>Total</b>	<b>0.1649</b>	<b>1.7674</b>	<b>1.3214</b>	<b>2.8200e-003</b>	<b>0.3270</b>	<b>0.0744</b>	<b>0.4014</b>	<b>0.1563</b>	<b>0.0684</b>	<b>0.2248</b>	<b>0.0000</b>	<b>248.1324</b>	<b>248.1324</b>	<b>0.0803</b>	<b>0.0000</b>	<b>250.1387</b>

**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	4.7600e-003	3.9700e-003	0.0373	1.0000e-004	0.0111	7.0000e-005	0.0112	2.9600e-003	6.0000e-005	3.0200e-003	0.0000	8.8684	8.8684	2.8000e-004	0.0000	8.8754
<b>Total</b>	<b>4.7600e-003</b>	<b>3.9700e-003</b>	<b>0.0373</b>	<b>1.0000e-004</b>	<b>0.0111</b>	<b>7.0000e-005</b>	<b>0.0112</b>	<b>2.9600e-003</b>	<b>6.0000e-005</b>	<b>3.0200e-003</b>	<b>0.0000</b>	<b>8.8684</b>	<b>8.8684</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>8.8754</b>

ARC - Off-site Drainage Basin - Yuba County, Annual

**3.2 Grading - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3270	0.0000	0.3270	0.1563	0.0000	0.1563	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1649	1.7674	1.3214	2.8200e-003		0.0744	0.0744		0.0684	0.0684	0.0000	248.1321	248.1321	0.0803	0.0000	250.1384
<b>Total</b>	<b>0.1649</b>	<b>1.7674</b>	<b>1.3214</b>	<b>2.8200e-003</b>	<b>0.3270</b>	<b>0.0744</b>	<b>0.4014</b>	<b>0.1563</b>	<b>0.0684</b>	<b>0.2248</b>	<b>0.0000</b>	<b>248.1321</b>	<b>248.1321</b>	<b>0.0803</b>	<b>0.0000</b>	<b>250.1384</b>

**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	4.7600e-003	3.9700e-003	0.0373	1.0000e-004	0.0111	7.0000e-005	0.0112	2.9600e-003	6.0000e-005	3.0200e-003	0.0000	8.8684	8.8684	2.8000e-004	0.0000	8.8754
<b>Total</b>	<b>4.7600e-003</b>	<b>3.9700e-003</b>	<b>0.0373</b>	<b>1.0000e-004</b>	<b>0.0111</b>	<b>7.0000e-005</b>	<b>0.0112</b>	<b>2.9600e-003</b>	<b>6.0000e-005</b>	<b>3.0200e-003</b>	<b>0.0000</b>	<b>8.8684</b>	<b>8.8684</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>8.8754</b>

**4.0 Operational Detail - Mobile**

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ARC - Off-site Drainage Basin - Yuba County, Annual

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.623397	0.028959	0.171958	0.109598	0.026189	0.005295	0.008094	0.015285	0.001696	0.001924	0.005627	0.001125	0.000852

ARC - Off-site Drainage Basin - Yuba County, Annual

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



ARC - Off-site Drainage Basin - Yuba County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

ARC - Off-site Drainage Basin - Yuba County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4331	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9000e-003
Unmitigated	0.4331	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1514					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2816					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9000e-003
<b>Total</b>	<b>0.4331</b>	<b>1.0000e-005</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7900e-003</b>	<b>1.7900e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9000e-003</b>



ARC - Off-site Drainage Basin - Yuba County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1514					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2816					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9000e-003
<b>Total</b>	<b>0.4331</b>	<b>1.0000e-005</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7900e-003</b>	<b>1.7900e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9000e-003</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

ARC - Off-site Drainage Basin - Yuba County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

ARC - Off-site Drainage Basin - Yuba County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

ARC - Off-site Drainage Basin - Yuba County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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ARC - Off-site Drainage Basin - Yuba County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC - Off-site Drainage Basin - Yuba County, Summer

**ARC - Off-site Drainage Basin**  
**Yuba County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	100.00	Acre	100.00	4,356,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	72
<b>Climate Zone</b>	2			<b>Operational Year</b>	2022
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	269.5	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity Factory adjusted for PG&E's calculated progress towards RPS

Land Use -

Construction Phase - Based on applicant provided construction information

Grading - Based on project information

ARC - Off-site Drainage Basin - Yuba County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155.00	91.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	PhaseEndDate	6/15/2023	6/30/2022
tblConstructionPhase	PhaseStartDate	11/11/2022	4/1/2022
tblGrading	AcresOfGrading	227.50	100.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

**2.0 Emissions Summary**

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ARC - Off-site Drainage Basin - Yuba County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

ARC - Off-site Drainage Basin - Yuba County, Summer

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2022	6/30/2022	7	91	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 100

Acres of Paving: 100

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Scrapers	2	8.00	367	0.48

**Trips and VMT**

ARC - Off-site Drainage Basin - Yuba County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1875	0.0000	7.1875	3.4361	0.0000	3.4361			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>7.1875</b>	<b>1.6349</b>	<b>8.8224</b>	<b>3.4361</b>	<b>1.5041</b>	<b>4.9402</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

ARC - Off-site Drainage Basin - Yuba County, Summer

**3.2 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0777	0.9760	2.3900e-003	0.2555	1.5500e-003	0.2570	0.0678	1.4200e-003	0.0692		238.0303	238.0303	7.6500e-003		238.2216
<b>Total</b>	<b>0.1164</b>	<b>0.0777</b>	<b>0.9760</b>	<b>2.3900e-003</b>	<b>0.2555</b>	<b>1.5500e-003</b>	<b>0.2570</b>	<b>0.0678</b>	<b>1.4200e-003</b>	<b>0.0692</b>		<b>238.0303</b>	<b>238.0303</b>	<b>7.6500e-003</b>		<b>238.2216</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1875	0.0000	7.1875	3.4361	0.0000	3.4361			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>7.1875</b>	<b>1.6349</b>	<b>8.8224</b>	<b>3.4361</b>	<b>1.5041</b>	<b>4.9402</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

ARC - Off-site Drainage Basin - Yuba County, Summer

**3.2 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0777	0.9760	2.3900e-003	0.2555	1.5500e-003	0.2570	0.0678	1.4200e-003	0.0692		238.0303	238.0303	7.6500e-003		238.2216
<b>Total</b>	<b>0.1164</b>	<b>0.0777</b>	<b>0.9760</b>	<b>2.3900e-003</b>	<b>0.2555</b>	<b>1.5500e-003</b>	<b>0.2570</b>	<b>0.0678</b>	<b>1.4200e-003</b>	<b>0.0692</b>		<b>238.0303</b>	<b>238.0303</b>	<b>7.6500e-003</b>		<b>238.2216</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

ARC - Off-site Drainage Basin - Yuba County, Summer

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.623397	0.028959	0.171958	0.109598	0.026189	0.005295	0.008094	0.015285	0.001696	0.001924	0.005627	0.001125	0.000852

5.0 Energy Detail

Historical Energy Use: N

ARC - Off-site Drainage Basin - Yuba County, Summer

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

ARC - Off-site Drainage Basin - Yuba County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233



ARC - Off-site Drainage Basin - Yuba County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**7.0 Water Detail**

## ARC - Off-site Drainage Basin - Yuba County, Summer

**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

ARC - Off-site Drainage Basin - Yuba County, Winter

**ARC - Off-site Drainage Basin**  
**Yuba County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	100.00	Acre	100.00	4,356,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	72
<b>Climate Zone</b>	2			<b>Operational Year</b>	2022
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	269.5	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 Intensity Factory adjusted for PG&E's calculated progress towards RPS

Land Use -

Construction Phase - Based on applicant provided construction information

Grading - Based on project information

ARC - Off-site Drainage Basin - Yuba County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155.00	91.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	PhaseEndDate	6/15/2023	6/30/2022
tblConstructionPhase	PhaseStartDate	11/11/2022	4/1/2022
tblGrading	AcresOfGrading	227.50	100.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

**2.0 Emissions Summary**

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ARC - Off-site Drainage Basin - Yuba County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

ARC - Off-site Drainage Basin - Yuba County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/1/2022	6/30/2022	7	91	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 100

Acres of Paving: 100

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Scrapers	2	8.00	367	0.48

#### Trips and VMT

ARC - Off-site Drainage Basin - Yuba County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1875	0.0000	7.1875	3.4361	0.0000	3.4361			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>7.1875</b>	<b>1.6349</b>	<b>8.8224</b>	<b>3.4361</b>	<b>1.5041</b>	<b>4.9402</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>



ARC - Off-site Drainage Basin - Yuba County, Winter

**3.2 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1142	0.0978	0.8146	2.1000e-003	0.2555	1.5500e-003	0.2570	0.0678	1.4200e-003	0.0692		208.7073	208.7073	6.6100e-003		208.8725
<b>Total</b>	<b>0.1142</b>	<b>0.0978</b>	<b>0.8146</b>	<b>2.1000e-003</b>	<b>0.2555</b>	<b>1.5500e-003</b>	<b>0.2570</b>	<b>0.0678</b>	<b>1.4200e-003</b>	<b>0.0692</b>		<b>208.7073</b>	<b>208.7073</b>	<b>6.6100e-003</b>		<b>208.8725</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1875	0.0000	7.1875	3.4361	0.0000	3.4361			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>7.1875</b>	<b>1.6349</b>	<b>8.8224</b>	<b>3.4361</b>	<b>1.5041</b>	<b>4.9402</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

ARC - Off-site Drainage Basin - Yuba County, Winter

**3.2 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1142	0.0978	0.8146	2.1000e-003	0.2555	1.5500e-003	0.2570	0.0678	1.4200e-003	0.0692		208.7073	208.7073	6.6100e-003		208.8725
<b>Total</b>	<b>0.1142</b>	<b>0.0978</b>	<b>0.8146</b>	<b>2.1000e-003</b>	<b>0.2555</b>	<b>1.5500e-003</b>	<b>0.2570</b>	<b>0.0678</b>	<b>1.4200e-003</b>	<b>0.0692</b>		<b>208.7073</b>	<b>208.7073</b>	<b>6.6100e-003</b>		<b>208.8725</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

ARC - Off-site Drainage Basin - Yuba County, Winter

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.623397	0.028959	0.171958	0.109598	0.026189	0.005295	0.008094	0.015285	0.001696	0.001924	0.005627	0.001125	0.000852

5.0 Energy Detail

Historical Energy Use: N

ARC - Off-site Drainage Basin - Yuba County, Winter

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

ARC - Off-site Drainage Basin - Yuba County, Winter

**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.3736	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

ARC - Off-site Drainage Basin - Yuba County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5429					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.3736</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**7.0 Water Detail**

## ARC - Off-site Drainage Basin - Yuba County, Winter

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**7.1 Mitigation Measures Water****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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### ARC - Off-site Drainage Basin

### Yuba 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												
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Excavators	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	2	No Change	0.00
Scrapers	Diesel	No Change	0	2	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					
Excavators	1.84200E-002	1.61700E-001	2.96220E-001	4.70000E-004	7.82000E-003	7.19000E-003	0.00000E+000	4.12782E+001	4.12782E+001	1.33500E-002	0.00000E+000	4.16119E+001
Graders	1.88800E-002	2.39220E-001	7.83400E-002	3.00000E-004	7.61000E-003	7.00000E-003	0.00000E+000	2.64700E+001	2.64700E+001	8.56000E-003	0.00000E+000	2.66840E+001
Rubber Tired Dozers	3.80900E-002	4.00110E-001	1.62980E-001	3.90000E-004	1.89900E-002	1.74700E-002	0.00000E+000	3.41375E+001	3.41375E+001	1.10400E-002	0.00000E+000	3.44135E+001
Scrapers	7.45500E-002	8.13860E-001	5.80200E-001	1.38000E-003	3.17700E-002	2.92300E-002	0.00000E+000	1.21378E+002	1.21378E+002	3.92600E-002	0.00000E+000	1.22360E+002
Tractors/Loaders/Backhoes	1.49900E-002	1.52480E-001	2.03650E-001	2.80000E-004	8.20000E-003	7.54000E-003	0.00000E+000	2.48684E+001	2.48684E+001	8.04000E-003	0.00000E+000	2.50695E+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					
Excavators	1.84200E-002	1.61700E-001	2.96220E-001	4.70000E-004	7.82000E-003	7.19000E-003	0.00000E+000	4.12781E+001	4.12781E+001	1.33500E-002	0.00000E+000	4.16119E+001
Graders	1.88800E-002	2.39220E-001	7.83400E-002	3.00000E-004	7.61000E-003	7.00000E-003	0.00000E+000	2.64700E+001	2.64700E+001	8.56000E-003	0.00000E+000	2.66840E+001
Rubber Tired Dozers	3.80900E-002	4.00110E-001	1.62980E-001	3.90000E-004	1.89900E-002	1.74700E-002	0.00000E+000	3.41374E+001	3.41374E+001	1.10400E-002	0.00000E+000	3.44134E+001
Scrapers	7.45500E-002	8.13860E-001	5.80200E-001	1.38000E-003	3.17700E-002	2.92300E-002	0.00000E+000	1.21378E+002	1.21378E+002	3.92600E-002	0.00000E+000	1.22360E+002
Tractors/Loaders/Backhoes	1.49900E-002	1.52480E-001	2.03650E-001	2.80000E-004	8.20000E-003	7.54000E-003	0.00000E+000	2.48684E+001	2.48684E+001	8.04000E-003	0.00000E+000	2.50695E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21129E-006	1.21129E-006	0.00000E+000	0.00000E+000	1.20158E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13336E-006	1.13336E-006	0.00000E+000	0.00000E+000	1.12427E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	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	1.16234E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23581E-006	1.23581E-006	0.00000E+000	0.00000E+000	1.14417E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20635E-006	1.20635E-006	0.00000E+000	0.00000E+000	1.19667E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	
No	Clean Paved Road	% PM Reduction	0.00	

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	0.33	0.16	0.33	0.16	0.00	0.00
Grading	Roads	0.01	0.00	0.01	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	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.00	0.15		
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	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

### Energy Mitigation Measures

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

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

**Water Mitigation Measures**

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

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**ARC CalEEMod  
Existing Plus Project Operations**



ARC Operations (E+P) - Yolo County, Annual

**ARC Operations (E+P)**  
**Yolo County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	1,510.00	1000sqft	44.70	1,510,000.00	0
Manufacturing	884.00	1000sqft	57.20	884,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	2,573.00	Space	11.20	1,029,200.00	0
Unenclosed Parking Structure	3,285.00	Space	5.28	1,314,000.00	0
Hotel	150.00	Room	5.00	160,000.00	0
Apartments Mid Rise	570.00	Dwelling Unit	15.00	570,000.00	1630
Condo/Townhouse High Rise	280.00	Dwelling Unit	4.38	280,000.00	801
Regional Shopping Center	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

ARC Operations (E+P) - Yolo County, Annual

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Information based on project application

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Grading -

Vehicle Trips - Adjusted based on project-specific traffic information from Fehr and Peers

Road Dust - Adjusted based on location in County and urban nature of the project

Energy Use - Energy intensity upgraded in compliance with 2019 CBSC

Area Mitigation - Per applicant provided information

Energy Mitigation - Per applicant provided information

Water Mitigation - Per applicant provided information

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	120.00	1.00
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	1.87	4.31
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	26.46	18.52
tblEnergyUse	T24NG	18.58	13.01
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01

## ARC Operations (E+P) - Yolo County, Annual

tblLandUse	LandUseSquareFeet	217,800.00	160,000.00
tblLandUse	LotAcreage	34.66	44.70
tblLandUse	LotAcreage	20.29	57.20
tblLandUse	LotAcreage	23.16	11.20
tblLandUse	LotAcreage	29.56	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	CC_TL	5.00	8.50
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	HO_TL	7.00	11.79
tblVehicleTrips	HO_TL	7.00	11.79
tblVehicleTrips	HS_TL	5.00	8.50
tblVehicleTrips	HS_TL	5.00	8.50
tblVehicleTrips	HW_TL	10.00	16.84
tblVehicleTrips	HW_TL	10.00	16.84

## ARC Operations (E+P) - Yolo County, Annual

tblVehicleTrips	WD_TR	6.65	4.94
tblVehicleTrips	WD_TR	4.18	6.73
tblVehicleTrips	WD_TR	8.17	7.67
tblVehicleTrips	WD_TR	3.82	3.57
tblVehicleTrips	WD_TR	42.70	9.24
tblVehicleTrips	WD_TR	8.11	9.24

**2.0 Emissions Summary**

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ARC Operations (E+P) - Yolo County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	95.4427	1.4664	104.0172	0.1767		13.7288	13.7288		13.7288	13.7288	1,305.1248	378.6877	1,683.8125	1.2299	0.0990	1,744.0690
Energy	0.2318	2.0842	1.6005	0.0126		0.1602	0.1602		0.1602	0.1602	0.0000	3,770.1172	3,770.1172	0.4109	0.1180	3,815.5421
Mobile	3.7709	40.3915	45.5289	0.3172	29.9318	0.1341	30.0658	8.0870	0.1254	8.2124	0.0000	29,465.8923	29,465.8923	0.6988	0.0000	29,483.3628
Waste						0.0000	0.0000		0.0000	0.0000	363.1590	0.0000	363.1590	21.4621	0.0000	899.7109
Water						0.0000	0.0000		0.0000	0.0000	321.5292	297.5985	619.1277	33.0981	0.7951	1,683.5129
<b>Total</b>	<b>99.4454</b>	<b>43.9422</b>	<b>151.1465</b>	<b>0.5065</b>	<b>29.9318</b>	<b>14.0230</b>	<b>43.9547</b>	<b>8.0870</b>	<b>14.0143</b>	<b>22.1013</b>	<b>1,989.8129</b>	<b>33,912.2956</b>	<b>35,902.1086</b>	<b>56.8998</b>	<b>1.0121</b>	<b>37,626.1977</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	15.4365	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
Energy	0.1991	1.7890	1.3685	0.0109		0.1375	0.1375		0.1375	0.1375	0.0000	2,691.7635	2,691.7635	0.2172	0.0732	2,719.0158
Mobile	3.7709	40.3915	45.5289	0.3172	29.9318	0.1341	30.0658	8.0870	0.1254	8.2124	0.0000	29,465.8923	29,465.8923	0.6988	0.0000	29,483.3628
Waste						0.0000	0.0000		0.0000	0.0000	363.1590	0.0000	363.1590	21.4621	0.0000	899.7109
Water						0.0000	0.0000		0.0000	0.0000	257.2234	236.6016	493.8249	26.4781	0.6360	1,345.3013
<b>Total</b>	<b>19.4065</b>	<b>42.2538</b>	<b>53.2642</b>	<b>0.3284</b>	<b>29.9318</b>	<b>0.3069</b>	<b>30.2386</b>	<b>8.0870</b>	<b>0.2982</b>	<b>8.3852</b>	<b>620.3823</b>	<b>32,404.7187</b>	<b>33,025.1010</b>	<b>48.8664</b>	<b>0.7092</b>	<b>34,458.1073</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>80.49</b>	<b>3.84</b>	<b>64.76</b>	<b>35.17</b>	<b>0.00</b>	<b>97.81</b>	<b>31.21</b>	<b>0.00</b>	<b>97.87</b>	<b>62.06</b>	<b>68.82</b>	<b>4.45</b>	<b>8.01</b>	<b>14.12</b>	<b>29.92</b>	<b>8.42</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2021	1/6/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

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**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 17.08**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**





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**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.7709	40.3915	45.5289	0.3172	29.9318	0.1341	30.0658	8.0870	0.1254	8.2124	0.0000	29,465.89 23	29,465.89 23	0.6988	0.0000	29,483.36 28
Unmitigated	3.7709	40.3915	45.5289	0.3172	29.9318	0.1341	30.0658	8.0870	0.1254	8.2124	0.0000	29,465.89 23	29,465.89 23	0.6988	0.0000	29,483.36 28

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,815.80	3,642.30	3340.20	13,305,236	13,305,236
Condo/Townhouse High Rise	1,884.40	1,206.80	960.40	7,321,275	7,321,275
Hotel	1,150.50	1,228.50	892.50	2,970,588	2,970,588
Manufacturing	3,155.88	1,317.16	548.08	11,832,035	11,832,035
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	924.00	4,997.00	2524.00	4,139,996	4,139,996
Research & Development	13,952.40	2,869.00	1676.10	39,238,054	39,238,054
Unenclosed Parking Structure	0.00	0.00	0.00		
<b>Total</b>	<b>23,882.98</b>	<b>15,260.76</b>	<b>9,941.28</b>	<b>78,807,184</b>	<b>78,807,184</b>

**4.3 Trip Type Information**

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	16.84	8.50	11.79	46.00	13.00	41.00	86	11	3
Condo/Townhouse High Rise	16.84	8.50	11.79	46.00	13.00	41.00	86	11	3
Hotel	16.84	8.50	11.79	19.40	61.60	19.00	58	38	4
Manufacturing	16.84	8.42	11.79	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.84	8.42	11.79	16.30	64.70	19.00	54	35	11
Research & Development	16.84	8.42	11.79	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Condo/Townhouse High Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Hotel	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Manufacturing	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Other Asphalt Surfaces	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Unenclosed Parking Structure	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	721.7112	721.7112	0.1794	0.0371	737.2564
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,476.0003	1,476.0003	0.3669	0.0759	1,507.7925
NaturalGas Mitigated	0.1991	1.7890	1.3685	0.0109		0.1375	0.1375		0.1375	0.1375	0.0000	1,970.0523	1,970.0523	0.0378	0.0361	1,981.7594
NaturalGas Unmitigated	0.2318	2.0842	1.6005	0.0126		0.1602	0.1602		0.1602	0.1602	0.0000	2,294.1169	2,294.1169	0.0440	0.0421	2,307.7497

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	5.27468e+006	0.0284	0.2431	0.1034	1.5500e-003		0.0197	0.0197		0.0197	0.0197	0.0000	281.4769	281.4769	5.3900e-003	5.1600e-003	283.1496
Condo/Townhouse High Rise	2.59107e+006	0.0140	0.1194	0.0508	7.6000e-004		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	138.2693	138.2693	2.6500e-003	2.5300e-003	139.0910
Hotel	3.0048e+006	0.0162	0.1473	0.1237	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3476	160.3476	3.0700e-003	2.9400e-003	161.3004
Manufacturing	1.15539e+007	0.0623	0.5664	0.4758	3.4000e-003		0.0430	0.0430		0.0430	0.0430	0.0000	616.5590	616.5590	0.0118	0.0113	620.2229
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	830000	4.4800e-003	0.0407	0.0342	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	44.2920	44.2920	8.5000e-004	8.1000e-004	44.5552
Research & Development	1.97357e+007	0.1064	0.9674	0.8127	5.8000e-003		0.0735	0.0735		0.0735	0.0735	0.0000	1,053.1721	1,053.1721	0.0202	0.0193	1,059.4306
Unenclosed Parking Structure	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
<b>Total</b>		<b>0.2318</b>	<b>2.0842</b>	<b>1.6006</b>	<b>0.0126</b>		<b>0.1602</b>	<b>0.1602</b>		<b>0.1602</b>	<b>0.1602</b>	<b>0.0000</b>	<b>2,294.1169</b>	<b>2,294.1169</b>	<b>0.0440</b>	<b>0.0421</b>	<b>2,307.7497</b>

ARC Operations (E+P) - Yolo County, Annual

**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					
Apartments Mid Rise	4.71321e+006	0.0254	0.2172	0.0924	1.3900e-003		0.0176	0.0176		0.0176	0.0176	0.0000	251.5151	251.5151	4.8200e-003	4.6100e-003	253.0097
Condo/Townhouse High Rise	2.31526e+006	0.0125	0.1067	0.0454	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003	0.0000	123.5513	123.5513	2.3700e-003	2.2700e-003	124.2855
Hotel	2.56032e+006	0.0138	0.1255	0.1054	7.5000e-004		9.5400e-003	9.5400e-003		9.5400e-003	9.5400e-003	0.0000	136.6284	136.6284	2.6200e-003	2.5000e-003	137.4403
Manufacturing	9.82875e+006	0.0530	0.4818	0.4047	2.8900e-003		0.0366	0.0366		0.0366	0.0366	0.0000	524.4997	524.4997	0.0101	9.6200e-003	527.6166
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	710900	3.8300e-003	0.0349	0.0293	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	37.9363	37.9363	7.3000e-004	7.0000e-004	38.1618
Research & Development	1.67889e+007	0.0905	0.8230	0.6913	4.9400e-003		0.0626	0.0626		0.0626	0.0626	0.0000	895.9215	895.9215	0.0172	0.0164	901.2455
Unenclosed Parking Structure	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
<b>Total</b>		<b>0.1991</b>	<b>1.7890</b>	<b>1.3685</b>	<b>0.0109</b>		<b>0.1376</b>	<b>0.1376</b>		<b>0.1376</b>	<b>0.1376</b>	<b>0.0000</b>	<b>1,970.0523</b>	<b>1,970.0523</b>	<b>0.0378</b>	<b>0.0361</b>	<b>1,981.7594</b>

## ARC Operations (E+P) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.40779e+006	127.4220	0.0317	6.5500e-003	130.1666
Condo/Townhouse High Rise	1.25548e+006	66.4408	0.0165	3.4200e-003	67.8719
Hotel	1.4496e+006	76.7137	0.0191	3.9500e-003	78.3661
Manufacturing	7.03664e+006	372.3834	0.0926	0.0192	380.4043
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	360220	19.0631	4.7400e-003	9.8000e-004	19.4737
Regional Shopping Center	1.062e+006	56.2017	0.0140	2.8900e-003	57.4123
Research & Development	1.20196e+007	636.0847	0.1581	0.0327	649.7856
Unenclosed Parking Structure	2.2995e+006	121.6910	0.0303	6.2600e-003	124.3121
<b>Total</b>		<b>1,476.0003</b>	<b>0.3669</b>	<b>0.0759</b>	<b>1,507.7925</b>



ARC Operations (E+P) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.18557e+006	62.7412	0.0156	3.2300e-003	64.0926
Condo/Townhouse High Rise	618739	32.7440	8.1400e-003	1.6800e-003	33.4493
Hotel	673080	35.6198	8.8500e-003	1.8300e-003	36.3870
Manufacturing	3.44141e+006	182.1217	0.0453	9.3700e-003	186.0445
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	180110	9.5315	2.3700e-003	4.9000e-004	9.7368
Regional Shopping Center	510525	27.0173	6.7200e-003	1.3900e-003	27.5992
Research & Development	5.87843e+006	311.0902	0.0773	0.0160	317.7909
Unenclosed Parking Structure	1.14975e+006	60.8455	0.0151	3.1300e-003	62.1561
<b>Total</b>		<b>721.7112</b>	<b>0.1794</b>	<b>0.0371</b>	<b>737.2564</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

No Hearths Installed

Use Low VOC Cleaning Supplies

ARC Operations (E+P) - Yolo County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	15.4365	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
Unmitigated	95.4427	1.4664	104.0172	0.1767		13.7288	13.7288		13.7288	13.7288	1,305.1248	378.6877	1,683.8125	1.2299	0.0990	1,744.0690

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	13.8380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	78.9830	1.3932	97.6503	0.1764		13.6935	13.6935		13.6935	13.6935	1,305.1248	368.2263	1,673.3511	1.2197	0.0990	1,733.3525
Landscaping	0.1952	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
<b>Total</b>	<b>95.4427</b>	<b>1.4664</b>	<b>104.0172</b>	<b>0.1767</b>		<b>13.7288</b>	<b>13.7288</b>		<b>13.7288</b>	<b>13.7288</b>	<b>1,305.1248</b>	<b>378.6877</b>	<b>1,683.8125</b>	<b>1.2300</b>	<b>0.0990</b>	<b>1,744.0690</b>

ARC Operations (E+P) - Yolo County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.8149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1952	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
<b>Total</b>	<b>15.4365</b>	<b>0.0733</b>	<b>6.3669</b>	<b>3.4000e-004</b>		<b>0.0353</b>	<b>0.0353</b>		<b>0.0353</b>	<b>0.0353</b>	<b>0.0000</b>	<b>10.4614</b>	<b>10.4614</b>	<b>0.0102</b>	<b>0.0000</b>	<b>10.7165</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

ARC Operations (E+P) - Yolo County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	493.8249	26.4781	0.6360	1,345.301 3
Unmitigated	619.1277	33.0981	0.7951	1,683.512 9

ARC Operations (E+P) - Yolo County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	37.1378 / 23.413	26.7532	1.2139	0.0293	65.8441
Condo/Townhouse High Rise	18.2431 / 11.5011	13.1419	0.5963	0.0144	32.3445
Hotel	3.80502 / 0.422779	2.3750	0.1243	2.9900e-003	6.3723
Manufacturing	204.425 / 0	123.3924	6.6757	0.1603	338.0541
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.40725 / 4.53993	5.3120	0.2421	5.8500e-003	13.1083
Research & Development	742.458 / 0	448.1530	24.2459	0.5822	1,227.7897
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>619.1276</b>	<b>33.0981</b>	<b>0.7951</b>	<b>1,683.5129</b>

ARC Operations (E+P) - Yolo County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.7102 / 14.0478	20.5353	0.9709	0.0234	51.7893
Condo/Townhouse High Rise	14.5945 / 6.90066	10.0875	0.4769	0.0115	25.4404
Hotel	3.04401 / 0.253668	1.8844	0.0994	2.3900e-003	5.0818
Manufacturing	163.54 / 0	98.7140	5.3406	0.1282	270.4433
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	5.9258 / 2.72396	4.0814	0.1936	4.6700e-003	10.3148
Research & Development	593.966 / 0	358.5224	19.3967	0.4658	982.2317
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>493.8249</b>	<b>26.4781</b>	<b>0.6360</b>	<b>1,345.3013</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

ARC Operations (E+P) - Yolo County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	363.1590	21.4621	0.0000	899.7109
Unmitigated	363.1590	21.4621	0.0000	899.7109

## ARC Operations (E+P) - Yolo County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	262.2	53.2242	3.1455	0.0000	131.8608
Condo/Townhouse High Rise	128.8	26.1452	1.5451	0.0000	64.7737
Hotel	82.13	16.6717	0.9853	0.0000	41.3033
Manufacturing	1096.16	222.5106	13.1500	0.0000	551.2605
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	105	21.3141	1.2596	0.0000	52.8047
Research & Development	114.75	23.2932	1.3766	0.0000	57.7080
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>363.1590</b>	<b>21.4621</b>	<b>0.0000</b>	<b>899.7109</b>



ARC Operations (E+P) - Yolo County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	262.2	53.2242	3.1455	0.0000	131.8608
Condo/Townhouse High Rise	128.8	26.1452	1.5451	0.0000	64.7737
Hotel	82.13	16.6717	0.9853	0.0000	41.3033
Manufacturing	1096.16	222.5106	13.1500	0.0000	551.2605
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	105	21.3141	1.2596	0.0000	52.8047
Research & Development	114.75	23.2932	1.3766	0.0000	57.7080
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>363.1590</b>	<b>21.4621</b>	<b>0.0000</b>	<b>899.7109</b>

**9.0 Operational Offroad**

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

ARC Operations (E+P) - Yolo County, Annual

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC Operations (E+P) - Yolo County, Summer

**ARC Operations (E+P)**  
**Yolo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	1,510.00	1000sqft	44.70	1,510,000.00	0
Manufacturing	884.00	1000sqft	57.20	884,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	2,573.00	Space	11.20	1,029,200.00	0
Unenclosed Parking Structure	3,285.00	Space	5.28	1,314,000.00	0
Hotel	150.00	Room	5.00	160,000.00	0
Apartments Mid Rise	570.00	Dwelling Unit	15.00	570,000.00	1630
Condo/Townhouse High Rise	280.00	Dwelling Unit	4.38	280,000.00	801
Regional Shopping Center	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

ARC Operations (E+P) - Yolo County, Summer

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Information based on project application

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Grading -

Vehicle Trips - Adjusted based on project-specific traffic information from Fehr and Peers

Road Dust - Adjusted based on location in County and urban nature of the project

Energy Use - Energy intensity upgraded in compliance with 2019 CBSC

Area Mitigation - Per applicant provided information

Energy Mitigation - Per applicant provided information

Water Mitigation - Per applicant provided information

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	120.00	1.00
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	1.87	4.31
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	26.46	18.52
tblEnergyUse	T24NG	18.58	13.01
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01

## ARC Operations (E+P) - Yolo County, Summer

tblLandUse	LandUseSquareFeet	217,800.00	160,000.00
tblLandUse	LotAcreage	34.66	44.70
tblLandUse	LotAcreage	20.29	57.20
tblLandUse	LotAcreage	23.16	11.20
tblLandUse	LotAcreage	29.56	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	CC_TL	5.00	8.50
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	HO_TL	7.00	11.79
tblVehicleTrips	HO_TL	7.00	11.79
tblVehicleTrips	HS_TL	5.00	8.50
tblVehicleTrips	HS_TL	5.00	8.50
tblVehicleTrips	HW_TL	10.00	16.84
tblVehicleTrips	HW_TL	10.00	16.84

## ARC Operations (E+P) - Yolo County, Summer

tblVehicleTrips	WD_TR	6.65	4.94
tblVehicleTrips	WD_TR	4.18	6.73
tblVehicleTrips	WD_TR	8.17	7.67
tblVehicleTrips	WD_TR	3.82	3.57
tblVehicleTrips	WD_TR	42.70	9.24
tblVehicleTrips	WD_TR	8.11	9.24

**2.0 Emissions Summary**

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ARC Operations (E+P) - Yolo County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487
Energy	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511
Mobile	34.1348	298.5975	380.7461	2.4811	228.3256	0.9941	229.3197	61.5131	0.9296	62.4428		253,770.1859	253,770.1859	5.7836		253,914.7752
<b>Total</b>	<b>2,053.1084</b>	<b>344.8116</b>	<b>2,841.9736</b>	<b>6.8563</b>	<b>228.3256</b>	<b>336.2514</b>	<b>564.5770</b>	<b>61.5131</b>	<b>336.1870</b>	<b>397.7001</b>	<b>35,089.1179</b>	<b>277,654.9244</b>	<b>312,744.0422</b>	<b>38.9676</b>	<b>2.9163</b>	<b>314,587.2750</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Energy	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
Mobile	34.1348	298.5975	380.7461	2.4811	228.3256	0.9941	229.3197	61.5131	0.9296	62.4428		253,770.1859	253,770.1859	5.7836		253,914.7752
<b>Total</b>	<b>120.9080</b>	<b>309.2142</b>	<b>458.9877</b>	<b>2.5444</b>	<b>228.3256</b>	<b>2.1397</b>	<b>230.4652</b>	<b>61.5131</b>	<b>2.0752</b>	<b>63.5883</b>	<b>0.0000</b>	<b>265,797.5544</b>	<b>265,797.5544</b>	<b>6.1366</b>	<b>0.2182</b>	<b>266,015.9798</b>



ARC Operations (E+P) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.11	10.32	83.85	62.89	0.00	99.36	59.18	0.00	99.38	84.01	100.00	4.27	15.01	84.25	92.52	15.44

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2021	1/6/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.08

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

ARC Operations (E+P) - Yolo County, Summer

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Unmitigated Construction Off-Site**

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

ARC Operations (E+P) - Yolo County, Summer

**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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ARC Operations (E+P) - Yolo County, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	34.1348	298.5975	380.7461	2.4811	228.3256	0.9941	229.3197	61.5131	0.9296	62.4428		253,770.1859	253,770.1859	5.7836		253,914.7752
Unmitigated	34.1348	298.5975	380.7461	2.4811	228.3256	0.9941	229.3197	61.5131	0.9296	62.4428		253,770.1859	253,770.1859	5.7836		253,914.7752

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,815.80	3,642.30	3340.20	13,305,236	13,305,236
Condo/Townhouse High Rise	1,884.40	1,206.80	960.40	7,321,275	7,321,275
Hotel	1,150.50	1,228.50	892.50	2,970,588	2,970,588
Manufacturing	3,155.88	1,317.16	548.08	11,832,035	11,832,035
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	924.00	4,997.00	2524.00	4,139,996	4,139,996
Research & Development	13,952.40	2,869.00	1676.10	39,238,054	39,238,054
Unenclosed Parking Structure	0.00	0.00	0.00		
<b>Total</b>	<b>23,882.98</b>	<b>15,260.76</b>	<b>9,941.28</b>	<b>78,807,184</b>	<b>78,807,184</b>

**4.3 Trip Type Information**

ARC Operations (E+P) - Yolo County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	16.84	8.50	11.79	46.00	13.00	41.00	86	11	3
Condo/Townhouse High Rise	16.84	8.50	11.79	46.00	13.00	41.00	86	11	3
Hotel	16.84	8.50	11.79	19.40	61.60	19.00	58	38	4
Manufacturing	16.84	8.42	11.79	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.84	8.42	11.79	16.30	64.70	19.00	54	35	11
Research & Development	16.84	8.42	11.79	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Condo/Townhouse High Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Hotel	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Manufacturing	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Other Asphalt Surfaces	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Unenclosed Parking Structure	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC Operations (E+P) - Yolo County, Summer

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
NaturalGas Unmitigated	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511

ARC Operations (E+P) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	14451.2	0.1559	1.3318	0.5667	8.5000e-003		0.1077	0.1077		0.1077	0.1077		1,700.1378	1,700.1378	0.0326	0.0312	1,710.2408
Condo/Townhouse High Rise	7098.82	0.0766	0.6542	0.2784	4.1800e-003		0.0529	0.0529		0.0529	0.0529		835.1554	835.1554	0.0160	0.0153	840.1183
Hotel	8232.33	0.0888	0.8071	0.6780	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.5093	968.5093	0.0186	0.0178	974.2646
Manufacturing	31654.5	0.3414	3.1034	2.6068	0.0186		0.2359	0.2359		0.2359	0.2359		3,724.0548	3,724.0548	0.0714	0.0683	3,746.1850
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	2273.97	0.0245	0.2229	0.1873	1.3400e-003		0.0169	0.0169		0.0169	0.0169		267.5262	267.5262	5.1300e-003	4.9000e-003	269.1160
Research & Development	54070.4	0.5831	5.3010	4.4529	0.0318		0.4029	0.4029		0.4029	0.4029		6,361.2248	6,361.2248	0.1219	0.1166	6,399.0264
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.2702</b>	<b>11.4204</b>	<b>8.7700</b>	<b>0.0693</b>		<b>0.8776</b>	<b>0.8776</b>		<b>0.8776</b>	<b>0.8776</b>		<b>13,856.6082</b>	<b>13,856.6082</b>	<b>0.2656</b>	<b>0.2540</b>	<b>13,938.9511</b>

ARC Operations (E+P) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	12.9129	0.1393	1.1900	0.5064	7.6000e-003		0.0962	0.0962		0.0962	0.0962		1,519.1666	1,519.1666	0.0291	0.0279	1,528.1942
Condo/Townhouse High Rise	6.34319	0.0684	0.5846	0.2488	3.7300e-003		0.0473	0.0473		0.0473	0.0473		746.2573	746.2573	0.0143	0.0137	750.6919
Hotel	7.01458	0.0757	0.6877	0.5777	4.1300e-003		0.0523	0.0523		0.0523	0.0523		825.2442	825.2442	0.0158	0.0151	830.1482
Manufacturing	26.9281	0.2904	2.6400	2.2176	0.0158		0.2006	0.2006		0.2006	0.2006		3,168.0110	3,168.0110	0.0607	0.0581	3,186.8369
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	1.94767	0.0210	0.1910	0.1604	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1378	229.1378	4.3900e-003	4.2000e-003	230.4994
Research & Development	45.9971	0.4961	4.5095	3.7880	0.0271		0.3427	0.3427		0.3427	0.3427		5,411.4214	5,411.4214	0.1037	0.0992	5,443.5788
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.0908</b>	<b>9.8028</b>	<b>7.4988</b>	<b>0.0595</b>		<b>0.7536</b>	<b>0.7536</b>		<b>0.7536</b>	<b>0.7536</b>		<b>11,899.2382</b>	<b>11,899.2382</b>	<b>0.2281</b>	<b>0.2182</b>	<b>11,969.9494</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

No Hearths Installed

Use Low VOC Cleaning Supplies



ARC Operations (E+P) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Unmitigated	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	75.8248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,926.4146	33.9797	2,381.7147	4.3022		333.9878	333.9878		333.9878	333.9878	35,089.1179	9,900.0000	44,989.1179	32.7934	2.6622	46,602.2935
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>2,017.7035</b>	<b>34.7937</b>	<b>2,452.4575</b>	<b>4.3059</b>		<b>334.3798</b>	<b>334.3798</b>		<b>334.3798</b>	<b>334.3798</b>	<b>35,089.1179</b>	<b>10,028.1303</b>	<b>45,117.2481</b>	<b>32.9184</b>	<b>2.6622</b>	<b>46,733.5487</b>

ARC Operations (E+P) - Yolo County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	70.2184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>85.6825</b>	<b>0.8140</b>	<b>70.7428</b>	<b>3.7700e-003</b>		<b>0.3920</b>	<b>0.3920</b>		<b>0.3920</b>	<b>0.3920</b>	<b>0.0000</b>	<b>128.1303</b>	<b>128.1303</b>	<b>0.1250</b>	<b>0.0000</b>	<b>131.2552</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## ARC Operations (E+P) - Yolo County, Summer

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC Operations (E+P) - Yolo County, Winter

**ARC Operations (E+P)**  
**Yolo County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	1,510.00	1000sqft	44.70	1,510,000.00	0
Manufacturing	884.00	1000sqft	57.20	884,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	2,573.00	Space	11.20	1,029,200.00	0
Unenclosed Parking Structure	3,285.00	Space	5.28	1,314,000.00	0
Hotel	150.00	Room	5.00	160,000.00	0
Apartments Mid Rise	570.00	Dwelling Unit	15.00	570,000.00	1630
Condo/Townhouse High Rise	280.00	Dwelling Unit	4.38	280,000.00	801
Regional Shopping Center	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

ARC Operations (E+P) - Yolo County, Winter

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Information based on project application

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Grading -

Vehicle Trips - Adjusted based on project-specific traffic information from Fehr and Peers

Road Dust - Adjusted based on location in County and urban nature of the project

Energy Use - Energy intensity upgraded in compliance with 2019 CBSC

Area Mitigation - Per applicant provided information

Energy Mitigation - Per applicant provided information

Water Mitigation - Per applicant provided information

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	120.00	1.00
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	1.87	4.31
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	26.46	18.52
tblEnergyUse	T24NG	18.58	13.01
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01

## ARC Operations (E+P) - Yolo County, Winter

tblLandUse	LandUseSquareFeet	217,800.00	160,000.00
tblLandUse	LotAcreage	34.66	44.70
tblLandUse	LotAcreage	20.29	57.20
tblLandUse	LotAcreage	23.16	11.20
tblLandUse	LotAcreage	29.56	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	CC_TL	5.00	8.50
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CC_TL	5.00	8.42
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CNW_TL	7.00	11.79
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	CW_TL	10.00	16.84
tblVehicleTrips	HO_TL	7.00	11.79
tblVehicleTrips	HO_TL	7.00	11.79
tblVehicleTrips	HS_TL	5.00	8.50
tblVehicleTrips	HS_TL	5.00	8.50
tblVehicleTrips	HW_TL	10.00	16.84
tblVehicleTrips	HW_TL	10.00	16.84

## ARC Operations (E+P) - Yolo County, Winter

tblVehicleTrips	WD_TR	6.65	4.94
tblVehicleTrips	WD_TR	4.18	6.73
tblVehicleTrips	WD_TR	8.17	7.67
tblVehicleTrips	WD_TR	3.82	3.57
tblVehicleTrips	WD_TR	42.70	9.24
tblVehicleTrips	WD_TR	8.11	9.24

**2.0 Emissions Summary**

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ARC Operations (E+P) - Yolo County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487
Energy	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511
Mobile	27.0387	308.6731	347.2951	2.3096	228.3256	0.9967	229.3223	61.5131	0.9322	62.4453		236,552.7096	236,552.7096	5.9705		236,701.9724
<b>Total</b>	<b>2,046.0124</b>	<b>354.8872</b>	<b>2,808.5226</b>	<b>6.6848</b>	<b>228.3256</b>	<b>336.2541</b>	<b>564.5796</b>	<b>61.5131</b>	<b>336.1895</b>	<b>397.7026</b>	<b>35,089.1179</b>	<b>260,437.4481</b>	<b>295,526.5660</b>	<b>39.1545</b>	<b>2.9163</b>	<b>297,374.4722</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Energy	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
Mobile	27.0387	308.6731	347.2951	2.3096	228.3256	0.9967	229.3223	61.5131	0.9322	62.4453		236,552.7096	236,552.7096	5.9705		236,701.9724
<b>Total</b>	<b>113.8120</b>	<b>319.2898</b>	<b>425.5367</b>	<b>2.3728</b>	<b>228.3256</b>	<b>2.1423</b>	<b>230.4679</b>	<b>61.5131</b>	<b>2.0777</b>	<b>63.5909</b>	<b>0.0000</b>	<b>248,580.0781</b>	<b>248,580.0781</b>	<b>6.3236</b>	<b>0.2182</b>	<b>248,803.1770</b>

ARC Operations (E+P) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.44	10.03	84.85	64.50	0.00	99.36	59.18	0.00	99.38	84.01	100.00	4.55	15.89	83.85	92.52	16.33

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2021	1/6/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.08

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

ARC Operations (E+P) - Yolo County, Winter

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Unmitigated Construction Off-Site**

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

ARC Operations (E+P) - Yolo County, Winter

**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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ARC Operations (E+P) - Yolo County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	27.0387	308.6731	347.2951	2.3096	228.3256	0.9967	229.3223	61.5131	0.9322	62.4453		236,552.7096	236,552.7096	5.9705		236,701.9724
Unmitigated	27.0387	308.6731	347.2951	2.3096	228.3256	0.9967	229.3223	61.5131	0.9322	62.4453		236,552.7096	236,552.7096	5.9705		236,701.9724

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,815.80	3,642.30	3340.20	13,305,236	13,305,236
Condo/Townhouse High Rise	1,884.40	1,206.80	960.40	7,321,275	7,321,275
Hotel	1,150.50	1,228.50	892.50	2,970,588	2,970,588
Manufacturing	3,155.88	1,317.16	548.08	11,832,035	11,832,035
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	924.00	4,997.00	2524.00	4,139,996	4,139,996
Research & Development	13,952.40	2,869.00	1676.10	39,238,054	39,238,054
Unenclosed Parking Structure	0.00	0.00	0.00		
<b>Total</b>	<b>23,882.98</b>	<b>15,260.76</b>	<b>9,941.28</b>	<b>78,807,184</b>	<b>78,807,184</b>

**4.3 Trip Type Information**

ARC Operations (E+P) - Yolo County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	16.84	8.50	11.79	46.00	13.00	41.00	86	11	3
Condo/Townhouse High Rise	16.84	8.50	11.79	46.00	13.00	41.00	86	11	3
Hotel	16.84	8.50	11.79	19.40	61.60	19.00	58	38	4
Manufacturing	16.84	8.42	11.79	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.84	8.42	11.79	16.30	64.70	19.00	54	35	11
Research & Development	16.84	8.42	11.79	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Condo/Townhouse High Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Hotel	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Manufacturing	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Other Asphalt Surfaces	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Unenclosed Parking Structure	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC Operations (E+P) - Yolo County, Winter

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
NaturalGas Unmitigated	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511

ARC Operations (E+P) - Yolo County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	14451.2	0.1559	1.3318	0.5667	8.5000e-003		0.1077	0.1077		0.1077	0.1077		1,700.1378	1,700.1378	0.0326	0.0312	1,710.2408
Condo/Townhouse High Rise	7098.82	0.0766	0.6542	0.2784	4.1800e-003		0.0529	0.0529		0.0529	0.0529		835.1554	835.1554	0.0160	0.0153	840.1183
Hotel	8232.33	0.0888	0.8071	0.6780	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.5093	968.5093	0.0186	0.0178	974.2646
Manufacturing	31654.5	0.3414	3.1034	2.6068	0.0186		0.2359	0.2359		0.2359	0.2359		3,724.0548	3,724.0548	0.0714	0.0683	3,746.1850
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	2273.97	0.0245	0.2229	0.1873	1.3400e-003		0.0169	0.0169		0.0169	0.0169		267.5262	267.5262	5.1300e-003	4.9000e-003	269.1160
Research & Development	54070.4	0.5831	5.3010	4.4529	0.0318		0.4029	0.4029		0.4029	0.4029		6,361.2248	6,361.2248	0.1219	0.1166	6,399.0264
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.2702</b>	<b>11.4204</b>	<b>8.7700</b>	<b>0.0693</b>		<b>0.8776</b>	<b>0.8776</b>		<b>0.8776</b>	<b>0.8776</b>		<b>13,856.6082</b>	<b>13,856.6082</b>	<b>0.2656</b>	<b>0.2540</b>	<b>13,938.9511</b>



ARC Operations (E+P) - Yolo County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	12.9129	0.1393	1.1900	0.5064	7.6000e-003		0.0962	0.0962		0.0962	0.0962		1,519.1666	1,519.1666	0.0291	0.0279	1,528.1942
Condo/Townhouse High Rise	6.34319	0.0684	0.5846	0.2488	3.7300e-003		0.0473	0.0473		0.0473	0.0473		746.2573	746.2573	0.0143	0.0137	750.6919
Hotel	7.01458	0.0757	0.6877	0.5777	4.1300e-003		0.0523	0.0523		0.0523	0.0523		825.2442	825.2442	0.0158	0.0151	830.1482
Manufacturing	26.9281	0.2904	2.6400	2.2176	0.0158		0.2006	0.2006		0.2006	0.2006		3,168.0110	3,168.0110	0.0607	0.0581	3,186.8369
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	1.94767	0.0210	0.1910	0.1604	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1378	229.1378	4.3900e-003	4.2000e-003	230.4994
Research & Development	45.9971	0.4961	4.5095	3.7880	0.0271		0.3427	0.3427		0.3427	0.3427		5,411.4214	5,411.4214	0.1037	0.0992	5,443.5788
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.0908</b>	<b>9.8028</b>	<b>7.4988</b>	<b>0.0595</b>		<b>0.7536</b>	<b>0.7536</b>		<b>0.7536</b>	<b>0.7536</b>		<b>11,899.2382</b>	<b>11,899.2382</b>	<b>0.2281</b>	<b>0.2182</b>	<b>11,969.9494</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

No Hearths Installed

Use Low VOC Cleaning Supplies

ARC Operations (E+P) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Unmitigated	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	75.8248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,926.4146	33.9797	2,381.7147	4.3022		333.9878	333.9878		333.9878	333.9878	35,089.1179	9,900.0000	44,989.1179	32.7934	2.6622	46,602.2935
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>2,017.7035</b>	<b>34.7937</b>	<b>2,452.4575</b>	<b>4.3059</b>		<b>334.3798</b>	<b>334.3798</b>		<b>334.3798</b>	<b>334.3798</b>	<b>35,089.1179</b>	<b>10,028.1303</b>	<b>45,117.2481</b>	<b>32.9184</b>	<b>2.6622</b>	<b>46,733.5487</b>

ARC Operations (E+P) - Yolo County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	70.2184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>85.6825</b>	<b>0.8140</b>	<b>70.7428</b>	<b>3.7700e-003</b>		<b>0.3920</b>	<b>0.3920</b>		<b>0.3920</b>	<b>0.3920</b>	<b>0.0000</b>	<b>128.1303</b>	<b>128.1303</b>	<b>0.1250</b>	<b>0.0000</b>	<b>131.2552</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## ARC Operations (E+P) - Yolo County, Winter

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	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		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)		
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

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	7.39	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	51.10	51.10	51.10	51.10	51.10
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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	14.13	14.16	14.50	14.01	14.11	14.11	0.00	14.13	14.13	14.12	14.08	14.13
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.50	20.24	20.00	20.01	20.09
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	0.28	0.62		
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	
Yes	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### 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	
Yes	On-site Renewable	0.00	50.00

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

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	40.00
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
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**ARC CalEEMod  
Cumulative Operations**

ARC Operations (Cumulative) - Yolo County, Annual

**ARC Operations (Cumulative)**  
**Yolo County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	1,510.00	1000sqft	44.70	1,510,000.00	0
Manufacturing	884.00	1000sqft	57.20	884,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	2,573.00	Space	11.20	1,029,200.00	0
Unenclosed Parking Structure	3,285.00	Space	5.28	1,314,000.00	0
Hotel	150.00	Room	5.00	160,000.00	0
Apartments Mid Rise	570.00	Dwelling Unit	15.00	570,000.00	1630
Condo/Townhouse High Rise	280.00	Dwelling Unit	4.38	280,000.00	801
Regional Shopping Center	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

ARC Operations (Cumulative) - Yolo County, Annual

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Information based on project application

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Grading -

Vehicle Trips - Adjusted based on project-specific traffic information from Fehr and Peers

Road Dust - Adjusted based on location in County and urban nature of the project

Energy Use - Energy intensity upgraded in compliance with 2019 CBSC

Area Mitigation - Per applicant provided information

Energy Mitigation - Per applicant provided information

Water Mitigation - Per applicant provided information

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	120.00	1.00
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	1.87	4.31
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	26.46	18.52
tblEnergyUse	T24NG	18.58	13.01
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01

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tblLandUse	LandUseSquareFeet	217,800.00	160,000.00
tblLandUse	LotAcreage	34.66	44.70
tblLandUse	LotAcreage	20.29	57.20
tblLandUse	LotAcreage	23.16	11.20
tblLandUse	LotAcreage	29.56	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	HO_TL	7.00	9.65
tblVehicleTrips	HO_TL	7.00	9.65
tblVehicleTrips	HS_TL	5.00	6.89
tblVehicleTrips	HS_TL	5.00	6.89
tblVehicleTrips	HW_TL	10.00	13.80
tblVehicleTrips	HW_TL	10.00	13.80

## ARC Operations (Cumulative) - Yolo County, Annual

tblVehicleTrips	WD_TR	6.65	4.94
tblVehicleTrips	WD_TR	4.18	6.73
tblVehicleTrips	WD_TR	8.17	7.67
tblVehicleTrips	WD_TR	3.82	3.57
tblVehicleTrips	WD_TR	42.70	9.24
tblVehicleTrips	WD_TR	8.11	9.24

**2.0 Emissions Summary**

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ARC Operations (Cumulative) - Yolo County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	95.4427	1.4664	104.0172	0.1767		13.7288	13.7288		13.7288	13.7288	1,305.1248	378.6877	1,683.8125	1.2299	0.0990	1,744.0690
Energy	0.2318	2.0842	1.6005	0.0126		0.1602	0.1602		0.1602	0.1602	0.0000	3,770.1172	3,770.1172	0.4109	0.1180	3,815.5421
Mobile	3.4050	37.4515	38.5607	0.2634	24.5053	0.1119	24.6172	6.6209	0.1046	6.7255	0.0000	24,475.1388	24,475.1388	0.6170	0.0000	24,490.5638
Waste						0.0000	0.0000		0.0000	0.0000	363.1590	0.0000	363.1590	21.4621	0.0000	899.7109
Water						0.0000	0.0000		0.0000	0.0000	321.5292	297.5985	619.1277	33.0981	0.7951	1,683.5129
<b>Total</b>	<b>99.0794</b>	<b>41.0021</b>	<b>144.1783</b>	<b>0.4528</b>	<b>24.5053</b>	<b>14.0008</b>	<b>38.5061</b>	<b>6.6209</b>	<b>13.9935</b>	<b>20.6144</b>	<b>1,989.8129</b>	<b>28,921.5421</b>	<b>30,911.3551</b>	<b>56.8180</b>	<b>1.0121</b>	<b>32,633.3988</b>

ARC Operations (Cumulative) - Yolo County, Annual

**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	15.4365	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
Energy	0.1991	1.7890	1.3685	0.0109		0.1375	0.1375		0.1375	0.1375	0.0000	2,691.7635	2,691.7635	0.2172	0.0732	2,719.0158
Mobile	3.4050	37.4515	38.5607	0.2634	24.5053	0.1119	24.6172	6.6209	0.1046	6.7255	0.0000	24,475.1388	24,475.1388	0.6170	0.0000	24,490.5638
Waste						0.0000	0.0000		0.0000	0.0000	363.1590	0.0000	363.1590	21.4621	0.0000	899.7109
Water						0.0000	0.0000		0.0000	0.0000	257.2234	236.6016	493.8249	26.4781	0.6360	1,345.3013
<b>Total</b>	<b>19.0405</b>	<b>39.3137</b>	<b>46.2960</b>	<b>0.2746</b>	<b>24.5053</b>	<b>0.2847</b>	<b>24.7900</b>	<b>6.6209</b>	<b>0.2774</b>	<b>6.8983</b>	<b>620.3823</b>	<b>27,413.9652</b>	<b>28,034.3475</b>	<b>48.7846</b>	<b>0.7092</b>	<b>29,465.3083</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>80.78</b>	<b>4.12</b>	<b>67.89</b>	<b>39.35</b>	<b>0.00</b>	<b>97.97</b>	<b>35.62</b>	<b>0.00</b>	<b>98.02</b>	<b>66.54</b>	<b>68.82</b>	<b>5.21</b>	<b>9.31</b>	<b>14.14</b>	<b>29.92</b>	<b>9.71</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2021	1/6/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

ARC Operations (Cumulative) - Yolo County, Annual

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 17.08**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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ARC Operations (Cumulative) - Yolo County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.4050	37.4515	38.5607	0.2634	24.5053	0.1119	24.6172	6.6209	0.1046	6.7255	0.0000	24,475.1388	24,475.1388	0.6170	0.0000	24,490.5638
Unmitigated	3.4050	37.4515	38.5607	0.2634	24.5053	0.1119	24.6172	6.6209	0.1046	6.7255	0.0000	24,475.1388	24,475.1388	0.6170	0.0000	24,490.5638

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,815.80	3,642.30	3340.20	10,889,748	10,889,748
Condo/Townhouse High Rise	1,884.40	1,206.80	960.40	5,992,141	5,992,141
Hotel	1,150.50	1,228.50	892.50	2,421,152	2,421,152
Manufacturing	3,155.88	1,317.16	548.08	9,692,892	9,692,892
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	924.00	4,997.00	2524.00	3,390,447	3,390,447
Research & Development	13,952.40	2,869.00	1676.10	32,133,561	32,133,561
Unenclosed Parking Structure	0.00	0.00	0.00		
<b>Total</b>	<b>23,882.98</b>	<b>15,260.76</b>	<b>9,941.28</b>	<b>64,519,941</b>	<b>64,519,941</b>

4.3 Trip Type Information

ARC Operations (Cumulative) - Yolo County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.80	6.89	9.65	46.00	13.00	41.00	86	11	3
Condo/Townhouse High Rise	13.80	6.89	9.65	46.00	13.00	41.00	86	11	3
Hotel	13.80	6.89	9.65	19.40	61.60	19.00	58	38	4
Manufacturing	13.80	6.89	9.65	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.80	6.89	9.65	16.30	64.70	19.00	54	35	11
Research & Development	13.80	6.89	9.65	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Condo/Townhouse High Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Hotel	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Manufacturing	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Other Asphalt Surfaces	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Unenclosed Parking Structure	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy



ARC Operations (Cumulative) - Yolo County, Annual

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	721.7112	721.7112	0.1794	0.0371	737.2564
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,476.0003	1,476.0003	0.3669	0.0759	1,507.7925
NaturalGas Mitigated	0.1991	1.7890	1.3685	0.0109		0.1375	0.1375		0.1375	0.1375	0.0000	1,970.0523	1,970.0523	0.0378	0.0361	1,981.7594
NaturalGas Unmitigated	0.2318	2.0842	1.6005	0.0126		0.1602	0.1602		0.1602	0.1602	0.0000	2,294.1169	2,294.1169	0.0440	0.0421	2,307.7497

ARC Operations (Cumulative) - Yolo County, Annual

**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					
Apartments Mid Rise	5.27468e+006	0.0284	0.2431	0.1034	1.5500e-003		0.0197	0.0197		0.0197	0.0197	0.0000	281.4769	281.4769	5.3900e-003	5.1600e-003	283.1496
Condo/Townhouse High Rise	2.59107e+006	0.0140	0.1194	0.0508	7.6000e-004		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	138.2693	138.2693	2.6500e-003	2.5300e-003	139.0910
Hotel	3.0048e+006	0.0162	0.1473	0.1237	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3476	160.3476	3.0700e-003	2.9400e-003	161.3004
Manufacturing	1.15539e+007	0.0623	0.5664	0.4758	3.4000e-003		0.0430	0.0430		0.0430	0.0430	0.0000	616.5590	616.5590	0.0118	0.0113	620.2229
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	830000	4.4800e-003	0.0407	0.0342	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	44.2920	44.2920	8.5000e-004	8.1000e-004	44.5552
Research & Development	1.97357e+007	0.1064	0.9674	0.8127	5.8000e-003		0.0735	0.0735		0.0735	0.0735	0.0000	1,053.1721	1,053.1721	0.0202	0.0193	1,059.4306
Unenclosed Parking Structure	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
<b>Total</b>		<b>0.2318</b>	<b>2.0842</b>	<b>1.6006</b>	<b>0.0126</b>		<b>0.1602</b>	<b>0.1602</b>		<b>0.1602</b>	<b>0.1602</b>	<b>0.0000</b>	<b>2,294.1169</b>	<b>2,294.1169</b>	<b>0.0440</b>	<b>0.0421</b>	<b>2,307.7497</b>

ARC Operations (Cumulative) - Yolo County, Annual

**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					
Apartments Mid Rise	4.71321e+006	0.0254	0.2172	0.0924	1.3900e-003		0.0176	0.0176		0.0176	0.0176	0.0000	251.5151	251.5151	4.8200e-003	4.6100e-003	253.0097
Condo/Townhouse High Rise	2.31526e+006	0.0125	0.1067	0.0454	6.8000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003	0.0000	123.5513	123.5513	2.3700e-003	2.2700e-003	124.2855
Hotel	2.56032e+006	0.0138	0.1255	0.1054	7.5000e-004		9.5400e-003	9.5400e-003		9.5400e-003	9.5400e-003	0.0000	136.6284	136.6284	2.6200e-003	2.5000e-003	137.4403
Manufacturing	9.82875e+006	0.0530	0.4818	0.4047	2.8900e-003		0.0366	0.0366		0.0366	0.0366	0.0000	524.4997	524.4997	0.0101	9.6200e-003	527.6166
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	710900	3.8300e-003	0.0349	0.0293	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	37.9363	37.9363	7.3000e-004	7.0000e-004	38.1618
Research & Development	1.67889e+007	0.0905	0.8230	0.6913	4.9400e-003		0.0626	0.0626		0.0626	0.0626	0.0000	895.9215	895.9215	0.0172	0.0164	901.2455
Unenclosed Parking Structure	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
<b>Total</b>		<b>0.1991</b>	<b>1.7890</b>	<b>1.3685</b>	<b>0.0109</b>		<b>0.1376</b>	<b>0.1376</b>		<b>0.1376</b>	<b>0.1376</b>	<b>0.0000</b>	<b>1,970.0523</b>	<b>1,970.0523</b>	<b>0.0378</b>	<b>0.0361</b>	<b>1,981.7594</b>

## ARC Operations (Cumulative) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.40779e+006	127.4220	0.0317	6.5500e-003	130.1666
Condo/Townhouse High Rise	1.25548e+006	66.4408	0.0165	3.4200e-003	67.8719
Hotel	1.4496e+006	76.7137	0.0191	3.9500e-003	78.3661
Manufacturing	7.03664e+006	372.3834	0.0926	0.0192	380.4043
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	360220	19.0631	4.7400e-003	9.8000e-004	19.4737
Regional Shopping Center	1.062e+006	56.2017	0.0140	2.8900e-003	57.4123
Research & Development	1.20196e+007	636.0847	0.1581	0.0327	649.7856
Unenclosed Parking Structure	2.2995e+006	121.6910	0.0303	6.2600e-003	124.3121
<b>Total</b>		<b>1,476.0003</b>	<b>0.3669</b>	<b>0.0759</b>	<b>1,507.7925</b>

ARC Operations (Cumulative) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.18557e+006	62.7412	0.0156	3.2300e-003	64.0926
Condo/Townhouse High Rise	618739	32.7440	8.1400e-003	1.6800e-003	33.4493
Hotel	673080	35.6198	8.8500e-003	1.8300e-003	36.3870
Manufacturing	3.44141e+006	182.1217	0.0453	9.3700e-003	186.0445
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	180110	9.5315	2.3700e-003	4.9000e-004	9.7368
Regional Shopping Center	510525	27.0173	6.7200e-003	1.3900e-003	27.5992
Research & Development	5.87843e+006	311.0902	0.0773	0.0160	317.7909
Unenclosed Parking Structure	1.14975e+006	60.8455	0.0151	3.1300e-003	62.1561
<b>Total</b>		<b>721.7112</b>	<b>0.1794</b>	<b>0.0371</b>	<b>737.2564</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

No Hearths Installed

Use Low VOC Cleaning Supplies

ARC Operations (Cumulative) - Yolo County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	15.4365	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
Unmitigated	95.4427	1.4664	104.0172	0.1767		13.7288	13.7288		13.7288	13.7288	1,305.1248	378.6877	1,683.8125	1.2299	0.0990	1,744.0690

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	13.8380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	78.9830	1.3932	97.6503	0.1764		13.6935	13.6935		13.6935	13.6935	1,305.1248	368.2263	1,673.3511	1.2197	0.0990	1,733.3525
Landscaping	0.1952	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
<b>Total</b>	<b>95.4427</b>	<b>1.4664</b>	<b>104.0172</b>	<b>0.1767</b>		<b>13.7288</b>	<b>13.7288</b>		<b>13.7288</b>	<b>13.7288</b>	<b>1,305.1248</b>	<b>378.6877</b>	<b>1,683.8125</b>	<b>1.2300</b>	<b>0.0990</b>	<b>1,744.0690</b>

ARC Operations (Cumulative) - Yolo County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.8149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1952	0.0733	6.3669	3.4000e-004		0.0353	0.0353		0.0353	0.0353	0.0000	10.4614	10.4614	0.0102	0.0000	10.7165
<b>Total</b>	<b>15.4365</b>	<b>0.0733</b>	<b>6.3669</b>	<b>3.4000e-004</b>		<b>0.0353</b>	<b>0.0353</b>		<b>0.0353</b>	<b>0.0353</b>	<b>0.0000</b>	<b>10.4614</b>	<b>10.4614</b>	<b>0.0102</b>	<b>0.0000</b>	<b>10.7165</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

ARC Operations (Cumulative) - Yolo County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	493.8249	26.4781	0.6360	1,345.3013
Unmitigated	619.1277	33.0981	0.7951	1,683.5129



ARC Operations (Cumulative) - Yolo County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	37.1378 / 23.413	26.7532	1.2139	0.0293	65.8441
Condo/Townhouse High Rise	18.2431 / 11.5011	13.1419	0.5963	0.0144	32.3445
Hotel	3.80502 / 0.422779	2.3750	0.1243	2.9900e-003	6.3723
Manufacturing	204.425 / 0	123.3924	6.6757	0.1603	338.0541
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.40725 / 4.53993	5.3120	0.2421	5.8500e-003	13.1083
Research & Development	742.458 / 0	448.1530	24.2459	0.5822	1,227.7897
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>619.1276</b>	<b>33.0981</b>	<b>0.7951</b>	<b>1,683.5129</b>

ARC Operations (Cumulative) - Yolo County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.7102 / 14.0478	20.5353	0.9709	0.0234	51.7893
Condo/Townhouse High Rise	14.5945 / 6.90066	10.0875	0.4769	0.0115	25.4404
Hotel	3.04401 / 0.253668	1.8844	0.0994	2.3900e-003	5.0818
Manufacturing	163.54 / 0	98.7140	5.3406	0.1282	270.4433
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	5.9258 / 2.72396	4.0814	0.1936	4.6700e-003	10.3148
Research & Development	593.966 / 0	358.5224	19.3967	0.4658	982.2317
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>493.8249</b>	<b>26.4781</b>	<b>0.6360</b>	<b>1,345.3013</b>

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

ARC Operations (Cumulative) - Yolo County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	363.1590	21.4621	0.0000	899.7109
Unmitigated	363.1590	21.4621	0.0000	899.7109

## ARC Operations (Cumulative) - Yolo County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	262.2	53.2242	3.1455	0.0000	131.8608
Condo/Townhouse High Rise	128.8	26.1452	1.5451	0.0000	64.7737
Hotel	82.13	16.6717	0.9853	0.0000	41.3033
Manufacturing	1096.16	222.5106	13.1500	0.0000	551.2605
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	105	21.3141	1.2596	0.0000	52.8047
Research & Development	114.75	23.2932	1.3766	0.0000	57.7080
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>363.1590</b>	<b>21.4621</b>	<b>0.0000</b>	<b>899.7109</b>

ARC Operations (Cumulative) - Yolo County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	262.2	53.2242	3.1455	0.0000	131.8608
Condo/Townhouse High Rise	128.8	26.1452	1.5451	0.0000	64.7737
Hotel	82.13	16.6717	0.9853	0.0000	41.3033
Manufacturing	1096.16	222.5106	13.1500	0.0000	551.2605
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	105	21.3141	1.2596	0.0000	52.8047
Research & Development	114.75	23.2932	1.3766	0.0000	57.7080
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>363.1590</b>	<b>21.4621</b>	<b>0.0000</b>	<b>899.7109</b>

**9.0 Operational Offroad**

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

ARC Operations (Cumulative) - Yolo County, Annual

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC Operations (Cumulative) - Yolo County, Summer

**ARC Operations (Cumulative)**  
**Yolo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	1,510.00	1000sqft	44.70	1,510,000.00	0
Manufacturing	884.00	1000sqft	57.20	884,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	2,573.00	Space	11.20	1,029,200.00	0
Unenclosed Parking Structure	3,285.00	Space	5.28	1,314,000.00	0
Hotel	150.00	Room	5.00	160,000.00	0
Apartments Mid Rise	570.00	Dwelling Unit	15.00	570,000.00	1630
Condo/Townhouse High Rise	280.00	Dwelling Unit	4.38	280,000.00	801
Regional Shopping Center	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

ARC Operations (Cumulative) - Yolo County, Summer

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Information based on project application

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Grading -

Vehicle Trips - Adjusted based on project-specific traffic information from Fehr and Peers

Road Dust - Adjusted based on location in County and urban nature of the project

Energy Use - Energy intensity upgraded in compliance with 2019 CBSC

Area Mitigation - Per applicant provided information

Energy Mitigation - Per applicant provided information

Water Mitigation - Per applicant provided information

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	120.00	1.00
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	1.87	4.31
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	26.46	18.52
tblEnergyUse	T24NG	18.58	13.01
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01



ARC Operations (Cumulative) - Yolo County, Summer

tblLandUse	LandUseSquareFeet	217,800.00	160,000.00
tblLandUse	LotAcreage	34.66	44.70
tblLandUse	LotAcreage	20.29	57.20
tblLandUse	LotAcreage	23.16	11.20
tblLandUse	LotAcreage	29.56	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	HO_TL	7.00	9.65
tblVehicleTrips	HO_TL	7.00	9.65
tblVehicleTrips	HS_TL	5.00	6.89
tblVehicleTrips	HS_TL	5.00	6.89
tblVehicleTrips	HW_TL	10.00	13.80
tblVehicleTrips	HW_TL	10.00	13.80

## ARC Operations (Cumulative) - Yolo County, Summer

tblVehicleTrips	WD_TR	6.65	4.94
tblVehicleTrips	WD_TR	4.18	6.73
tblVehicleTrips	WD_TR	8.17	7.67
tblVehicleTrips	WD_TR	3.82	3.57
tblVehicleTrips	WD_TR	42.70	9.24
tblVehicleTrips	WD_TR	8.11	9.24

**2.0 Emissions Summary**

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ARC Operations (Cumulative) - Yolo County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487
Energy	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511
Mobile	31.3813	278.3404	320.0547	2.0615	186.9409	0.8302	187.7710	50.3637	0.7761	51.1398		210,895.2565	210,895.2565	5.0901		211,022.5096
<b>Total</b>	<b>2,050.3550</b>	<b>324.5545</b>	<b>2,781.2822</b>	<b>6.4367</b>	<b>186.9409</b>	<b>336.0875</b>	<b>523.0283</b>	<b>50.3637</b>	<b>336.0334</b>	<b>386.3971</b>	<b>35,089.1179</b>	<b>234,779.9950</b>	<b>269,869.1128</b>	<b>38.2741</b>	<b>2.9163</b>	<b>271,695.0094</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Energy	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
Mobile	31.3813	278.3404	320.0547	2.0615	186.9409	0.8302	187.7710	50.3637	0.7761	51.1398		210,895.2565	210,895.2565	5.0901		211,022.5096
<b>Total</b>	<b>118.1546</b>	<b>288.9571</b>	<b>398.2963</b>	<b>2.1248</b>	<b>186.9409</b>	<b>1.9757</b>	<b>188.9166</b>	<b>50.3637</b>	<b>1.9217</b>	<b>52.2854</b>	<b>0.0000</b>	<b>222,922.6249</b>	<b>222,922.6249</b>	<b>5.4432</b>	<b>0.2182</b>	<b>223,123.7142</b>

ARC Operations (Cumulative) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.24	10.97	85.68	66.99	0.00	99.41	63.88	0.00	99.43	86.47	100.00	5.05	17.40	85.78	92.52	17.88

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2021	1/6/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.08

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

ARC Operations (Cumulative) - Yolo County, Summer

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Unmitigated Construction Off-Site**

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

ARC Operations (Cumulative) - Yolo County, Summer

**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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ARC Operations (Cumulative) - Yolo County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3813	278.3404	320.0547	2.0615	186.9409	0.8302	187.7710	50.3637	0.7761	51.1398		210,895.2565	210,895.2565	5.0901		211,022.5096
Unmitigated	31.3813	278.3404	320.0547	2.0615	186.9409	0.8302	187.7710	50.3637	0.7761	51.1398		210,895.2565	210,895.2565	5.0901		211,022.5096

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,815.80	3,642.30	3340.20	10,889,748	10,889,748
Condo/Townhouse High Rise	1,884.40	1,206.80	960.40	5,992,141	5,992,141
Hotel	1,150.50	1,228.50	892.50	2,421,152	2,421,152
Manufacturing	3,155.88	1,317.16	548.08	9,692,892	9,692,892
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	924.00	4,997.00	2524.00	3,390,447	3,390,447
Research & Development	13,952.40	2,869.00	1676.10	32,133,561	32,133,561
Unenclosed Parking Structure	0.00	0.00	0.00		
<b>Total</b>	<b>23,882.98</b>	<b>15,260.76</b>	<b>9,941.28</b>	<b>64,519,941</b>	<b>64,519,941</b>

4.3 Trip Type Information



ARC Operations (Cumulative) - Yolo County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.80	6.89	9.65	46.00	13.00	41.00	86	11	3
Condo/Townhouse High Rise	13.80	6.89	9.65	46.00	13.00	41.00	86	11	3
Hotel	13.80	6.89	9.65	19.40	61.60	19.00	58	38	4
Manufacturing	13.80	6.89	9.65	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.80	6.89	9.65	16.30	64.70	19.00	54	35	11
Research & Development	13.80	6.89	9.65	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Condo/Townhouse High Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Hotel	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Manufacturing	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Other Asphalt Surfaces	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Unenclosed Parking Structure	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC Operations (Cumulative) - Yolo County, Summer

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
NaturalGas Unmitigated	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511

ARC Operations (Cumulative) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	14451.2	0.1559	1.3318	0.5667	8.5000e-003		0.1077	0.1077		0.1077	0.1077		1,700.1378	1,700.1378	0.0326	0.0312	1,710.2408
Condo/Townhouse High Rise	7098.82	0.0766	0.6542	0.2784	4.1800e-003		0.0529	0.0529		0.0529	0.0529		835.1554	835.1554	0.0160	0.0153	840.1183
Hotel	8232.33	0.0888	0.8071	0.6780	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.5093	968.5093	0.0186	0.0178	974.2646
Manufacturing	31654.5	0.3414	3.1034	2.6068	0.0186		0.2359	0.2359		0.2359	0.2359		3,724.0548	3,724.0548	0.0714	0.0683	3,746.1850
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	2273.97	0.0245	0.2229	0.1873	1.3400e-003		0.0169	0.0169		0.0169	0.0169		267.5262	267.5262	5.1300e-003	4.9000e-003	269.1160
Research & Development	54070.4	0.5831	5.3010	4.4529	0.0318		0.4029	0.4029		0.4029	0.4029		6,361.2248	6,361.2248	0.1219	0.1166	6,399.0264
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.2702</b>	<b>11.4204</b>	<b>8.7700</b>	<b>0.0693</b>		<b>0.8776</b>	<b>0.8776</b>		<b>0.8776</b>	<b>0.8776</b>		<b>13,856.6082</b>	<b>13,856.6082</b>	<b>0.2656</b>	<b>0.2540</b>	<b>13,938.9511</b>

ARC Operations (Cumulative) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	12.9129	0.1393	1.1900	0.5064	7.6000e-003		0.0962	0.0962		0.0962	0.0962		1,519.1666	1,519.1666	0.0291	0.0279	1,528.1942
Condo/Townhouse High Rise	6.34319	0.0684	0.5846	0.2488	3.7300e-003		0.0473	0.0473		0.0473	0.0473		746.2573	746.2573	0.0143	0.0137	750.6919
Hotel	7.01458	0.0757	0.6877	0.5777	4.1300e-003		0.0523	0.0523		0.0523	0.0523		825.2442	825.2442	0.0158	0.0151	830.1482
Manufacturing	26.9281	0.2904	2.6400	2.2176	0.0158		0.2006	0.2006		0.2006	0.2006		3,168.0110	3,168.0110	0.0607	0.0581	3,186.8369
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	1.94767	0.0210	0.1910	0.1604	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1378	229.1378	4.3900e-003	4.2000e-003	230.4994
Research & Development	45.9971	0.4961	4.5095	3.7880	0.0271		0.3427	0.3427		0.3427	0.3427		5,411.4214	5,411.4214	0.1037	0.0992	5,443.5788
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.0908</b>	<b>9.8028</b>	<b>7.4988</b>	<b>0.0595</b>		<b>0.7536</b>	<b>0.7536</b>		<b>0.7536</b>	<b>0.7536</b>		<b>11,899.2382</b>	<b>11,899.2382</b>	<b>0.2281</b>	<b>0.2182</b>	<b>11,969.9494</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

No Hearths Installed

Use Low VOC Cleaning Supplies

ARC Operations (Cumulative) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Unmitigated	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	75.8248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,926.4146	33.9797	2,381.7147	4.3022		333.9878	333.9878		333.9878	333.9878	35,089.1179	9,900.0000	44,989.1179	32.7934	2.6622	46,602.2935
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>2,017.7035</b>	<b>34.7937</b>	<b>2,452.4575</b>	<b>4.3059</b>		<b>334.3798</b>	<b>334.3798</b>		<b>334.3798</b>	<b>334.3798</b>	<b>35,089.1179</b>	<b>10,028.1303</b>	<b>45,117.2481</b>	<b>32.9184</b>	<b>2.6622</b>	<b>46,733.5487</b>

ARC Operations (Cumulative) - Yolo County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	70.2184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>85.6825</b>	<b>0.8140</b>	<b>70.7428</b>	<b>3.7700e-003</b>		<b>0.3920</b>	<b>0.3920</b>		<b>0.3920</b>	<b>0.3920</b>	<b>0.0000</b>	<b>128.1303</b>	<b>128.1303</b>	<b>0.1250</b>	<b>0.0000</b>	<b>131.2552</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## ARC Operations (Cumulative) - Yolo County, Summer

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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ARC Operations (Cumulative) - Yolo County, Winter

**ARC Operations (Cumulative)**  
Yolo County, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	1,510.00	1000sqft	44.70	1,510,000.00	0
Manufacturing	884.00	1000sqft	57.20	884,000.00	0
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Parking Lot	2,573.00	Space	11.20	1,029,200.00	0
Unenclosed Parking Structure	3,285.00	Space	5.28	1,314,000.00	0
Hotel	150.00	Room	5.00	160,000.00	0
Apartments Mid Rise	570.00	Dwelling Unit	15.00	570,000.00	1630
Condo/Townhouse High Rise	280.00	Dwelling Unit	4.38	280,000.00	801
Regional Shopping Center	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



ARC Operations (Cumulative) - Yolo County, Winter

Project Characteristics - CO2 Intensity Factor adjusted to reflect PG&E's calculated progress towards RPS

Land Use - Information based on project application

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Grading -

Vehicle Trips - Adjusted based on project-specific traffic information from Fehr and Peers

Road Dust - Adjusted based on location in County and urban nature of the project

Energy Use - Energy intensity upgraded in compliance with 2019 CBSC

Area Mitigation - Per applicant provided information

Energy Mitigation - Per applicant provided information

Water Mitigation - Per applicant provided information

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	120.00	1.00
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	460.92	428.66
tblEnergyUse	T24E	1.87	4.31
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	7,061.10	6,566.82
tblEnergyUse	T24NG	26.46	18.52
tblEnergyUse	T24NG	18.58	13.01
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01

ARC Operations (Cumulative) - Yolo County, Winter

tblLandUse	LandUseSquareFeet	217,800.00	160,000.00
tblLandUse	LotAcreage	34.66	44.70
tblLandUse	LotAcreage	20.29	57.20
tblLandUse	LotAcreage	23.16	11.20
tblLandUse	LotAcreage	29.56	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CC_TL	5.00	6.89
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CNW_TL	7.00	9.65
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	CW_TL	10.00	13.80
tblVehicleTrips	HO_TL	7.00	9.65
tblVehicleTrips	HO_TL	7.00	9.65
tblVehicleTrips	HS_TL	5.00	6.89
tblVehicleTrips	HS_TL	5.00	6.89
tblVehicleTrips	HW_TL	10.00	13.80
tblVehicleTrips	HW_TL	10.00	13.80

## ARC Operations (Cumulative) - Yolo County, Winter

tblVehicleTrips	WD_TR	6.65	4.94
tblVehicleTrips	WD_TR	4.18	6.73
tblVehicleTrips	WD_TR	8.17	7.67
tblVehicleTrips	WD_TR	3.82	3.57
tblVehicleTrips	WD_TR	42.70	9.24
tblVehicleTrips	WD_TR	8.11	9.24

**2.0 Emissions Summary**

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ARC Operations (Cumulative) - Yolo County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487
Energy	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511
Mobile	24.3017	286.1381	296.4416	1.9178	186.9409	0.8328	187.7736	50.3637	0.7786	51.1423		196,448.2020	196,448.2020	5.3018		196,580.7467
<b>Total</b>	<b>2,043.2753</b>	<b>332.3522</b>	<b>2,757.6691</b>	<b>6.2930</b>	<b>186.9409</b>	<b>336.0901</b>	<b>523.0310</b>	<b>50.3637</b>	<b>336.0360</b>	<b>386.3996</b>	<b>35,089.1179</b>	<b>220,332.9405</b>	<b>255,422.0583</b>	<b>38.4858</b>	<b>2.9163</b>	<b>257,253.2464</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Energy	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
Mobile	24.3017	286.1381	296.4416	1.9178	186.9409	0.8328	187.7736	50.3637	0.7786	51.1423		196,448.2020	196,448.2020	5.3018		196,580.7467
<b>Total</b>	<b>111.0749</b>	<b>296.7548</b>	<b>374.6832</b>	<b>1.9811</b>	<b>186.9409</b>	<b>1.9784</b>	<b>188.9192</b>	<b>50.3637</b>	<b>1.9242</b>	<b>52.2879</b>	<b>0.0000</b>	<b>208,475.5704</b>	<b>208,475.5704</b>	<b>5.6549</b>	<b>0.2182</b>	<b>208,681.9512</b>

ARC Operations (Cumulative) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	94.56	10.71	86.41	68.52	0.00	99.41	63.88	0.00	99.43	86.47	100.00	5.38	18.38	85.31	92.52	18.88

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2021	1/6/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.08

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

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

ARC Operations (Cumulative) - Yolo County, Winter

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Unmitigated Construction Off-Site**

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

ARC Operations (Cumulative) - Yolo County, Winter

**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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ARC Operations (Cumulative) - Yolo County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	24.3017	286.1381	296.4416	1.9178	186.9409	0.8328	187.7736	50.3637	0.7786	51.1423		196,448.2020	196,448.2020	5.3018		196,580.7467
Unmitigated	24.3017	286.1381	296.4416	1.9178	186.9409	0.8328	187.7736	50.3637	0.7786	51.1423		196,448.2020	196,448.2020	5.3018		196,580.7467

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,815.80	3,642.30	3340.20	10,889,748	10,889,748
Condo/Townhouse High Rise	1,884.40	1,206.80	960.40	5,992,141	5,992,141
Hotel	1,150.50	1,228.50	892.50	2,421,152	2,421,152
Manufacturing	3,155.88	1,317.16	548.08	9,692,892	9,692,892
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	924.00	4,997.00	2524.00	3,390,447	3,390,447
Research & Development	13,952.40	2,869.00	1676.10	32,133,561	32,133,561
Unenclosed Parking Structure	0.00	0.00	0.00		
<b>Total</b>	<b>23,882.98</b>	<b>15,260.76</b>	<b>9,941.28</b>	<b>64,519,941</b>	<b>64,519,941</b>

**4.3 Trip Type Information**

ARC Operations (Cumulative) - Yolo County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.80	6.89	9.65	46.00	13.00	41.00	86	11	3
Condo/Townhouse High Rise	13.80	6.89	9.65	46.00	13.00	41.00	86	11	3
Hotel	13.80	6.89	9.65	19.40	61.60	19.00	58	38	4
Manufacturing	13.80	6.89	9.65	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.80	6.89	9.65	16.30	64.70	19.00	54	35	11
Research & Development	13.80	6.89	9.65	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Condo/Townhouse High Rise	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Hotel	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Manufacturing	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Other Asphalt Surfaces	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Unenclosed Parking Structure	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ARC Operations (Cumulative) - Yolo County, Winter

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0908	9.8028	7.4988	0.0595		0.7536	0.7536		0.7536	0.7536		11,899.2382	11,899.2382	0.2281	0.2182	11,969.9494
NaturalGas Unmitigated	1.2702	11.4204	8.7700	0.0693		0.8776	0.8776		0.8776	0.8776		13,856.6082	13,856.6082	0.2656	0.2540	13,938.9511

ARC Operations (Cumulative) - Yolo County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	14451.2	0.1559	1.3318	0.5667	8.5000e-003		0.1077	0.1077		0.1077	0.1077		1,700.1378	1,700.1378	0.0326	0.0312	1,710.2408
Condo/Townhouse High Rise	7098.82	0.0766	0.6542	0.2784	4.1800e-003		0.0529	0.0529		0.0529	0.0529		835.1554	835.1554	0.0160	0.0153	840.1183
Hotel	8232.33	0.0888	0.8071	0.6780	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.5093	968.5093	0.0186	0.0178	974.2646
Manufacturing	31654.5	0.3414	3.1034	2.6068	0.0186		0.2359	0.2359		0.2359	0.2359		3,724.0548	3,724.0548	0.0714	0.0683	3,746.1850
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	2273.97	0.0245	0.2229	0.1873	1.3400e-003		0.0169	0.0169		0.0169	0.0169		267.5262	267.5262	5.1300e-003	4.9000e-003	269.1160
Research & Development	54070.4	0.5831	5.3010	4.4529	0.0318		0.4029	0.4029		0.4029	0.4029		6,361.2248	6,361.2248	0.1219	0.1166	6,399.0264
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.2702</b>	<b>11.4204</b>	<b>8.7700</b>	<b>0.0693</b>		<b>0.8776</b>	<b>0.8776</b>		<b>0.8776</b>	<b>0.8776</b>		<b>13,856.6082</b>	<b>13,856.6082</b>	<b>0.2656</b>	<b>0.2540</b>	<b>13,938.9511</b>

ARC Operations (Cumulative) - Yolo County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	12.9129	0.1393	1.1900	0.5064	7.6000e-003		0.0962	0.0962		0.0962	0.0962		1,519.1666	1,519.1666	0.0291	0.0279	1,528.1942
Condo/Townhouse High Rise	6.34319	0.0684	0.5846	0.2488	3.7300e-003		0.0473	0.0473		0.0473	0.0473		746.2573	746.2573	0.0143	0.0137	750.6919
Hotel	7.01458	0.0757	0.6877	0.5777	4.1300e-003		0.0523	0.0523		0.0523	0.0523		825.2442	825.2442	0.0158	0.0151	830.1482
Manufacturing	26.9281	0.2904	2.6400	2.2176	0.0158		0.2006	0.2006		0.2006	0.2006		3,168.0110	3,168.0110	0.0607	0.0581	3,186.8369
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Regional Shopping Center	1.94767	0.0210	0.1910	0.1604	1.1500e-003		0.0145	0.0145		0.0145	0.0145		229.1378	229.1378	4.3900e-003	4.2000e-003	230.4994
Research & Development	45.9971	0.4961	4.5095	3.7880	0.0271		0.3427	0.3427		0.3427	0.3427		5,411.4214	5,411.4214	0.1037	0.0992	5,443.5788
Unenclosed Parking Structure	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
<b>Total</b>		<b>1.0908</b>	<b>9.8028</b>	<b>7.4988</b>	<b>0.0595</b>		<b>0.7536</b>	<b>0.7536</b>		<b>0.7536</b>	<b>0.7536</b>		<b>11,899.2382</b>	<b>11,899.2382</b>	<b>0.2281</b>	<b>0.2182</b>	<b>11,969.9494</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

No Hearths Installed

Use Low VOC Cleaning Supplies

ARC Operations (Cumulative) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	85.6825	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920	0.0000	128.1303	128.1303	0.1250	0.0000	131.2552
Unmitigated	2,017.7035	34.7937	2,452.4575	4.3059		334.3797	334.3797		334.3797	334.3797	35,089.1179	10,028.1303	45,117.2481	32.9184	2.6622	46,733.5487

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	75.8248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,926.4146	33.9797	2,381.7147	4.3022		333.9878	333.9878		333.9878	333.9878	35,089.1179	9,900.0000	44,989.1179	32.7934	2.6622	46,602.2935
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>2,017.7035</b>	<b>34.7937</b>	<b>2,452.4575</b>	<b>4.3059</b>		<b>334.3798</b>	<b>334.3798</b>		<b>334.3798</b>	<b>334.3798</b>	<b>35,089.1179</b>	<b>10,028.1303</b>	<b>45,117.2481</b>	<b>32.9184</b>	<b>2.6622</b>	<b>46,733.5487</b>

ARC Operations (Cumulative) - Yolo County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	13.2958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	70.2184					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1683	0.8140	70.7428	3.7700e-003		0.3920	0.3920		0.3920	0.3920		128.1303	128.1303	0.1250		131.2552
<b>Total</b>	<b>85.6825</b>	<b>0.8140</b>	<b>70.7428</b>	<b>3.7700e-003</b>		<b>0.3920</b>	<b>0.3920</b>		<b>0.3920</b>	<b>0.3920</b>	<b>0.0000</b>	<b>128.1303</b>	<b>128.1303</b>	<b>0.1250</b>	<b>0.0000</b>	<b>131.2552</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## ARC Operations (Cumulative) - Yolo County, Winter

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	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		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)		
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

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	7.39	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	51.10	51.10	51.10	51.10	51.10
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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	14.13	14.16	14.50	14.01	14.11	14.11	0.00	14.13	14.13	14.12	14.08	14.13
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.50	20.24	20.00	20.01	20.09
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	0.28	0.62		
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	
Yes	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**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	
Yes	On-site Renewable	0.00	50.00

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

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	40.00
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
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**Mace Triangle CalEEMod  
Existing Plus Project**



Mace Triangle (Existing Plus Project) - Yolo County, Annual

**Mace Triangle (Existing Plus Project)**  
**Yolo County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	45.90	1000sqft	1.05	45,901.00	0
Regional Shopping Center	25.16	1000sqft	0.58	25,155.00	0
Parking Lot	170.00	Space	1.53	68,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	116.67	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Vehicle Trips - Trip rates based on Fehr and Peers provided information and assumed uses

Energy Use - Adjusted per 2019 CBSC

Road Dust - % paved updated per location of site in urbanized area

Area Mitigation -

Energy Mitigation - Updated based on City of Davis Municipal Code requirements

Water Mitigation -

## Mace Triangle (Existing Plus Project) - Yolo County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	5/5/2022	4/29/2022
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01
tblLandUse	LandUseSquareFeet	45,900.00	45,901.00
tblLandUse	LandUseSquareFeet	25,160.00	25,155.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	CC_TL	5.00	11.50
tblVehicleTrips	CC_TL	5.00	11.50
tblVehicleTrips	CNW_TL	7.00	16.10
tblVehicleTrips	CNW_TL	7.00	16.10
tblVehicleTrips	CW_TL	10.00	23.00
tblVehicleTrips	CW_TL	10.00	23.00
tblVehicleTrips	ST_TR	49.97	10.72
tblVehicleTrips	SU_TR	25.24	10.72
tblVehicleTrips	WD_TR	42.70	10.72
tblVehicleTrips	WD_TR	8.11	10.72

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2022	6-30-2022	0.0026	0.0026
		Highest	0.0026	0.0026

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3329	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
Energy	4.3600e-003	0.0396	0.0333	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	77.8641	77.8641	9.4600e-003	2.5800e-003	78.8684
Mobile	0.1249	1.3164	1.5626	0.0110	1.0455	4.6400e-003	1.0501	0.2825	4.3400e-003	0.2868	0.0000	1,021.6463	1,021.6463	0.0234	0.0000	1,022.2323
Waste						0.0000	0.0000		0.0000	0.0000	6.0715	0.0000	6.0715	0.3588	0.0000	15.0418
Water						0.0000	0.0000		0.0000	0.0000	7.7513	7.2079	14.9592	0.7979	0.0192	40.6196
<b>Total</b>	<b>0.4622</b>	<b>1.3561</b>	<b>1.5981</b>	<b>0.0112</b>	<b>1.0455</b>	<b>7.6600e-003</b>	<b>1.0531</b>	<b>0.2825</b>	<b>7.3600e-003</b>	<b>0.2898</b>	<b>13.8227</b>	<b>1,106.7226</b>	<b>1,120.5453</b>	<b>1.1896</b>	<b>0.0218</b>	<b>1,156.7666</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3122	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
Energy	3.9300e-003	0.0357	0.0300	2.1000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	45.7075	45.7075	2.4400e-003	1.0600e-003	46.0854
Mobile	0.1249	1.3164	1.5626	0.0110	1.0455	4.6400e-003	1.0501	0.2825	4.3400e-003	0.2868	0.0000	1,021.6463	1,021.6463	0.0234	0.0000	1,022.2323
Waste						0.0000	0.0000		0.0000	0.0000	6.0715	0.0000	6.0715	0.3588	0.0000	15.0418
Water						0.0000	0.0000		0.0000	0.0000	6.2010	5.7957	11.9967	0.6384	0.0153	32.5257
<b>Total</b>	<b>0.4410</b>	<b>1.3522</b>	<b>1.5948</b>	<b>0.0112</b>	<b>1.0455</b>	<b>7.3700e-003</b>	<b>1.0529</b>	<b>0.2825</b>	<b>7.0700e-003</b>	<b>0.2895</b>	<b>12.2725</b>	<b>1,073.1538</b>	<b>1,085.4263</b>	<b>1.0231</b>	<b>0.0164</b>	<b>1,115.8898</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>4.58</b>	<b>0.29</b>	<b>0.21</b>	<b>0.27</b>	<b>0.00</b>	<b>3.79</b>	<b>0.03</b>	<b>0.00</b>	<b>3.94</b>	<b>0.10</b>	<b>11.22</b>	<b>3.03</b>	<b>3.13</b>	<b>14.00</b>	<b>24.60</b>	<b>3.53</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2022	4/29/2022	5	1	

**Acres of Grading (Site Preparation Phase): 0**

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**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 1.53**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	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
Site Preparation	4	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**





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**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3000e-004	3.3500e-003	4.4800e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.5466	0.5466	1.8000e-004	0.0000	0.5510
<b>Total</b>	<b>3.3000e-004</b>	<b>3.3500e-003</b>	<b>4.4800e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.5466</b>	<b>0.5466</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.5510</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1249	1.3164	1.5626	0.0110	1.0455	4.6400e-003	1.0501	0.2825	4.3400e-003	0.2868	0.0000	1,021.6463	1,021.6463	0.0234	0.0000	1,022.2323
Unmitigated	0.1249	1.3164	1.5626	0.0110	1.0455	4.6400e-003	1.0501	0.2825	4.3400e-003	0.2868	0.0000	1,021.6463	1,021.6463	0.0234	0.0000	1,022.2323

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	269.72	269.72	269.72	878,868	878,868
Research & Development	492.05	87.21	50.95	1,873,788	1,873,788
Total	761.76	356.93	320.66	2,752,656	2,752,656

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	23.00	11.50	16.10	16.30	64.70	19.00	54	35	11
Research & Development	23.00	11.50	16.10	33.00	48.00	19.00	82	15	3

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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.8153	6.8153	1.6900e-003	3.5000e-004	6.9621
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	34.7206	34.7206	8.6300e-003	1.7900e-003	35.4685
NaturalGas Mitigated	3.9300e-003	0.0357	0.0300	2.1000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	38.8922	38.8922	7.5000e-004	7.1000e-004	39.1233
NaturalGas Unmitigated	4.3600e-003	0.0396	0.0333	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	43.1435	43.1435	8.3000e-004	7.9000e-004	43.3999

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Regional Shopping Center	208736	1.1300e-003	0.0102	8.6000e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	11.1390	11.1390	2.1000e-004	2.0000e-004	11.2052
Research & Development	599742	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	32.0045	32.0045	6.1000e-004	5.9000e-004	32.1947
<b>Total</b>		<b>4.3600e-003</b>	<b>0.0396</b>	<b>0.0333</b>	<b>2.4000e-004</b>		<b>3.0100e-003</b>	<b>3.0100e-003</b>		<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>43.1435</b>	<b>43.1435</b>	<b>8.2000e-004</b>	<b>7.9000e-004</b>	<b>43.3999</b>

**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					
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
Regional Shopping Center	188768	1.0200e-003	9.2500e-003	7.7700e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0734	10.0734	1.9000e-004	1.8000e-004	10.1333
Research & Development	540044	2.9100e-003	0.0265	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	28.8188	28.8188	5.5000e-004	5.3000e-004	28.9900
<b>Total</b>		<b>3.9300e-003</b>	<b>0.0357</b>	<b>0.0300</b>	<b>2.2000e-004</b>		<b>2.7100e-003</b>	<b>2.7100e-003</b>		<b>2.7100e-003</b>	<b>2.7100e-003</b>	<b>0.0000</b>	<b>38.8922</b>	<b>38.8922</b>	<b>7.4000e-004</b>	<b>7.1000e-004</b>	<b>39.1233</b>

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	23800	1.2595	3.1000e-004	6.0000e-005	1.2866
Regional Shopping Center	267146	14.1375	3.5100e-003	7.3000e-004	14.4421
Research & Development	365142	19.3236	4.8000e-003	9.9000e-004	19.7398
<b>Total</b>		<b>34.7206</b>	<b>8.6200e-003</b>	<b>1.7800e-003</b>	<b>35.4685</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	4760	0.2519	6.0000e-005	1.0000e-005	0.2573
Regional Shopping Center	52055.8	2.7548	6.8000e-004	1.4000e-004	2.8142
Research & Development	71968.2	3.8086	9.5000e-004	2.0000e-004	3.8906
<b>Total</b>		<b>6.8153</b>	<b>1.6900e-003</b>	<b>3.5000e-004</b>	<b>6.9621</b>

**6.0 Area Detail**

Mace Triangle (Existing Plus Project) - Yolo County, Annual

**6.1 Mitigation Measures Area**

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3122	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
Unmitigated	0.3329	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003

Mace Triangle (Existing Plus Project) - Yolo County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2819					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-004	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
<b>Total</b>	<b>0.3329</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5800e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2612					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-004	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
<b>Total</b>	<b>0.3122</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5800e-003</b>

**7.0 Water Detail**

Mace Triangle (Existing Plus Project) - Yolo County, Annual

**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.9967	0.6384	0.0153	32.5257
Unmitigated	14.9592	0.7979	0.0192	40.6196



Mace Triangle (Existing Plus Project) - Yolo County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.86366 / 1.14225	1.3365	0.0609	1.4700e-003	3.2980
Research & Development	22.5688 / 0	13.6227	0.7370	0.0177	37.3216
<b>Total</b>		<b>14.9592</b>	<b>0.7979</b>	<b>0.0192</b>	<b>40.6196</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.49093 / 1.07257	1.0986	0.0487	1.1800e-003	2.6685
Research & Development	18.055 / 0	10.8981	0.5896	0.0142	29.8572
<b>Total</b>		<b>11.9967</b>	<b>0.6384</b>	<b>0.0153</b>	<b>32.5257</b>

Mace Triangle (Existing Plus Project) - Yolo County, Annual

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0715	0.3588	0.0000	15.0418
Unmitigated	6.0715	0.3588	0.0000	15.0418

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	26.42	5.3630	0.3170	0.0000	13.2867
Research & Development	3.49	0.7084	0.0419	0.0000	1.7551
<b>Total</b>		<b>6.0715</b>	<b>0.3588</b>	<b>0.0000</b>	<b>15.0418</b>

Mace Triangle (Existing Plus Project) - Yolo County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	26.42	5.3630	0.3170	0.0000	13.2867
Research & Development	3.49	0.7084	0.0419	0.0000	1.7551
<b>Total</b>		<b>6.0715</b>	<b>0.3588</b>	<b>0.0000</b>	<b>15.0418</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Mace Triangle (Existing Plus Project) - Yolo County, Annual

**11.0 Vegetation**

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Mace Triangle (Existing Plus Project) - Yolo County, Summer

**Mace Triangle (Existing Plus Project)**  
**Yolo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	45.90	1000sqft	1.05	45,901.00	0
Regional Shopping Center	25.16	1000sqft	0.58	25,155.00	0
Parking Lot	170.00	Space	1.53	68,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	116.67	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Mace Triangle (Existing Plus Project) - Yolo County, Summer

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Vehicle Trips - Trip rates based on Fehr and Peers provided information and assumed uses

Energy Use - Adjusted per 2019 CBSC

Road Dust - % paved updated per location of site in urbanized area

Area Mitigation -

Energy Mitigation - Updated based on City of Davis Municipal Code requirements

Water Mitigation -

## Mace Triangle (Existing Plus Project) - Yolo County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	5/5/2022	4/29/2022
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01
tblLandUse	LandUseSquareFeet	45,900.00	45,901.00
tblLandUse	LandUseSquareFeet	25,160.00	25,155.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	CC_TL	5.00	11.50
tblVehicleTrips	CC_TL	5.00	11.50
tblVehicleTrips	CNW_TL	7.00	16.10
tblVehicleTrips	CNW_TL	7.00	16.10
tblVehicleTrips	CW_TL	10.00	23.00
tblVehicleTrips	CW_TL	10.00	23.00
tblVehicleTrips	ST_TR	49.97	10.72
tblVehicleTrips	SU_TR	25.24	10.72
tblVehicleTrips	WD_TR	42.70	10.72
tblVehicleTrips	WD_TR	8.11	10.72

## 2.0 Emissions Summary

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Mace Triangle (Existing Plus Project) - Yolo County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380
Mobile	0.9819	8.4770	11.8341	0.0778	7.2434	0.0311	7.2744	1.9514	0.0291	1.9805		7,958.7768	7,958.7768	0.1730		7,963.1029
<b>Total</b>	<b>2.8312</b>	<b>8.6944</b>	<b>12.0410</b>	<b>0.0791</b>	<b>7.2434</b>	<b>0.0477</b>	<b>7.2910</b>	<b>1.9514</b>	<b>0.0456</b>	<b>1.9971</b>		<b>8,219.4190</b>	<b>8,219.4190</b>	<b>0.1782</b>	<b>4.7800e-003</b>	<b>8,225.2970</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
Mobile	0.9819	8.4770	11.8341	0.0778	7.2434	0.0311	7.2744	1.9514	0.0291	1.9805		7,958.7768	7,958.7768	0.1730		7,963.1029
<b>Total</b>	<b>2.7152</b>	<b>8.6730</b>	<b>12.0230</b>	<b>0.0790</b>	<b>7.2434</b>	<b>0.0460</b>	<b>7.2894</b>	<b>1.9514</b>	<b>0.0440</b>	<b>1.9955</b>		<b>8,193.7407</b>	<b>8,193.7407</b>	<b>0.1777</b>	<b>4.3100e-003</b>	<b>8,199.4661</b>

Mace Triangle (Existing Plus Project) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.10	0.25	0.15	0.16	0.00	3.40	0.02	0.00	3.55	0.08	0.00	0.31	0.31	0.28	9.83	0.31

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2022	4/29/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.53

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	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
Site Preparation	4	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Mace Triangle (Existing Plus Project) - Yolo County, Summer

**3.2 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316		1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>		<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Unmitigated Construction Off-Site**

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

Mace Triangle (Existing Plus Project) - Yolo County, Summer

**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316	0.0000	1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>	<b>0.0000</b>	<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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Mace Triangle (Existing Plus Project) - Yolo County, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9819	8.4770	11.8341	0.0778	7.2434	0.0311	7.2744	1.9514	0.0291	1.9805		7,958.7768	7,958.7768	0.1730		7,963.1029
Unmitigated	0.9819	8.4770	11.8341	0.0778	7.2434	0.0311	7.2744	1.9514	0.0291	1.9805		7,958.7768	7,958.7768	0.1730		7,963.1029

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	269.72	269.72	269.72	878,868	878,868
Research & Development	492.05	87.21	50.95	1,873,788	1,873,788
Total	761.76	356.93	320.66	2,752,656	2,752,656

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	23.00	11.50	16.10	16.30	64.70	19.00	54	35	11
Research & Development	23.00	11.50	16.10	33.00	48.00	19.00	82	15	3

Mace Triangle (Existing Plus Project) - Yolo County, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
NaturalGas Unmitigated	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380

Mace Triangle (Existing Plus Project) - Yolo County, Summer

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	571.88	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.2800	67.2800	1.2900e-003	1.2300e-003	67.6798
Research & Development	1643.13	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122		193.3094	193.3094	3.7100e-003	3.5400e-003	194.4582
<b>Total</b>		<b>0.0239</b>	<b>0.2172</b>	<b>0.1824</b>	<b>1.3100e-003</b>		<b>0.0165</b>	<b>0.0165</b>		<b>0.0165</b>	<b>0.0165</b>		<b>260.5894</b>	<b>260.5894</b>	<b>5.0000e-003</b>	<b>4.7700e-003</b>	<b>262.1380</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	0.517173	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003		60.8439	60.8439	1.1700e-003	1.1200e-003	61.2055
Research & Development	1.47957	0.0160	0.1451	0.1219	8.7000e-004		0.0110	0.0110		0.0110	0.0110		174.0672	174.0672	3.3400e-003	3.1900e-003	175.1016
<b>Total</b>		<b>0.0215</b>	<b>0.1958</b>	<b>0.1644</b>	<b>1.1700e-003</b>		<b>0.0149</b>	<b>0.0149</b>		<b>0.0149</b>	<b>0.0149</b>		<b>234.9111</b>	<b>234.9111</b>	<b>4.5100e-003</b>	<b>4.3100e-003</b>	<b>236.3071</b>

**6.0 Area Detail**

Mace Triangle (Existing Plus Project) - Yolo County, Summer

**6.1 Mitigation Measures Area**

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Unmitigated	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562



Mace Triangle (Existing Plus Project) - Yolo County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5447					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.8254</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.7117</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**7.0 Water Detail**

Mace Triangle (Existing Plus Project) - Yolo County, Summer

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**Mace Triangle (Existing Plus Project)**  
**Yolo County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	45.90	1000sqft	1.05	45,901.00	0
Regional Shopping Center	25.16	1000sqft	0.58	25,155.00	0
Parking Lot	170.00	Space	1.53	68,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Mace Triangle (Existing Plus Project) - Yolo County, Winter

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Vehicle Trips - Trip rates based on Fehr and Peers provided information and assumed uses

Energy Use - Adjusted per 2019 CBSC

Road Dust - % paved updated per location of site in urbanized area

Area Mitigation -

Energy Mitigation - Updated based on City of Davis Municipal Code requirements

Water Mitigation -

## Mace Triangle (Existing Plus Project) - Yolo County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	5/5/2022	4/29/2022
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01
tblLandUse	LandUseSquareFeet	45,900.00	45,901.00
tblLandUse	LandUseSquareFeet	25,160.00	25,155.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	CC_TL	5.00	11.50
tblVehicleTrips	CC_TL	5.00	11.50
tblVehicleTrips	CNW_TL	7.00	16.10
tblVehicleTrips	CNW_TL	7.00	16.10
tblVehicleTrips	CW_TL	10.00	23.00
tblVehicleTrips	CW_TL	10.00	23.00
tblVehicleTrips	ST_TR	49.97	10.72
tblVehicleTrips	SU_TR	25.24	10.72
tblVehicleTrips	WD_TR	42.70	10.72
tblVehicleTrips	WD_TR	8.11	10.72

## 2.0 Emissions Summary

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Mace Triangle (Existing Plus Project) - Yolo County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380
Mobile	0.7942	8.8099	10.6619	0.0725	7.2434	0.0311	7.2745	1.9514	0.0291	1.9806		7,422.8720	7,422.8720	0.1773		7,427.3033
<b>Total</b>	<b>2.6434</b>	<b>9.0273</b>	<b>10.8688</b>	<b>0.0738</b>	<b>7.2434</b>	<b>0.0477</b>	<b>7.2911</b>	<b>1.9514</b>	<b>0.0457</b>	<b>1.9971</b>		<b>7,683.5142</b>	<b>7,683.5142</b>	<b>0.1824</b>	<b>4.7800e-003</b>	<b>7,689.4974</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
Mobile	0.7942	8.8099	10.6619	0.0725	7.2434	0.0311	7.2745	1.9514	0.0291	1.9806		7,422.8720	7,422.8720	0.1773		7,427.3033
<b>Total</b>	<b>2.5274</b>	<b>9.0059</b>	<b>10.8508</b>	<b>0.0737</b>	<b>7.2434</b>	<b>0.0461</b>	<b>7.2895</b>	<b>1.9514</b>	<b>0.0441</b>	<b>1.9955</b>		<b>7,657.8359</b>	<b>7,657.8359</b>	<b>0.1819</b>	<b>4.3100e-003</b>	<b>7,663.6665</b>

Mace Triangle (Existing Plus Project) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.39	0.24	0.17	0.18	0.00	3.39	0.02	0.00	3.54	0.08	0.00	0.33	0.33	0.27	9.83	0.34

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2022	4/29/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.53

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	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
Site Preparation	4	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction



Mace Triangle (Existing Plus Project) - Yolo County, Winter

**3.2 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316		1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>		<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Unmitigated Construction Off-Site**

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

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316	0.0000	1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>	<b>0.0000</b>	<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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Mace Triangle (Existing Plus Project) - Yolo County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7942	8.8099	10.6619	0.0725	7.2434	0.0311	7.2745	1.9514	0.0291	1.9806		7,422.8720	7,422.8720	0.1773		7,427.3033
Unmitigated	0.7942	8.8099	10.6619	0.0725	7.2434	0.0311	7.2745	1.9514	0.0291	1.9806		7,422.8720	7,422.8720	0.1773		7,427.3033

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	269.72	269.72	269.72	878,868	878,868
Research & Development	492.05	87.21	50.95	1,873,788	1,873,788
Total	761.76	356.93	320.66	2,752,656	2,752,656

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	23.00	11.50	16.10	16.30	64.70	19.00	54	35	11
Research & Development	23.00	11.50	16.10	33.00	48.00	19.00	82	15	3

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
NaturalGas Unmitigated	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	571.88	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.2800	67.2800	1.2900e-003	1.2300e-003	67.6798
Research & Development	1643.13	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122		193.3094	193.3094	3.7100e-003	3.5400e-003	194.4582
<b>Total</b>		<b>0.0239</b>	<b>0.2172</b>	<b>0.1824</b>	<b>1.3100e-003</b>		<b>0.0165</b>	<b>0.0165</b>		<b>0.0165</b>	<b>0.0165</b>		<b>260.5894</b>	<b>260.5894</b>	<b>5.0000e-003</b>	<b>4.7700e-003</b>	<b>262.1380</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	0.517173	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003		60.8439	60.8439	1.1700e-003	1.1200e-003	61.2055
Research & Development	1.47957	0.0160	0.1451	0.1219	8.7000e-004		0.0110	0.0110		0.0110	0.0110		174.0672	174.0672	3.3400e-003	3.1900e-003	175.1016
<b>Total</b>		<b>0.0215</b>	<b>0.1958</b>	<b>0.1644</b>	<b>1.1700e-003</b>		<b>0.0149</b>	<b>0.0149</b>		<b>0.0149</b>	<b>0.0149</b>		<b>234.9111</b>	<b>234.9111</b>	<b>4.5100e-003</b>	<b>4.3100e-003</b>	<b>236.3071</b>

**6.0 Area Detail**

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**6.1 Mitigation Measures Area**

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Unmitigated	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5447					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.8254</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.7117</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**7.0 Water Detail**

Mace Triangle (Existing Plus Project) - Yolo County, Winter

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**



## Mace Triangle (Existing Plus Project) Yolo 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												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	0	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						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	3.30000E-004	3.35000E-003	4.48000E-003	1.00000E-005	1.80000E-004	1.70000E-004	0.00000E+000	5.46560E-001	5.46560E-001	1.80000E-004	0.00000E+000	5.50980E-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						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	3.30000E-004	3.35000E-003	4.48000E-003	1.00000E-005	1.80000E-004	1.70000E-004	0.00000E+000	5.46560E-001	5.46560E-001	1.80000E-004	0.00000E+000	5.50980E-001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	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		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00	
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

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	7.36	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	80.37	80.37	80.39	80.34	80.37
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	9.86	9.87	9.88	8.33	9.97	9.97	0.00	9.85	9.85	9.76	10.13	9.85
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	19.59	19.80	20.00	19.98	19.93
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	0.10	0.32		
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	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	10.00	
No	Install High Efficiency Lighting		
Yes	On-site Renewable		80.00

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

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**Mace Triangle CalEEMod  
Cumulative Operations**



Mace Triangle (Cumulative) - Yolo County, Annual

**Mace Triangle (Cumulative)**  
**Yolo County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	45.90	1000sqft	1.05	45,901.00	0
Regional Shopping Center	25.16	1000sqft	0.58	25,155.00	0
Parking Lot	170.00	Space	1.53	68,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	116.67	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Mace Triangle (Cumulative) - Yolo County, Annual

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Vehicle Trips - Trip rates based on Fehr and Peers provided information and assumed uses

Energy Use - Adjusted per 2019 CBSC

Road Dust - % paved updated per location of site in urbanized area

Area Mitigation -

Energy Mitigation - Updated based on City of Davis Municipal Code requirements

Water Mitigation -

## Mace Triangle (Cumulative) - Yolo County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	5/5/2022	4/29/2022
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01
tblLandUse	LandUseSquareFeet	45,900.00	45,901.00
tblLandUse	LandUseSquareFeet	25,160.00	25,155.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	CC_TL	5.00	9.05
tblVehicleTrips	CC_TL	5.00	9.05
tblVehicleTrips	CNW_TL	7.00	12.67
tblVehicleTrips	CNW_TL	7.00	12.67
tblVehicleTrips	CW_TL	10.00	18.10
tblVehicleTrips	CW_TL	10.00	18.10
tblVehicleTrips	ST_TR	49.97	10.72
tblVehicleTrips	SU_TR	25.24	10.72
tblVehicleTrips	WD_TR	42.70	10.72
tblVehicleTrips	WD_TR	8.11	10.72

## 2.0 Emissions Summary

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Mace Triangle (Cumulative) - Yolo County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2022	6-30-2022	0.0026	0.0026
		Highest	0.0026	0.0026

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3329	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
Energy	4.3600e-003	0.0396	0.0333	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	77.8641	77.8641	9.4600e-003	2.5800e-003	78.8684
Mobile	0.1099	1.1958	1.2767	8.7900e-003	0.8229	3.7300e-003	0.8266	0.2223	3.4800e-003	0.2258	0.0000	816.9059	816.9059	0.0201	0.0000	817.4080
Waste						0.0000	0.0000		0.0000	0.0000	6.0715	0.0000	6.0715	0.3588	0.0000	15.0418
Water						0.0000	0.0000		0.0000	0.0000	7.7513	7.2079	14.9592	0.7979	0.0192	40.6196
<b>Total</b>	<b>0.4472</b>	<b>1.2354</b>	<b>1.3122</b>	<b>9.0300e-003</b>	<b>0.8229</b>	<b>6.7500e-003</b>	<b>0.8296</b>	<b>0.2223</b>	<b>6.5000e-003</b>	<b>0.2288</b>	<b>13.8227</b>	<b>901.9822</b>	<b>915.8049</b>	<b>1.1863</b>	<b>0.0218</b>	<b>951.9424</b>

Mace Triangle (Cumulative) - Yolo County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3122	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
Energy	3.9300e-003	0.0357	0.0300	2.1000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	45.7075	45.7075	2.4400e-003	1.0600e-003	46.0854
Mobile	0.1099	1.1958	1.2767	8.7900e-003	0.8229	3.7300e-003	0.8266	0.2223	3.4800e-003	0.2258	0.0000	816.9059	816.9059	0.0201	0.0000	817.4080
Waste						0.0000	0.0000		0.0000	0.0000	6.0715	0.0000	6.0715	0.3588	0.0000	15.0418
Water						0.0000	0.0000		0.0000	0.0000	6.2010	5.7957	11.9967	0.6384	0.0153	32.5257
<b>Total</b>	<b>0.4260</b>	<b>1.2315</b>	<b>1.3089</b>	<b>9.0000e-003</b>	<b>0.8229</b>	<b>6.4600e-003</b>	<b>0.8293</b>	<b>0.2223</b>	<b>6.2100e-003</b>	<b>0.2285</b>	<b>12.2725</b>	<b>868.4134</b>	<b>880.6859</b>	<b>1.0197</b>	<b>0.0164</b>	<b>911.0655</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>4.74</b>	<b>0.32</b>	<b>0.25</b>	<b>0.33</b>	<b>0.00</b>	<b>4.30</b>	<b>0.03</b>	<b>0.00</b>	<b>4.46</b>	<b>0.13</b>	<b>11.22</b>	<b>3.72</b>	<b>3.83</b>	<b>14.04</b>	<b>24.60</b>	<b>4.29</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2022	4/29/2022	5	1	

**Acres of Grading (Site Preparation Phase): 0**

Mace Triangle (Cumulative) - Yolo County, Annual

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 1.53**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	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
Site Preparation	4	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**





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**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3000e-004	3.3500e-003	4.4800e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.5466	0.5466	1.8000e-004	0.0000	0.5510
<b>Total</b>	<b>3.3000e-004</b>	<b>3.3500e-003</b>	<b>4.4800e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.5466</b>	<b>0.5466</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.5510</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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Mace Triangle (Cumulative) - Yolo County, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1099	1.1958	1.2767	8.7900e-003	0.8229	3.7300e-003	0.8266	0.2223	3.4800e-003	0.2258	0.0000	816.9059	816.9059	0.0201	0.0000	817.4080
Unmitigated	0.1099	1.1958	1.2767	8.7900e-003	0.8229	3.7300e-003	0.8266	0.2223	3.4800e-003	0.2258	0.0000	816.9059	816.9059	0.0201	0.0000	817.4080

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	269.72	269.72	269.72	691,861	691,861
Research & Development	492.05	87.21	50.95	1,474,676	1,474,676
Total	761.76	356.93	320.66	2,166,537	2,166,537

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.10	9.05	12.67	16.30	64.70	19.00	54	35	11
Research & Development	18.10	9.05	12.67	33.00	48.00	19.00	82	15	3

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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.8153	6.8153	1.6900e-003	3.5000e-004	6.9621
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	34.7206	34.7206	8.6300e-003	1.7900e-003	35.4685
NaturalGas Mitigated	3.9300e-003	0.0357	0.0300	2.1000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	38.8922	38.8922	7.5000e-004	7.1000e-004	39.1233
NaturalGas Unmitigated	4.3600e-003	0.0396	0.0333	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	43.1435	43.1435	8.3000e-004	7.9000e-004	43.3999

Mace Triangle (Cumulative) - Yolo County, Annual

**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					
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
Regional Shopping Center	208736	1.1300e-003	0.0102	8.6000e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	11.1390	11.1390	2.1000e-004	2.0000e-004	11.2052
Research & Development	599742	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	32.0045	32.0045	6.1000e-004	5.9000e-004	32.1947
<b>Total</b>		<b>4.3600e-003</b>	<b>0.0396</b>	<b>0.0333</b>	<b>2.4000e-004</b>		<b>3.0100e-003</b>	<b>3.0100e-003</b>		<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>43.1435</b>	<b>43.1435</b>	<b>8.2000e-004</b>	<b>7.9000e-004</b>	<b>43.3999</b>

**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					
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
Regional Shopping Center	188768	1.0200e-003	9.2500e-003	7.7700e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0734	10.0734	1.9000e-004	1.8000e-004	10.1333
Research & Development	540044	2.9100e-003	0.0265	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	28.8188	28.8188	5.5000e-004	5.3000e-004	28.9900
<b>Total</b>		<b>3.9300e-003</b>	<b>0.0357</b>	<b>0.0300</b>	<b>2.2000e-004</b>		<b>2.7100e-003</b>	<b>2.7100e-003</b>		<b>2.7100e-003</b>	<b>2.7100e-003</b>	<b>0.0000</b>	<b>38.8922</b>	<b>38.8922</b>	<b>7.4000e-004</b>	<b>7.1000e-004</b>	<b>39.1233</b>

Mace Triangle (Cumulative) - Yolo County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	23800	1.2595	3.1000e-004	6.0000e-005	1.2866
Regional Shopping Center	267146	14.1375	3.5100e-003	7.3000e-004	14.4421
Research & Development	365142	19.3236	4.8000e-003	9.9000e-004	19.7398
<b>Total</b>		<b>34.7206</b>	<b>8.6200e-003</b>	<b>1.7800e-003</b>	<b>35.4685</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	4760	0.2519	6.0000e-005	1.0000e-005	0.2573
Regional Shopping Center	52055.8	2.7548	6.8000e-004	1.4000e-004	2.8142
Research & Development	71968.2	3.8086	9.5000e-004	2.0000e-004	3.8906
<b>Total</b>		<b>6.8153</b>	<b>1.6900e-003</b>	<b>3.5000e-004</b>	<b>6.9621</b>

**6.0 Area Detail**

Mace Triangle (Cumulative) - Yolo County, Annual

**6.1 Mitigation Measures Area**

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3122	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
Unmitigated	0.3329	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003

Mace Triangle (Cumulative) - Yolo County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2819					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-004	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
<b>Total</b>	<b>0.3329</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5800e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2612					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-004	2.0000e-005	2.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5800e-003
<b>Total</b>	<b>0.3122</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5800e-003</b>

**7.0 Water Detail**

Mace Triangle (Cumulative) - Yolo County, Annual

**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.9967	0.6384	0.0153	32.5257
Unmitigated	14.9592	0.7979	0.0192	40.6196



Mace Triangle (Cumulative) - Yolo County, Annual

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.86366 / 1.14225	1.3365	0.0609	1.4700e-003	3.2980
Research & Development	22.5688 / 0	13.6227	0.7370	0.0177	37.3216
<b>Total</b>		<b>14.9592</b>	<b>0.7979</b>	<b>0.0192</b>	<b>40.6196</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.49093 / 1.07257	1.0986	0.0487	1.1800e-003	2.6685
Research & Development	18.055 / 0	10.8981	0.5896	0.0142	29.8572
<b>Total</b>		<b>11.9967</b>	<b>0.6384</b>	<b>0.0153</b>	<b>32.5257</b>

Mace Triangle (Cumulative) - Yolo County, Annual

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0715	0.3588	0.0000	15.0418
Unmitigated	6.0715	0.3588	0.0000	15.0418

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	26.42	5.3630	0.3170	0.0000	13.2867
Research & Development	3.49	0.7084	0.0419	0.0000	1.7551
<b>Total</b>		<b>6.0715</b>	<b>0.3588</b>	<b>0.0000</b>	<b>15.0418</b>

Mace Triangle (Cumulative) - Yolo County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	26.42	5.3630	0.3170	0.0000	13.2867
Research & Development	3.49	0.7084	0.0419	0.0000	1.7551
<b>Total</b>		<b>6.0715</b>	<b>0.3588</b>	<b>0.0000</b>	<b>15.0418</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Mace Triangle (Cumulative) - Yolo County, Annual

**11.0 Vegetation**

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Mace Triangle (Cumulative) - Yolo County, Summer

**Mace Triangle (Cumulative)**  
**Yolo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	45.90	1000sqft	1.05	45,901.00	0
Regional Shopping Center	25.16	1000sqft	0.58	25,155.00	0
Parking Lot	170.00	Space	1.53	68,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Mace Triangle (Cumulative) - Yolo County, Summer

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Vehicle Trips - Trip rates based on Fehr and Peers provided information and assumed uses

Energy Use - Adjusted per 2019 CBSC

Road Dust - % paved updated per location of site in urbanized area

Area Mitigation -

Energy Mitigation - Updated based on City of Davis Municipal Code requirements

Water Mitigation -

## Mace Triangle (Cumulative) - Yolo County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	5/5/2022	4/29/2022
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01
tblLandUse	LandUseSquareFeet	45,900.00	45,901.00
tblLandUse	LandUseSquareFeet	25,160.00	25,155.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	CC_TL	5.00	9.05
tblVehicleTrips	CC_TL	5.00	9.05
tblVehicleTrips	CNW_TL	7.00	12.67
tblVehicleTrips	CNW_TL	7.00	12.67
tblVehicleTrips	CW_TL	10.00	18.10
tblVehicleTrips	CW_TL	10.00	18.10
tblVehicleTrips	ST_TR	49.97	10.72
tblVehicleTrips	SU_TR	25.24	10.72
tblVehicleTrips	WD_TR	42.70	10.72
tblVehicleTrips	WD_TR	8.11	10.72

## 2.0 Emissions Summary

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Mace Triangle (Cumulative) - Yolo County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380
Mobile	0.8793	7.7220	9.5721	0.0622	5.7010	0.0250	5.7259	1.5359	0.0233	1.5592		6,360.8285	6,360.8285	0.1472		6,364.5085
<b>Total</b>	<b>2.7286</b>	<b>7.9394</b>	<b>9.7790</b>	<b>0.0635</b>	<b>5.7010</b>	<b>0.0415</b>	<b>5.7425</b>	<b>1.5359</b>	<b>0.0399</b>	<b>1.5758</b>		<b>6,621.4707</b>	<b>6,621.4707</b>	<b>0.1523</b>	<b>4.7800e-003</b>	<b>6,626.7026</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
Mobile	0.8793	7.7220	9.5721	0.0622	5.7010	0.0250	5.7259	1.5359	0.0233	1.5592		6,360.8285	6,360.8285	0.1472		6,364.5085
<b>Total</b>	<b>2.6125</b>	<b>7.9180</b>	<b>9.7610</b>	<b>0.0634</b>	<b>5.7010</b>	<b>0.0399</b>	<b>5.7409</b>	<b>1.5359</b>	<b>0.0383</b>	<b>1.5742</b>		<b>6,595.7924</b>	<b>6,595.7924</b>	<b>0.1518</b>	<b>4.3100e-003</b>	<b>6,600.8717</b>

Mace Triangle (Cumulative) - Yolo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.25	0.27	0.18	0.20	0.00	3.90	0.03	0.00	4.06	0.10	0.00	0.39	0.39	0.32	9.83	0.39

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2022	4/29/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.53

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	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
Site Preparation	4	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Mace Triangle (Cumulative) - Yolo County, Summer

**3.2 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316		1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>		<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Unmitigated Construction Off-Site**

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

Mace Triangle (Cumulative) - Yolo County, Summer

**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316	0.0000	1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>	<b>0.0000</b>	<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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Mace Triangle (Cumulative) - Yolo County, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8793	7.7220	9.5721	0.0622	5.7010	0.0250	5.7259	1.5359	0.0233	1.5592		6,360.8285	6,360.8285	0.1472		6,364.5085
Unmitigated	0.8793	7.7220	9.5721	0.0622	5.7010	0.0250	5.7259	1.5359	0.0233	1.5592		6,360.8285	6,360.8285	0.1472		6,364.5085

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	269.72	269.72	269.72	691,861	691,861
Research & Development	492.05	87.21	50.95	1,474,676	1,474,676
Total	761.76	356.93	320.66	2,166,537	2,166,537

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.10	9.05	12.67	16.30	64.70	19.00	54	35	11
Research & Development	18.10	9.05	12.67	33.00	48.00	19.00	82	15	3

Mace Triangle (Cumulative) - Yolo County, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
NaturalGas Unmitigated	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380

Mace Triangle (Cumulative) - Yolo County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	571.88	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.2800	67.2800	1.2900e-003	1.2300e-003	67.6798
Research & Development	1643.13	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122		193.3094	193.3094	3.7100e-003	3.5400e-003	194.4582
<b>Total</b>		<b>0.0239</b>	<b>0.2172</b>	<b>0.1824</b>	<b>1.3100e-003</b>		<b>0.0165</b>	<b>0.0165</b>		<b>0.0165</b>	<b>0.0165</b>		<b>260.5894</b>	<b>260.5894</b>	<b>5.0000e-003</b>	<b>4.7700e-003</b>	<b>262.1380</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	0.517173	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003		60.8439	60.8439	1.1700e-003	1.1200e-003	61.2055
Research & Development	1.47957	0.0160	0.1451	0.1219	8.7000e-004		0.0110	0.0110		0.0110	0.0110		174.0672	174.0672	3.3400e-003	3.1900e-003	175.1016
<b>Total</b>		<b>0.0215</b>	<b>0.1958</b>	<b>0.1644</b>	<b>1.1700e-003</b>		<b>0.0149</b>	<b>0.0149</b>		<b>0.0149</b>	<b>0.0149</b>		<b>234.9111</b>	<b>234.9111</b>	<b>4.5100e-003</b>	<b>4.3100e-003</b>	<b>236.3071</b>

**6.0 Area Detail**

Mace Triangle (Cumulative) - Yolo County, Summer

**6.1 Mitigation Measures Area**

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004			0.0562
Unmitigated	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004			0.0562



Mace Triangle (Cumulative) - Yolo County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5447					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.8254</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.7117</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**7.0 Water Detail**

Mace Triangle (Cumulative) - Yolo County, Summer

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

Mace Triangle (Cumulative) - Yolo County, Winter

**Mace Triangle (Cumulative)**  
Yolo County, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	45.90	1000sqft	1.05	45,901.00	0
Regional Shopping Center	25.16	1000sqft	0.58	25,155.00	0
Parking Lot	170.00	Space	1.53	68,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	6.8	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	2			<b>Operational Year</b>	2035
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	116.67	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Mace Triangle (Cumulative) - Yolo County, Winter

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Vehicle Trips - Trip rates based on Fehr and Peers provided information and assumed uses

Energy Use - Adjusted per 2019 CBSC

Road Dust - % paved updated per location of site in urbanized area

Area Mitigation -

Energy Mitigation - Updated based on City of Davis Municipal Code requirements

Water Mitigation -

## Mace Triangle (Cumulative) - Yolo County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	5/5/2022	4/29/2022
tblEnergyUse	T24E	3.90	2.73
tblEnergyUse	T24E	1.65	1.16
tblEnergyUse	T24NG	11.34	7.94
tblEnergyUse	T24NG	18.58	13.01
tblLandUse	LandUseSquareFeet	45,900.00	45,901.00
tblLandUse	LandUseSquareFeet	25,160.00	25,155.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	116.67
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	CC_TL	5.00	9.05
tblVehicleTrips	CC_TL	5.00	9.05
tblVehicleTrips	CNW_TL	7.00	12.67
tblVehicleTrips	CNW_TL	7.00	12.67
tblVehicleTrips	CW_TL	10.00	18.10
tblVehicleTrips	CW_TL	10.00	18.10
tblVehicleTrips	ST_TR	49.97	10.72
tblVehicleTrips	SU_TR	25.24	10.72
tblVehicleTrips	WD_TR	42.70	10.72
tblVehicleTrips	WD_TR	8.11	10.72

## 2.0 Emissions Summary

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Mace Triangle (Cumulative) - Yolo County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380
Mobile	0.6921	7.9700	8.7666	0.0579	5.7010	0.0250	5.7260	1.5359	0.0234	1.5593		5,928.1773	5,928.1773	0.1523		5,931.9855
<b>Total</b>	<b>2.5414</b>	<b>8.1874</b>	<b>8.9735</b>	<b>0.0592</b>	<b>5.7010</b>	<b>0.0416</b>	<b>5.7426</b>	<b>1.5359</b>	<b>0.0400</b>	<b>1.5759</b>		<b>6,188.8195</b>	<b>6,188.8195</b>	<b>0.1575</b>	<b>4.7800e-003</b>	<b>6,194.1797</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Energy	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
Mobile	0.6921	7.9700	8.7666	0.0579	5.7010	0.0250	5.7260	1.5359	0.0234	1.5593		5,928.1773	5,928.1773	0.1523		5,931.9855
<b>Total</b>	<b>2.4254</b>	<b>8.1660</b>	<b>8.9555</b>	<b>0.0591</b>	<b>5.7010</b>	<b>0.0400</b>	<b>5.7409</b>	<b>1.5359</b>	<b>0.0384</b>	<b>1.5743</b>		<b>6,163.1412</b>	<b>6,163.1412</b>	<b>0.1570</b>	<b>4.3100e-003</b>	<b>6,168.3488</b>

Mace Triangle (Cumulative) - Yolo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.57	0.26	0.20	0.22	0.00	3.89	0.03	0.00	4.05	0.10	0.00	0.41	0.41	0.31	9.83	0.42

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2022	4/29/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.53

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	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
Site Preparation	4	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction



Mace Triangle (Cumulative) - Yolo County, Winter

**3.2 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316		1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>		<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Unmitigated Construction Off-Site**

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

Mace Triangle (Cumulative) - Yolo County, Winter

**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6588	6.7026	8.9518	0.0124		0.3605	0.3605		0.3316	0.3316	0.0000	1,204.9558	1,204.9558	0.3897		1,214.6985
<b>Total</b>	<b>0.6588</b>	<b>6.7026</b>	<b>8.9518</b>	<b>0.0124</b>	<b>0.0000</b>	<b>0.3605</b>	<b>0.3605</b>	<b>0.0000</b>	<b>0.3316</b>	<b>0.3316</b>	<b>0.0000</b>	<b>1,204.9558</b>	<b>1,204.9558</b>	<b>0.3897</b>		<b>1,214.6985</b>

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

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Mace Triangle (Cumulative) - Yolo County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6921	7.9700	8.7666	0.0579	5.7010	0.0250	5.7260	1.5359	0.0234	1.5593		5,928.1773	5,928.1773	0.1523		5,931.9855
Unmitigated	0.6921	7.9700	8.7666	0.0579	5.7010	0.0250	5.7260	1.5359	0.0234	1.5593		5,928.1773	5,928.1773	0.1523		5,931.9855

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	269.72	269.72	269.72	691,861	691,861
Research & Development	492.05	87.21	50.95	1,474,676	1,474,676
Total	761.76	356.93	320.66	2,166,537	2,166,537

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.10	9.05	12.67	16.30	64.70	19.00	54	35	11
Research & Development	18.10	9.05	12.67	33.00	48.00	19.00	82	15	3

Mace Triangle (Cumulative) - Yolo County, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Regional Shopping Center	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526
Research & Development	0.510775	0.034299	0.212670	0.100609	0.010702	0.004092	0.073108	0.045201	0.001012	0.001235	0.005125	0.000644	0.000526

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0215	0.1958	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.9111	234.9111	4.5000e-003	4.3100e-003	236.3071
NaturalGas Unmitigated	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5894	260.5894	4.9900e-003	4.7800e-003	262.1380

Mace Triangle (Cumulative) - Yolo County, Winter

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	571.88	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.2800	67.2800	1.2900e-003	1.2300e-003	67.6798
Research & Development	1643.13	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122		193.3094	193.3094	3.7100e-003	3.5400e-003	194.4582
<b>Total</b>		<b>0.0239</b>	<b>0.2172</b>	<b>0.1824</b>	<b>1.3100e-003</b>		<b>0.0165</b>	<b>0.0165</b>		<b>0.0165</b>	<b>0.0165</b>		<b>260.5894</b>	<b>260.5894</b>	<b>5.0000e-003</b>	<b>4.7700e-003</b>	<b>262.1380</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Regional Shopping Center	0.517173	5.5800e-003	0.0507	0.0426	3.0000e-004		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003		60.8439	60.8439	1.1700e-003	1.1200e-003	61.2055
Research & Development	1.47957	0.0160	0.1451	0.1219	8.7000e-004		0.0110	0.0110		0.0110	0.0110		174.0672	174.0672	3.3400e-003	3.1900e-003	175.1016
<b>Total</b>		<b>0.0215</b>	<b>0.1958</b>	<b>0.1644</b>	<b>1.1700e-003</b>		<b>0.0149</b>	<b>0.0149</b>		<b>0.0149</b>	<b>0.0149</b>		<b>234.9111</b>	<b>234.9111</b>	<b>4.5100e-003</b>	<b>4.3100e-003</b>	<b>236.3071</b>

**6.0 Area Detail**

Mace Triangle (Cumulative) - Yolo County, Winter

**6.1 Mitigation Measures Area**

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7117	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
Unmitigated	1.8254	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562

Mace Triangle (Cumulative) - Yolo County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5447					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.8254</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2400e-003	2.2000e-004	0.0245	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0562
<b>Total</b>	<b>1.7117</b>	<b>2.2000e-004</b>	<b>0.0245</b>	<b>0.0000</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>0.0528</b>	<b>0.0528</b>	<b>1.4000e-004</b>		<b>0.0562</b>

**7.0 Water Detail**

Mace Triangle (Cumulative) - Yolo County, Winter

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**



## Mace Triangle (Cumulative) Yolo 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												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	0	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						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	3.30000E-004	3.35000E-003	4.48000E-003	1.00000E-005	1.80000E-004	1.70000E-004	0.00000E+000	5.46560E-001	5.46560E-001	1.80000E-004	0.00000E+000	5.50980E-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						
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	3.30000E-004	3.35000E-003	4.48000E-003	1.00000E-005	1.80000E-004	1.70000E-004	0.00000E+000	5.46560E-001	5.46560E-001	1.80000E-004	0.00000E+000	5.50980E-001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	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	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	0.00
No	Clean Paved Road	% PM Reduction	0.00	

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

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	7.36	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	80.37	80.37	80.39	80.34	80.37
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	9.86	9.87	9.88	8.33	9.97	9.97	0.00	9.85	9.85	9.76	10.13	9.85
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	19.59	19.80	20.00	19.98	19.93
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	0.10	0.32		
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	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	10.00	
No	Install High Efficiency Lighting		
Yes	On-site Renewable		80.00

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

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**ARC Construction  
AERMOD**



# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Aggie Research Campus
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM25 H1H
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\USERS\JBYRNE\DESKTOP\SACINT~1\2020\724839\INT10~1.SFC
ME	PROFFILE	Profile met file	C:\USERS\JBYRNE\DESKTOP\SACINT~1\2020\724839\INT10~1.PFL
ME	SURFDATA	Surf met data info.	93225 2010
ME	UAIRDATA	U-Air met data info.	23230 2010
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	0
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU | DAYTABLE | Print summary opt.

## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
FLT1B091	VOLUME	Construction Equip	614115.6	4268283.2	0	0.000076194	(g/s)	5
FLT1B092	VOLUME	Construction Equip	614179.2	4268283.2	0	0.000076194	(g/s)	5
FLT1B093	VOLUME	Construction Equip	614242.8	4268283.2	0	0.000076194	(g/s)	5
FLT1B094	VOLUME	Construction Equip	614306.4	4268283.2	0	0.000076194	(g/s)	5
FLT1B095	VOLUME	Construction Equip	614370.0	4268283.2	0	0.000076194	(g/s)	5
FLT1B098	VOLUME	Construction Equip	614052.0	4268346.8	0	0.000076194	(g/s)	5
FLT1B099	VOLUME	Construction Equip	614115.6	4268346.8	0	0.000076194	(g/s)	5
FLT1B09A	VOLUME	Construction Equip	614179.2	4268346.8	0	0.000076194	(g/s)	5
FLT1B09B	VOLUME	Construction Equip	614242.8	4268346.8	0	0.000076194	(g/s)	5
FLT1B09C	VOLUME	Construction Equip	614306.4	4268346.8	0	0.000076194	(g/s)	5
FLT1B09D	VOLUME	Construction Equip	614370.0	4268346.8	0	0.000076194	(g/s)	5
FLT1B09E	VOLUME	Construction Equip	614433.7	4268346.8	0	0.000076194	(g/s)	5
FLT1B09F	VOLUME	Construction Equip	614497.3	4268346.8	0	0.000076194	(g/s)	5
FLT1B09G	VOLUME	Construction Equip	614560.9	4268346.8	0	0.000076194	(g/s)	5
FLT1B09H	VOLUME	Construction Equip	613861.1	4268410.4	0	0.000076194	(g/s)	5
FLT1B09I	VOLUME	Construction Equip	613924.7	4268410.4	0	0.000076194	(g/s)	5
FLT1B09J	VOLUME	Construction Equip	613988.3	4268410.4	0	0.000076194	(g/s)	5
FLT1B09K	VOLUME	Construction Equip	614052.0	4268410.4	0	0.000076194	(g/s)	5
FLT1B09L	VOLUME	Construction Equip	614115.6	4268410.4	0	0.000076194	(g/s)	5
FLT1B09M	VOLUME	Construction Equip	614179.2	4268410.4	0	0.000076194	(g/s)	5
FLT1B09N	VOLUME	Construction Equip	614242.8	4268410.4	0	0.000076194	(g/s)	5
FLT1B09O	VOLUME	Construction Equip	614306.4	4268410.4	0	0.000076194	(g/s)	5
FLT1B09P	VOLUME	Construction Equip	614370.0	4268410.4	0	0.000076194	(g/s)	5
FLT1B09Q	VOLUME	Construction Equip	614433.7	4268410.4	0	0.000076194	(g/s)	5
FLT1B09R	VOLUME	Construction Equip	614497.3	4268410.4	0	0.000076194	(g/s)	5
FLT1B09S	VOLUME	Construction Equip	614560.9	4268410.4	0	0.000076194	(g/s)	5
FLT1B09T	VOLUME	Construction Equip	613861.1	4268474.1	0	0.000076194	(g/s)	5
FLT1B09U	VOLUME	Construction Equip	613924.7	4268474.1	0	0.000076194	(g/s)	5
FLT1B09V	VOLUME	Construction Equip	613988.3	4268474.1	0	0.000076194	(g/s)	5
FLT1B09W	VOLUME	Construction Equip	614052.0	4268474.1	0	0.000076194	(g/s)	5
FLT1B09X	VOLUME	Construction Equip	614115.6	4268474.1	0	0.000076194	(g/s)	5
FLT1B09Y	VOLUME	Construction Equip	614179.2	4268474.1	0	0.000076194	(g/s)	5
FLT1B09Z	VOLUME	Construction Equip	614242.8	4268474.1	0	0.000076194	(g/s)	5
FLT1B0A0	VOLUME	Construction Equip	614306.4	4268474.1	0	0.000076194	(g/s)	5

FLT1B0A1	VOLUME	Construction Equip	614370.0	4268474.1	0	0.000076194	(g/s)	5
FLT1B0A2	VOLUME	Construction Equip	614433.7	4268474.1	0	0.000076194	(g/s)	5
FLT1B0A3	VOLUME	Construction Equip	614497.3	4268474.1	0	0.000076194	(g/s)	5
FLT1B0A4	VOLUME	Construction Equip	614560.9	4268474.1	0	0.000076194	(g/s)	5
FLT1B0A5	VOLUME	Construction Equip	613861.1	4268537.7	0	0.000076194	(g/s)	5
FLT1B0A6	VOLUME	Construction Equip	613924.7	4268537.7	0	0.000076194	(g/s)	5
FLT1B0A7	VOLUME	Construction Equip	613988.3	4268537.7	0	0.000076194	(g/s)	5
FLT1B0A8	VOLUME	Construction Equip	614052.0	4268537.7	0	0.000076194	(g/s)	5
FLT1B0A9	VOLUME	Construction Equip	614115.6	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AA	VOLUME	Construction Equip	614179.2	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AB	VOLUME	Construction Equip	614242.8	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AC	VOLUME	Construction Equip	614306.4	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AD	VOLUME	Construction Equip	614370.0	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AE	VOLUME	Construction Equip	614433.7	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AF	VOLUME	Construction Equip	614497.3	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AG	VOLUME	Construction Equip	614560.9	4268537.7	0	0.000076194	(g/s)	5
FLT1B0AH	VOLUME	Construction Equip	613861.1	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AI	VOLUME	Construction Equip	613924.7	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AJ	VOLUME	Construction Equip	613988.3	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AK	VOLUME	Construction Equip	614052.0	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AL	VOLUME	Construction Equip	614115.6	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AM	VOLUME	Construction Equip	614179.2	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AN	VOLUME	Construction Equip	614242.8	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AO	VOLUME	Construction Equip	614306.4	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AP	VOLUME	Construction Equip	614370.0	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AQ	VOLUME	Construction Equip	614433.7	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AR	VOLUME	Construction Equip	614497.3	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AS	VOLUME	Construction Equip	614560.9	4268601.3	0	0.000076194	(g/s)	5
FLT1B0AT	VOLUME	Construction Equip	613861.1	4268664.9	0	0.000076194	(g/s)	5
FLT1B0AU	VOLUME	Construction Equip	613924.7	4268664.9	0	0.000076194	(g/s)	5
FLT1B0AV	VOLUME	Construction Equip	613988.3	4268664.9	0	0.000076194	(g/s)	5
FLT1B0AW	VOLUME	Construction Equip	614052.0	4268664.9	0	0.000076194	(g/s)	5
FLT1B0AX	VOLUME	Construction Equip	614115.6	4268664.9	0	0.000076194	(g/s)	5
FLT1B0AY	VOLUME	Construction Equip	614179.2	4268664.9	0	0.000076194	(g/s)	5
FLT1B0AZ	VOLUME	Construction Equip	614242.8	4268664.9	0	0.000076194	(g/s)	5
FLT1B0B0	VOLUME	Construction Equip	614306.4	4268664.9	0	0.000076194	(g/s)	5
FLT1B0B1	VOLUME	Construction Equip	614370.0	4268664.9	0	0.000076194	(g/s)	5
FLT1B0B2	VOLUME	Construction Equip	614433.7	4268664.9	0	0.000076194	(g/s)	5
FLT1B0B3	VOLUME	Construction Equip	614497.3	4268664.9	0	0.000076194	(g/s)	5
FLT1B0B4	VOLUME	Construction Equip	614560.9	4268664.9	0	0.000076194	(g/s)	5
FLT1B0B5	VOLUME	Construction Equip	613861.1	4268728.5	0	0.000076194	(g/s)	5
FLT1B0B6	VOLUME	Construction Equip	613924.7	4268728.5	0	0.000076194	(g/s)	5
FLT1B0B7	VOLUME	Construction Equip	613988.3	4268728.5	0	0.000076194	(g/s)	5
FLT1B0B8	VOLUME	Construction Equip	614052.0	4268728.5	0	0.000076194	(g/s)	5
FLT1B0B9	VOLUME	Construction Equip	614115.6	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BA	VOLUME	Construction Equip	614179.2	4268728.5	0	0.000076194	(g/s)	5

FLT1B0BB	VOLUME	Construction Equip	614242.8	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BC	VOLUME	Construction Equip	614306.4	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BD	VOLUME	Construction Equip	614370.0	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BE	VOLUME	Construction Equip	614433.7	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BF	VOLUME	Construction Equip	614497.3	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BG	VOLUME	Construction Equip	614560.9	4268728.5	0	0.000076194	(g/s)	5
FLT1B0BH	VOLUME	Construction Equip	613861.1	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BI	VOLUME	Construction Equip	613924.7	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BJ	VOLUME	Construction Equip	613988.3	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BK	VOLUME	Construction Equip	614052.0	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BL	VOLUME	Construction Equip	614115.6	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BM	VOLUME	Construction Equip	614179.2	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BN	VOLUME	Construction Equip	614242.8	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BO	VOLUME	Construction Equip	614306.4	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BP	VOLUME	Construction Equip	614370.0	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BQ	VOLUME	Construction Equip	614433.7	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BR	VOLUME	Construction Equip	614497.3	4268792.1	0	0.000076194	(g/s)	5
FLT1B0BS	VOLUME	Construction Equip	614560.9	4268792.1	0	0.000076194	(g/s)	5

## Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev. (m)	Emiss. Rate (g/s)	Release Height (m)	Init. Lat. Dim. (m)	Init. Vert. Dim. (m)
		East (m)	North (m)					
FLT1B091	Construction Equip	614115.6	4268283.2	0	0.000076194	5	29.59	1
FLT1B092	Construction Equip	614179.2	4268283.2	0	0.000076194	5	29.59	1
FLT1B093	Construction Equip	614242.8	4268283.2	0	0.000076194	5	29.59	1
FLT1B094	Construction Equip	614306.4	4268283.2	0	0.000076194	5	29.59	1
FLT1B095	Construction Equip	614370.0	4268283.2	0	0.000076194	5	29.59	1
FLT1B098	Construction Equip	614052.0	4268346.8	0	0.000076194	5	29.59	1
FLT1B099	Construction Equip	614115.6	4268346.8	0	0.000076194	5	29.59	1
FLT1B09A	Construction Equip	614179.2	4268346.8	0	0.000076194	5	29.59	1
FLT1B09B	Construction Equip	614242.8	4268346.8	0	0.000076194	5	29.59	1
FLT1B09C	Construction Equip	614306.4	4268346.8	0	0.000076194	5	29.59	1
FLT1B09D	Construction Equip	614370.0	4268346.8	0	0.000076194	5	29.59	1
FLT1B09E	Construction Equip	614433.7	4268346.8	0	0.000076194	5	29.59	1
FLT1B09F	Construction Equip	614497.3	4268346.8	0	0.000076194	5	29.59	1
FLT1B09G	Construction Equip	614560.9	4268346.8	0	0.000076194	5	29.59	1
FLT1B09H	Construction Equip	613861.1	4268410.4	0	0.000076194	5	29.59	1
FLT1B09I	Construction Equip	613924.7	4268410.4	0	0.000076194	5	29.59	1
FLT1B09J	Construction Equip	613988.3	4268410.4	0	0.000076194	5	29.59	1
FLT1B09K	Construction Equip	614052.0	4268410.4	0	0.000076194	5	29.59	1
FLT1B09L	Construction Equip	614115.6	4268410.4	0	0.000076194	5	29.59	1
FLT1B09M	Construction Equip	614179.2	4268410.4	0	0.000076194	5	29.59	1
FLT1B09N	Construction Equip	614242.8	4268410.4	0	0.000076194	5	29.59	1
FLT1B09O	Construction Equip	614306.4	4268410.4	0	0.000076194	5	29.59	1

FLT1B09P	Construction Equip	614370.0	4268410.4	0	0.000076194	5	29.59	1
FLT1B09Q	Construction Equip	614433.7	4268410.4	0	0.000076194	5	29.59	1
FLT1B09R	Construction Equip	614497.3	4268410.4	0	0.000076194	5	29.59	1
FLT1B09S	Construction Equip	614560.9	4268410.4	0	0.000076194	5	29.59	1
FLT1B09T	Construction Equip	613861.1	4268474.1	0	0.000076194	5	29.59	1
FLT1B09U	Construction Equip	613924.7	4268474.1	0	0.000076194	5	29.59	1
FLT1B09V	Construction Equip	613988.3	4268474.1	0	0.000076194	5	29.59	1
FLT1B09W	Construction Equip	614052.0	4268474.1	0	0.000076194	5	29.59	1
FLT1B09X	Construction Equip	614115.6	4268474.1	0	0.000076194	5	29.59	1
FLT1B09Y	Construction Equip	614179.2	4268474.1	0	0.000076194	5	29.59	1
FLT1B09Z	Construction Equip	614242.8	4268474.1	0	0.000076194	5	29.59	1
FLT1B0A0	Construction Equip	614306.4	4268474.1	0	0.000076194	5	29.59	1
FLT1B0A1	Construction Equip	614370.0	4268474.1	0	0.000076194	5	29.59	1
FLT1B0A2	Construction Equip	614433.7	4268474.1	0	0.000076194	5	29.59	1
FLT1B0A3	Construction Equip	614497.3	4268474.1	0	0.000076194	5	29.59	1
FLT1B0A4	Construction Equip	614560.9	4268474.1	0	0.000076194	5	29.59	1
FLT1B0A5	Construction Equip	613861.1	4268537.7	0	0.000076194	5	29.59	1
FLT1B0A6	Construction Equip	613924.7	4268537.7	0	0.000076194	5	29.59	1
FLT1B0A7	Construction Equip	613988.3	4268537.7	0	0.000076194	5	29.59	1
FLT1B0A8	Construction Equip	614052.0	4268537.7	0	0.000076194	5	29.59	1
FLT1B0A9	Construction Equip	614115.6	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AA	Construction Equip	614179.2	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AB	Construction Equip	614242.8	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AC	Construction Equip	614306.4	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AD	Construction Equip	614370.0	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AE	Construction Equip	614433.7	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AF	Construction Equip	614497.3	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AG	Construction Equip	614560.9	4268537.7	0	0.000076194	5	29.59	1
FLT1B0AH	Construction Equip	613861.1	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AI	Construction Equip	613924.7	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AJ	Construction Equip	613988.3	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AK	Construction Equip	614052.0	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AL	Construction Equip	614115.6	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AM	Construction Equip	614179.2	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AN	Construction Equip	614242.8	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AO	Construction Equip	614306.4	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AP	Construction Equip	614370.0	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AQ	Construction Equip	614433.7	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AR	Construction Equip	614497.3	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AS	Construction Equip	614560.9	4268601.3	0	0.000076194	5	29.59	1
FLT1B0AT	Construction Equip	613861.1	4268664.9	0	0.000076194	5	29.59	1
FLT1B0AU	Construction Equip	613924.7	4268664.9	0	0.000076194	5	29.59	1
FLT1B0AV	Construction Equip	613988.3	4268664.9	0	0.000076194	5	29.59	1
FLT1B0AW	Construction Equip	614052.0	4268664.9	0	0.000076194	5	29.59	1
FLT1B0AX	Construction Equip	614115.6	4268664.9	0	0.000076194	5	29.59	1

FLT1B0AY	Construction Equip	614179.2	4268664.9	0	0.000076194	5	29.59	1
FLT1B0AZ	Construction Equip	614242.8	4268664.9	0	0.000076194	5	29.59	1
FLT1B0B0	Construction Equip	614306.4	4268664.9	0	0.000076194	5	29.59	1
FLT1B0B1	Construction Equip	614370.0	4268664.9	0	0.000076194	5	29.59	1
FLT1B0B2	Construction Equip	614433.7	4268664.9	0	0.000076194	5	29.59	1
FLT1B0B3	Construction Equip	614497.3	4268664.9	0	0.000076194	5	29.59	1
FLT1B0B4	Construction Equip	614560.9	4268664.9	0	0.000076194	5	29.59	1
FLT1B0B5	Construction Equip	613861.1	4268728.5	0	0.000076194	5	29.59	1
FLT1B0B6	Construction Equip	613924.7	4268728.5	0	0.000076194	5	29.59	1
FLT1B0B7	Construction Equip	613988.3	4268728.5	0	0.000076194	5	29.59	1
FLT1B0B8	Construction Equip	614052.0	4268728.5	0	0.000076194	5	29.59	1
FLT1B0B9	Construction Equip	614115.6	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BA	Construction Equip	614179.2	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BB	Construction Equip	614242.8	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BC	Construction Equip	614306.4	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BD	Construction Equip	614370.0	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BE	Construction Equip	614433.7	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BF	Construction Equip	614497.3	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BG	Construction Equip	614560.9	4268728.5	0	0.000076194	5	29.59	1
FLT1B0BH	Construction Equip	613861.1	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BI	Construction Equip	613924.7	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BJ	Construction Equip	613988.3	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BK	Construction Equip	614052.0	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BL	Construction Equip	614115.6	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BM	Construction Equip	614179.2	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BN	Construction Equip	614242.8	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BO	Construction Equip	614306.4	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BP	Construction Equip	614370.0	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BQ	Construction Equip	614433.7	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BR	Construction Equip	614497.3	4268792.1	0	0.000076194	5	29.59	1
FLT1B0BS	Construction Equip	614560.9	4268792.1	0	0.000076194	5	29.59	1

## BREEZE AERMOD Model Results

### Max. Annual ( 5 YEARS) Results of Pollutant: PM25 (ug/m\*\*3)

Group ID	High	Avg. Conc.	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
			East (m)	North (m)					
ALL	1ST	0.00881	614420.30	4267950.60	0.00	0.00	1.80	DC	
	2ND	0.00881	614425.30	4267950.60	0.00	0.00	1.80	DC	
	3RD	0.00881	614415.30	4267950.60	0.00	0.00	1.80	DC	
	4TH	0.00881	614430.30	4267950.60	0.00	0.00	1.80	DC	
	5TH	0.00880	614410.30	4267950.60	0.00	0.00	1.80	DC	
	6TH	0.00880	614435.30	4267950.60	0.00	0.00	1.80	DC	
	7TH	0.00880	614405.30	4267950.60	0.00	0.00	1.80	DC	
	8TH	0.00880	614440.30	4267950.60	0.00	0.00	1.80	DC	
	9TH	0.00879	614400.30	4267950.60	0.00	0.00	1.80	DC	
	10TH	0.00879	614445.30	4267950.60	0.00	0.00	1.80	DC	

### Highest Results of Pollutant: PM25

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	1.31501	ug/m**3	10013119	613743.50	4268510.40	0.00	0.00	1.80	DC	

### Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
4	Warning Message(s)
9526	Informational Message(s)
43824	Hours Were Processed
7881	Calm Hours Identified
1645	Missing Hours Identified ( 3.75 Percent)

### Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	CO	<a href="#">W276</a>	Special proc for 1h-NO2/SO2 24hPM25 NAAQS disabled PM25 H1H
WARNING	CO	<a href="#">W363</a>	Multiyr 24h/Ann PM25 processing not applicable for PM25 H1H

WARNING	OU	<a href="#">W565</a>	Possible Conflict With Dynamically Allocated FUNIT PLOTFILE
WARNING	OU	<a href="#">W565</a>	Possible Conflict With Dynamically Allocated FUNIT PLOTFILE

[www.breeze-software.com](http://www.breeze-software.com)



# **ARC HARP Construction**

Max Emissions Scenario Output

HARP2 - HRACalc (dated 19044) 2/4/2020 9:18:23 AM - Output Log

GLCs loaded successfully  
Pollutants loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: All  
Calculation Method: Derived

\*\*\*\*\*  
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 20

Exposure Duration Bin Distribution  
3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 0  
2<16 Years Bin: 14  
16<30 Years Bin: 4  
16 to 70 Years Bin: 0

\*\*\*\*\*  
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True  
Soil: False  
Dermal: False  
Mother's milk: False  
Water: False  
Fish: False  
Homegrown crops: False  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*  
INHALATION

Daily breathing rate: Moderate8HR

Max Emissions Scenario Output

**\*\*Worker Adjustment Factors\*\***

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

\*\*\*\*\*

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk saved to: C:\Users\jbyrne\Desktop\ARC HARP\Max Emissions Scenario  
CancerRisk.csv

Calculating chronic risk

Chronic risk saved to: C:\Users\jbyrne\Desktop\ARC HARP\Max Emissions Scenario  
NCChronicRisk.csv

Calculating acute risk

Acute risk saved to: C:\Users\jbyrne\Desktop\ARC HARP\Max Emissions Scenario  
NCAcuteRisk.csv

HRA ran successfully

1

9901 DieselExhP 0.00881 1.31501 0 0 0

\*HARP - HRACalc v19044 2/4/2020 9:18:23 AM - Cancer Risk - Input File: C:\Users\jbyrne\Desktop\ARC HARP\Max Emissions Scenario HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_RISK
1			9901	DieselExhPM	0.00881	6.26E-06	20YrCancerDerived_Inh_FAH16to70	*	6.26E-06	0.00E+00	0.00E+00

MMILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_RISK	EGG_RISK	1ST_DRIVER	2ND_DRIVER	PASTURE_CONC
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00

FISH_CONC	WATER_CONC
0.00E+00	0.00E+00



1	2	3	4	5	6	7	8	9	10
POL	POLABBREV	InhalationCancerURF	InhalationCancerSlopeFactor	OralCancerSlopeFactor	AcuteREL	InhalationChronicREL	OralChronicREL	IsMultipathway	AcuteCV
9901	DieseIxpM	0.0003	1.1			5		FALSE	FALSE
11	12	13	14	15	16	17	18	19	20
AcuteCNS_	AcuteIMMUN_	AcuteKIDNEY_	AcuteGILV_	AcuteREPRO_DEVEL_	AcuteRESP_	AcuteSKIN_	AcuteEYE_	AcuteBONE_TEETH_	AcuteENDO_
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
21	22	23	24	25	26	27	28	29	30
AcuteBLOOD_	AcuteODOR_	AcuteGENERAL_	InhalationChronicCV_	InhalationChronicCNS_	InhalationChronicIMMUN_	InhalationChronicKIDNEY_	InhalationChronicGILV_	InhalationChronicREPRO_DEVEL_	InhalationChronicRESP_
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE
31	32	33	34	35	36	37	38	39	40
InhalationChronicSKIN_	InhalationChronicEYE_	InhalationChronicBONE_TEETH_	InhalationChronicENDO_	InhalationChronicBLOOD_	InhalationChronicODOR_	InhalationChronicGENERAL_	OralChronicCV_	OralChronicCNS_	OralChronicIMMUN_
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
41	42	43	44	45	46	47	48	49	50
OralChronicKIDNEY_	OralChronicGILV_	OralChronicREPRO_DEVEL_	OralChronicRESP_	OralChronicSKIN_	OralChronicEYE_	OralChronicBONE_TEETH_	OralChronicENDO_	OralChronicBLOOD_	OralChronicODOR_
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
51	52	53	54	55	56	57	58	59	60
OralChronicGENERAL_	PathwayInhalation	PathwayDrinking	PathwayFood	PathwayCrop	PathwayExposed	PathwayLeafy	PathwayProtected	PathwayRoot	PathwayDairy
FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
61	62	63	64	65	66	67	68	69	70
PathwayMeatEggs	PathwaySoilingestion	PathwayFish	PathwayDermal	PathwayMothersMilk	SoilUptakeFactorLeafy	SoilUptakeFactorExposed	SoilUptakeFactorProtected	SoilUptakeFactorRoot	FoodTcoMiik
FALSE	FALSE	FALSE	FALSE	FALSE					
71	72	73	74	75	76	77	78	79	80
FoodTcoEgg	FoodTcoChicken	FoodTcoBeef	FoodTcoPjg	HalfLifeInSoil	GRAF	FishBCF	MolWtCorrection	DermalAbsorptionFactor	InhalationChronicREL_8HR
							1		
81	82	83	84	85	86	87	88	89	90
InhalationChronicCV_8HR	InhalationChronicCNS_8HR	InhalationChronicIMMUN_8HR	InhalationChronicKIDNEY_8HR	InhalationChronicGILV_8HR	InhalationChronicREPRO_DEVEL_8HR	InhalationChronicRESP_8HR	InhalationChronicSKIN_8HR	InhalationChronicEYE_8HR	InhalationChronicBONE_TEETH_8HR
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
91	92	93	94	95	96	97			
InhalationChronicENDO_8HR	InhalationChronicBLOOD_8HR	InhalationChronicODOR_8HR	InhalationChronicGENERAL_8HR	Tco_InhMM	Tco_OralMM	RChem_Group_HV			
FALSE	FALSE	FALSE	FALSE						

**ARC AERMOD  
Intersection 15**



# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Aggie Research Campus
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,8
CO	URBANOPT	<b>Urban options</b>	
CO	POLLUTID	Pollutant ID	CO
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\jbyrne\Desktop\SACINT~1\2020\724839\INT10~1.SFC
ME	PROFFILE	Profile met file	C:\Users\jbyrne\Desktop\SACINT~1\2020\724839\INT10~1.PFL
ME	SURFDATA	Surf met data info.	93225 2010
ME	UAIRDATA	U-Air met data info.	23230 2010
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	0
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU	DAYTABLE	Print summary opt.
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## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
ENBDC03U	VOLUME	ChilesW	613634.7	4267719.3	0	0.00498225	(g/s)	2.3
ENBDC03V	VOLUME	ChilesW	613662.2	4267710.2	0	0.00498225	(g/s)	2.3
ENBDC03W	VOLUME	ChilesW	613690.6	4267704.4	0	0.00498225	(g/s)	2.3
ENBDC03X	VOLUME	ChilesW	613719.4	4267701.9	0	0.00498225	(g/s)	2.3
ENBDC04U	VOLUME	ChilesE	613332.2	4267790.9	0	0.003804067	(g/s)	2.3
ENBDC04V	VOLUME	ChilesE	613352.6	4267786.0	0	0.003804067	(g/s)	2.3
ENBDC04W	VOLUME	ChilesE	613373.1	4267781.1	0	0.003804067	(g/s)	2.3
ENBDC04X	VOLUME	ChilesE	613393.5	4267776.2	0	0.003804067	(g/s)	2.3
ENBDC04Y	VOLUME	ChilesE	613413.9	4267771.3	0	0.003804067	(g/s)	2.3
ENBDC04Z	VOLUME	ChilesE	613434.3	4267766.4	0	0.003804067	(g/s)	2.3
ENBDC050	VOLUME	ChilesE	613454.7	4267761.5	0	0.003804067	(g/s)	2.3
ENBDC051	VOLUME	ChilesE	613475.1	4267756.3	0	0.003804067	(g/s)	2.3
ENBDC052	VOLUME	ChilesE	613495.3	4267750.8	0	0.003804067	(g/s)	2.3
ENBDC053	VOLUME	ChilesE	613515.6	4267745.3	0	0.003804067	(g/s)	2.3
ENBDC054	VOLUME	ChilesE	613535.9	4267740.1	0	0.003804067	(g/s)	2.3
ENBDC055	VOLUME	ChilesE	613556.4	4267735.2	0	0.003804067	(g/s)	2.3
ENBDC056	VOLUME	ChilesE	613577.0	4267731.2	0	0.003804067	(g/s)	2.3
ENBDC057	VOLUME	ChilesE	613597.7	4267727.8	0	0.003804067	(g/s)	2.3
ENBDC058	VOLUME	ChilesE	613618.4	4267724.6	0	0.003804067	(g/s)	2.3
#15IDLE	VOLUME	Int15Idleing	613621.5	4267724.0	0	0.065994	(g/s)	2.3
ENBDC0DW	VOLUME	80EB	613386.2	4267848.0	0	0.0093324	(g/s)	2.3
ENBDC0DX	VOLUME	80EB	613403.7	4267848.9	0	0.0093324	(g/s)	2.3
ENBDC0DY	VOLUME	80EB	613421.1	4267850.4	0	0.0093324	(g/s)	2.3
ENBDC0DZ	VOLUME	80EB	613438.5	4267852.4	0	0.0093324	(g/s)	2.3
ENBDC0E0	VOLUME	80EB	613455.9	4267854.3	0	0.0093324	(g/s)	2.3
ENBDC0E1	VOLUME	80EB	613473.4	4267855.8	0	0.0093324	(g/s)	2.3
ENBDC0E2	VOLUME	80EB	613490.8	4267857.4	0	0.0093324	(g/s)	2.3
ENBDC0E3	VOLUME	80EB	613508.2	4267858.8	0	0.0093324	(g/s)	2.3
ENBDC0E4	VOLUME	80EB	613525.7	4267859.9	0	0.0093324	(g/s)	2.3
ENBDC0E5	VOLUME	80EB	613543.2	4267861.0	0	0.0093324	(g/s)	2.3
ENBDC0E6	VOLUME	80EB	613560.6	4267860.4	0	0.0093324	(g/s)	2.3
ENBDC0E7	VOLUME	80EB	613577.7	4267857.8	0	0.0093324	(g/s)	2.3
ENBDC0E8	VOLUME	80EB	613593.1	4267849.5	0	0.0093324	(g/s)	2.3
ENBDC0E9	VOLUME	80EB	613606.5	4267838.5	0	0.0093324	(g/s)	2.3
ENBDC0EA	VOLUME	80EB	613617.7	4267825.0	0	0.0093324	(g/s)	2.3
ENBDC0EB	VOLUME	80EB	613626.5	4267810.5	0	0.0093324	(g/s)	2.3
ENBDC0EC	VOLUME	80EB	613626.4	4267793.0	0	0.0093324	(g/s)	2.3
ENBDC0ED	VOLUME	80EB	613627.4	4267775.5	0	0.0093324	(g/s)	2.3
ENBDC0EE	VOLUME	80EB	613625.7	4267758.1	0	0.0093324	(g/s)	2.3

ENBDC0EF	VOLUME	80EB	613623.5	4267740.8	0	0.0093324	(g/s)	2.3
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## Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev. (m)	Emiss. Rate (g/s)	Release Height (m)	Init. Lat. Dim. (m)	Init. Vert. Dim. (m)
		East (m)	North (m)					
ENBDC03U	ChilesW	613634.7	4267719.3	0	0.00498225	2.3	13.48837	2.139535
ENBDC03V	ChilesW	613662.2	4267710.2	0	0.00498225	2.3	13.48837	2.139535
ENBDC03W	ChilesW	613690.6	4267704.4	0	0.00498225	2.3	13.48837	2.139535
ENBDC03X	ChilesW	613719.4	4267701.9	0	0.00498225	2.3	13.48837	2.139535
ENBDC04U	ChilesE	613332.2	4267790.9	0	0.003804067	2.3	9.767442	2.139535
ENBDC04V	ChilesE	613352.6	4267786.0	0	0.003804067	2.3	9.767442	2.139535
ENBDC04W	ChilesE	613373.1	4267781.1	0	0.003804067	2.3	9.767442	2.139535
ENBDC04X	ChilesE	613393.5	4267776.2	0	0.003804067	2.3	9.767442	2.139535
ENBDC04Y	ChilesE	613413.9	4267771.3	0	0.003804067	2.3	9.767442	2.139535
ENBDC04Z	ChilesE	613434.3	4267766.4	0	0.003804067	2.3	9.767442	2.139535
ENBDC050	ChilesE	613454.7	4267761.5	0	0.003804067	2.3	9.767442	2.139535
ENBDC051	ChilesE	613475.1	4267756.3	0	0.003804067	2.3	9.767442	2.139535
ENBDC052	ChilesE	613495.3	4267750.8	0	0.003804067	2.3	9.767442	2.139535
ENBDC053	ChilesE	613515.6	4267745.3	0	0.003804067	2.3	9.767442	2.139535
ENBDC054	ChilesE	613535.9	4267740.1	0	0.003804067	2.3	9.767442	2.139535
ENBDC055	ChilesE	613556.4	4267735.2	0	0.003804067	2.3	9.767442	2.139535
ENBDC056	ChilesE	613577.0	4267731.2	0	0.003804067	2.3	9.767442	2.139535
ENBDC057	ChilesE	613597.7	4267727.8	0	0.003804067	2.3	9.767442	2.139535
ENBDC058	ChilesE	613618.4	4267724.6	0	0.003804067	2.3	9.767442	2.139535
#15IDLE	Int15Idling	613621.5	4267724.0	0	0.065994	2.3	16	1
ENBDC0DW	80EB	613386.2	4267848.0	0	0.0093324	2.3	8.139535	2.139535
ENBDC0DX	80EB	613403.7	4267848.9	0	0.0093324	2.3	8.139535	2.139535
ENBDC0DY	80EB	613421.1	4267850.4	0	0.0093324	2.3	8.139535	2.139535
ENBDC0DZ	80EB	613438.5	4267852.4	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E0	80EB	613455.9	4267854.3	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E1	80EB	613473.4	4267855.8	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E2	80EB	613490.8	4267857.4	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E3	80EB	613508.2	4267858.8	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E4	80EB	613525.7	4267859.9	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E5	80EB	613543.2	4267861.0	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E6	80EB	613560.6	4267860.4	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E7	80EB	613577.7	4267857.8	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E8	80EB	613593.1	4267849.5	0	0.0093324	2.3	8.139535	2.139535
ENBDC0E9	80EB	613606.5	4267838.5	0	0.0093324	2.3	8.139535	2.139535
ENBDC0EA	80EB	613617.7	4267825.0	0	0.0093324	2.3	8.139535	2.139535
ENBDC0EB	80EB	613626.5	4267810.5	0	0.0093324	2.3	8.139535	2.139535
ENBDC0EC	80EB	613626.4	4267793.0	0	0.0093324	2.3	8.139535	2.139535
ENBDC0ED	80EB	613627.4	4267775.5	0	0.0093324	2.3	8.139535	2.139535
ENBDC0EE	80EB	613625.7	4267758.1	0	0.0093324	2.3	8.139535	2.139535
ENBDC0EF	80EB	613623.5	4267740.8	0	0.0093324	2.3	8.139535	2.139535

## BREEZE AERMOD Model Results

### Highest Results of Pollutant: CO

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	1756.84313	ug/m**3	12011208	613647.82	4267696.19	0.00	0.00	1.80	DC	
8-HR	ALL	1ST	Avg. Conc.	1243.06373c	ug/m**3	11121608	613647.82	4267696.19	0.00	0.00	1.80	DC	

### Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
1	Warning Message(s)
9526	Informational Message(s)
43824	Hours Were Processed
7881	Calm Hours Identified
1645	Missing Hours Identified ( 3.75 Percent)

### Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	SO	<a href="#">W298</a>	Results reported for source group ALL include BACKGROUND

[www.breeze-software.com](http://www.breeze-software.com)

# **ARC AERMOD Intersection 13**

# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Aggie Research Campus
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,8
CO	URBANOPT	<b>Urban options</b>	
CO	POLLUTID	Pollutant ID	CO
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\jbyrne\Desktop\SACINT~1\2020\724839\INT10~1.SFC
ME	PROFFILE	Profile met file	C:\Users\jbyrne\Desktop\SACINT~1\2020\724839\INT10~1.PFL
ME	SURFDATA	Surf met data info.	93225 2010
ME	UAIRDATA	U-Air met data info.	23230 2010
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	0
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU	DAYTABLE	Print summary opt.
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## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
ENBDC0A8	VOLUME	MaceN	613760.0	4268007.1	0	0.02776869	(g/s)	2.3
ENBDC0A9	VOLUME	MaceN	613760.3	4268036.1	0	0.02776869	(g/s)	2.3
ENBDC0AA	VOLUME	MaceN	613760.6	4268065.1	0	0.02776869	(g/s)	2.3
ENBDC0AB	VOLUME	MaceN	613760.9	4268094.1	0	0.02776869	(g/s)	2.3
ENBDC0AC	VOLUME	MaceN	613761.1	4268123.1	0	0.02776869	(g/s)	2.3
ENBDC0AD	VOLUME	MaceN	613763.7	4268152.0	0	0.02776869	(g/s)	2.3
ENBDC0AE	VOLUME	MaceN	613767.0	4268180.8	0	0.02776869	(g/s)	2.3
ENBDC0AF	VOLUME	MaceN	613770.3	4268209.6	0	0.02776869	(g/s)	2.3
ENBDC0AG	VOLUME	MaceN	613773.4	4268238.4	0	0.02776869	(g/s)	2.3
ENBDC0AH	VOLUME	MaceN	613775.2	4268267.3	0	0.02776869	(g/s)	2.3
ENBDC0AI	VOLUME	MaceN	613776.3	4268296.3	0	0.02776869	(g/s)	2.3
ENBDC0AJ	VOLUME	MaceN	613777.0	4268325.3	0	0.02776869	(g/s)	2.3
ENBDC0AK	VOLUME	MaceN	613777.7	4268354.3	0	0.02776869	(g/s)	2.3
ENBDC0B9	VOLUME	MaceS	613756.0	4267974.3	0	0.037128	(g/s)	2.3
ENBDC0BA	VOLUME	MaceS	613755.8	4267945.3	0	0.037128	(g/s)	2.3
ENBDC0BB	VOLUME	MaceS	613755.6	4267916.3	0	0.037128	(g/s)	2.3
ENBDC0BC	VOLUME	MaceS	613755.4	4267887.3	0	0.037128	(g/s)	2.3
ENBDC0BD	VOLUME	MaceS	613755.2	4267858.3	0	0.037128	(g/s)	2.3
ENBDC0BE	VOLUME	MaceS	613755.0	4267829.3	0	0.037128	(g/s)	2.3
ENBDC0BF	VOLUME	MaceS	613754.8	4267800.3	0	0.037128	(g/s)	2.3
ENBDC0BG	VOLUME	MaceS	613754.6	4267771.3	0	0.037128	(g/s)	2.3
ENBDC0BH	VOLUME	MaceS	613754.4	4267742.3	0	0.037128	(g/s)	2.3
ENBDC0FG	VOLUME	80WB1	614118.2	4268104.9	0	0.01507548	(g/s)	2.3
ENBDC0FH	VOLUME	80WB1	614102.0	4268099.6	0	0.01507548	(g/s)	2.3
ENBDC0FI	VOLUME	80WB1	614085.9	4268094.4	0	0.01507548	(g/s)	2.3
ENBDC0FJ	VOLUME	80WB1	614069.7	4268089.1	0	0.01507548	(g/s)	2.3
ENBDC0FK	VOLUME	80WB1	614053.5	4268083.9	0	0.01507548	(g/s)	2.3
ENBDC0FL	VOLUME	80WB1	614037.4	4268078.7	0	0.01507548	(g/s)	2.3
ENBDC0FM	VOLUME	80WB1	614021.2	4268073.4	0	0.01507548	(g/s)	2.3
ENBDC0FN	VOLUME	80WB1	614005.0	4268068.2	0	0.01507548	(g/s)	2.3
ENBDC0FO	VOLUME	80WB1	613988.8	4268062.9	0	0.01507548	(g/s)	2.3
ENBDC0FP	VOLUME	80WB1	613972.7	4268057.7	0	0.01507548	(g/s)	2.3
ENBDC0FQ	VOLUME	80WB1	613956.5	4268052.4	0	0.01507548	(g/s)	2.3
ENBDC0FR	VOLUME	80WB1	613940.3	4268047.2	0	0.01507548	(g/s)	2.3
ENBDC0FS	VOLUME	80WB1	613924.1	4268042.1	0	0.01507548	(g/s)	2.3
ENBDC0FT	VOLUME	80WB1	613907.9	4268037.0	0	0.01507548	(g/s)	2.3
ENBDC0FU	VOLUME	80WB1	613891.7	4268031.9	0	0.01507548	(g/s)	2.3
ENBDC0FV	VOLUME	80WB1	613875.5	4268026.8	0	0.01507548	(g/s)	2.3
ENBDC0FW	VOLUME	80WB1	613859.2	4268021.7	0	0.01507548	(g/s)	2.3

ENBDC0FX	VOLUME	80WB1	613843.0	4268016.7	0	0.01507548	(g/s)	2.3
ENBDC0FY	VOLUME	80WB1	613826.7	4268011.8	0	0.01507548	(g/s)	2.3
ENBDC0FZ	VOLUME	80WB1	613810.4	4268007.1	0	0.01507548	(g/s)	2.3
ENBDC0G0	VOLUME	80WB1	613794.1	4268002.3	0	0.01507548	(g/s)	2.3
ENBDC0G1	VOLUME	80WB1	613777.7	4267997.6	0	0.01507548	(g/s)	2.3
ENBDC0G2	VOLUME	80WB1	613761.4	4267992.8	0	0.01507548	(g/s)	2.3
ENBDC0H3	VOLUME	80WB2	613363.2	4267887.8	0	0.0080239	(g/s)	2.3
ENBDC0H4	VOLUME	80WB2	613376.7	4267891.4	0	0.0080239	(g/s)	2.3
ENBDC0H5	VOLUME	80WB2	613390.2	4267895.0	0	0.0080239	(g/s)	2.3
ENBDC0H6	VOLUME	80WB2	613403.8	4267898.5	0	0.0080239	(g/s)	2.3
ENBDC0H7	VOLUME	80WB2	613417.3	4267902.1	0	0.0080239	(g/s)	2.3
ENBDC0H8	VOLUME	80WB2	613430.8	4267905.7	0	0.0080239	(g/s)	2.3
ENBDC0H9	VOLUME	80WB2	613444.4	4267909.3	0	0.0080239	(g/s)	2.3
ENBDC0HA	VOLUME	80WB2	613457.9	4267912.9	0	0.0080239	(g/s)	2.3
ENBDC0HB	VOLUME	80WB2	613471.4	4267916.5	0	0.0080239	(g/s)	2.3
ENBDC0HC	VOLUME	80WB2	613485.0	4267920.0	0	0.0080239	(g/s)	2.3
ENBDC0HD	VOLUME	80WB2	613498.5	4267923.6	0	0.0080239	(g/s)	2.3
ENBDC0HE	VOLUME	80WB2	613512.0	4267927.2	0	0.0080239	(g/s)	2.3
ENBDC0HF	VOLUME	80WB2	613525.6	4267930.8	0	0.0080239	(g/s)	2.3
ENBDC0HG	VOLUME	80WB2	613539.1	4267934.4	0	0.0080239	(g/s)	2.3
ENBDC0HH	VOLUME	80WB2	613552.6	4267937.9	0	0.0080239	(g/s)	2.3
ENBDC0HI	VOLUME	80WB2	613566.2	4267941.5	0	0.0080239	(g/s)	2.3
ENBDC0HJ	VOLUME	80WB2	613579.7	4267945.1	0	0.0080239	(g/s)	2.3
ENBDC0HK	VOLUME	80WB2	613593.2	4267948.7	0	0.0080239	(g/s)	2.3
ENBDC0HL	VOLUME	80WB2	613606.8	4267952.3	0	0.0080239	(g/s)	2.3
ENBDC0HM	VOLUME	80WB2	613620.3	4267955.9	0	0.0080239	(g/s)	2.3
ENBDC0HN	VOLUME	80WB2	613633.8	4267959.4	0	0.0080239	(g/s)	2.3
ENBDC0HO	VOLUME	80WB2	613647.4	4267963.0	0	0.0080239	(g/s)	2.3
ENBDC0HP	VOLUME	80WB2	613660.9	4267966.6	0	0.0080239	(g/s)	2.3
ENBDC0HQ	VOLUME	80WB2	613674.4	4267970.2	0	0.0080239	(g/s)	2.3
ENBDC0HR	VOLUME	80WB2	613688.0	4267973.8	0	0.0080239	(g/s)	2.3
ENBDC0HS	VOLUME	80WB2	613701.5	4267977.4	0	0.0080239	(g/s)	2.3
ENBDC0HT	VOLUME	80WB2	613715.0	4267980.9	0	0.0080239	(g/s)	2.3
ENBDC0HU	VOLUME	80WB2	613728.6	4267984.5	0	0.0080239	(g/s)	2.3
ENBDC0HV	VOLUME	80WB2	613742.1	4267988.1	0	0.0080239	(g/s)	2.3
ENBDC0HW	VOLUME	80WB2	613755.6	4267991.7	0	0.0080239	(g/s)	2.3
INT13IDLE	VOLUME	Int13Idle	613756.4	4267991.7	0	0.061859	(g/s)	2.3

## Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev. (m)	Emiss. Rate (g/s)	Release Height (m)	Init. Lat. Dim. (m)	Init. Vert. Dim. (m)
		East (m)	North (m)					
ENBDC0A8	MaceN	613760.0	4268007.1	0	0.02776869	2.3	13.48837	2.139535
ENBDC0A9	MaceN	613760.3	4268036.1	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AA	MaceN	613760.6	4268065.1	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AB	MaceN	613760.9	4268094.1	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AC	MaceN	613761.1	4268123.1	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AD	MaceN	613763.7	4268152.0	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AE	MaceN	613767.0	4268180.8	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AF	MaceN	613770.3	4268209.6	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AG	MaceN	613773.4	4268238.4	0	0.02776869	2.3	13.48837	2.139535



ENBDC0AH	MaceN	613775.2	4268267.3	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AI	MaceN	613776.3	4268296.3	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AJ	MaceN	613777.0	4268325.3	0	0.02776869	2.3	13.48837	2.139535
ENBDC0AK	MaceN	613777.7	4268354.3	0	0.02776869	2.3	13.48837	2.139535
ENBDC0B9	MaceS	613756.0	4267974.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BA	MaceS	613755.8	4267945.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BB	MaceS	613755.6	4267916.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BC	MaceS	613755.4	4267887.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BD	MaceS	613755.2	4267858.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BE	MaceS	613755.0	4267829.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BF	MaceS	613754.8	4267800.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BG	MaceS	613754.6	4267771.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0BH	MaceS	613754.4	4267742.3	0	0.037128	2.3	13.48837	2.139535
ENBDC0FG	80WB1	614118.2	4268104.9	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FH	80WB1	614102.0	4268099.6	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FI	80WB1	614085.9	4268094.4	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FJ	80WB1	614069.7	4268089.1	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FK	80WB1	614053.5	4268083.9	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FL	80WB1	614037.4	4268078.7	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FM	80WB1	614021.2	4268073.4	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FN	80WB1	614005.0	4268068.2	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FO	80WB1	613988.8	4268062.9	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FP	80WB1	613972.7	4268057.7	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FQ	80WB1	613956.5	4268052.4	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FR	80WB1	613940.3	4268047.2	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FS	80WB1	613924.1	4268042.1	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FT	80WB1	613907.9	4268037.0	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FU	80WB1	613891.7	4268031.9	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FV	80WB1	613875.5	4268026.8	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FW	80WB1	613859.2	4268021.7	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FX	80WB1	613843.0	4268016.7	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FY	80WB1	613826.7	4268011.8	0	0.01507548	2.3	7.906977	2.139535
ENBDC0FZ	80WB1	613810.4	4268007.1	0	0.01507548	2.3	7.906977	2.139535
ENBDC0G0	80WB1	613794.1	4268002.3	0	0.01507548	2.3	7.906977	2.139535
ENBDC0G1	80WB1	613777.7	4267997.6	0	0.01507548	2.3	7.906977	2.139535
ENBDC0G2	80WB1	613761.4	4267992.8	0	0.01507548	2.3	7.906977	2.139535
ENBDC0H3	80WB2	613363.2	4267887.8	0	0.0080239	2.3	6.511628	2.139535
ENBDC0H4	80WB2	613376.7	4267891.4	0	0.0080239	2.3	6.511628	2.139535
ENBDC0H5	80WB2	613390.2	4267895.0	0	0.0080239	2.3	6.511628	2.139535
ENBDC0H6	80WB2	613403.8	4267898.5	0	0.0080239	2.3	6.511628	2.139535
ENBDC0H7	80WB2	613417.3	4267902.1	0	0.0080239	2.3	6.511628	2.139535
ENBDC0H8	80WB2	613430.8	4267905.7	0	0.0080239	2.3	6.511628	2.139535
ENBDC0H9	80WB2	613444.4	4267909.3	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HA	80WB2	613457.9	4267912.9	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HB	80WB2	613471.4	4267916.5	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HC	80WB2	613485.0	4267920.0	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HD	80WB2	613498.5	4267923.6	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HE	80WB2	613512.0	4267927.2	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HF	80WB2	613525.6	4267930.8	0	0.0080239	2.3	6.511628	2.139535

ENBDC0HG	80WB2	613539.1	4267934.4	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HH	80WB2	613552.6	4267937.9	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HI	80WB2	613566.2	4267941.5	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HJ	80WB2	613579.7	4267945.1	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HK	80WB2	613593.2	4267948.7	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HL	80WB2	613606.8	4267952.3	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HM	80WB2	613620.3	4267955.9	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HN	80WB2	613633.8	4267959.4	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HO	80WB2	613647.4	4267963.0	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HP	80WB2	613660.9	4267966.6	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HQ	80WB2	613674.4	4267970.2	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HR	80WB2	613688.0	4267973.8	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HS	80WB2	613701.5	4267977.4	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HT	80WB2	613715.0	4267980.9	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HU	80WB2	613728.6	4267984.5	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HV	80WB2	613742.1	4267988.1	0	0.0080239	2.3	6.511628	2.139535
ENBDC0HW	80WB2	613755.6	4267991.7	0	0.0080239	2.3	6.511628	2.139535
INT13IDLE	Int13Idle	613756.4	4267991.7	0	0.061859	2.3	30.5	1

## BREEZE AERMOD Model Results

### Highest Results of Pollutant: CO

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	2830.06130	ug/m**3	14010618	613736.92	4267738.92	0.00	0.00	1.80	DC	
8-HR	ALL	1ST	Avg. Conc.	1393.96395c	ug/m**3	13120424	613771.92	4267738.69	0.00	0.00	1.80	DC	

### Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
1	Warning Message(s)
9526	Informational Message(s)
43824	Hours Were Processed
7881	Calm Hours Identified
1645	Missing Hours Identified ( 3.75 Percent)

### Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	SO	<a href="#">W298</a>	Results reported for source group ALL include BACKGROUND

[www.breeze-software.com](http://www.breeze-software.com)

**SMAQMD Draft Health Screening  
Tool  
ARC Existing Plus Project**



# Strategic Area Project Health Effects Tool

Strategic Area Location	D. Vacaville	<-- Step 1: Input the area
NOx Emissions	328.2957	<-- Step 2: Input NOx emissions in lbs./day
ROG Emissions	123.6232	<-- Step 3: Input ROG emissions in lbs./day
PM25 Emissions	65.5864	<-- Step 4: Input PM2.5 emissions in lbs./day

PM2.5 Health Endpoint	Age Range <sup>1</sup>	Incidences (per year) <sup>2</sup> (Mean)	Percent of Background Health Incidence <sup>3</sup> (%)
Emergency Room Visits, Asthma	0 - 99	1.8013	0.2272%
Mortality, All Cause	30 - 99	3.4129	0.1853%
Hospital Admissions, Asthma	0 - 64	0.0659	0.0745%
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.2169	0.0206%
Hospital Admissions, All Respiratory	65 - 99	0.5179	0.0573%
Acute Myocardial Infarction, Nonfatal	18 - 24	0.0001	0.0817%
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0068	0.0609%
Acute Myocardial Infarction, Nonfatal	45 - 54	0.0178	0.0620%
Acute Myocardial Infarction, Nonfatal	55 - 64	0.0246	0.0510%
Acute Myocardial Infarction, Nonfatal	65 - 99	0.1176	0.0578%

Ozone Health Endpoint	Age Range <sup>1</sup>	Incidences (per year) <sup>2</sup> (Mean)	Percent of Background Health Incidence <sup>3</sup> (%)
Hospital Admissions, All Respiratory	65 - 99	0.2318	0.0257%
Mortality, Non-Accidental	0 - 99	0.1404	0.0114%
Emergency Room Visits, Asthma	0 - 17	1.2045	0.5014%
Emergency Room Visits, Asthma	18 - 99	1.9967	0.3614%

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.
2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or “background health incidence”) values. Health effects and background health incidences are across the Northern California model domain.
3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, these background incidence rates cover the modeled domain. Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

**SMAQMD Draft Health Screening Tool  
ARC Cumulative**



# Strategic Area Project Health Effects Tool

Strategic Area Location	D. Vacaville	<-- Step 1: Input the area
NOx Emissions	304.9208	<-- Step 2: Input NOx emissions in lbs./day
ROG Emissions	120.7671	<-- Step 3: Input ROG emissions in lbs./day
PM25 Emissions	53.8622	<-- Step 4: Input PM2.5 emissions in lbs./day

PM2.5 Health Endpoint	Age Range <sup>1</sup>	Incidences (per year) <sup>2</sup> (Mean)	Percent of Background Health Incidence <sup>3</sup> (%)
Emergency Room Visits, Asthma	0 - 99	1.8013	0.2272%
Mortality, All Cause	30 - 99	3.4129	0.1853%
Hospital Admissions, Asthma	0 - 64	0.0659	0.0745%
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.2169	0.0206%
Hospital Admissions, All Respiratory	65 - 99	0.5179	0.0573%
Acute Myocardial Infarction, Nonfatal	18 - 24	0.0001	0.0817%
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0068	0.0609%
Acute Myocardial Infarction, Nonfatal	45 - 54	0.0178	0.0620%
Acute Myocardial Infarction, Nonfatal	55 - 64	0.0246	0.0510%
Acute Myocardial Infarction, Nonfatal	65 - 99	0.1176	0.0578%

Ozone Health Endpoint	Age Range <sup>1</sup>	Incidences (per year) <sup>2</sup> (Mean)	Percent of Background Health Incidence <sup>3</sup> (%)
Hospital Admissions, All Respiratory	65 - 99	0.2318	0.0257%
Mortality, Non-Accidental	0 - 99	0.1404	0.0114%
Emergency Room Visits, Asthma	0 - 17	1.2045	0.5014%
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2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or “background health incidence”) values. Health effects and background health incidences are across the Northern California model domain.

3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, these background incidence rates cover the modeled domain. Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.