

Appendix D

Air Quality

Appendix D1

Air Quality Modeling

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	1,437.00	1000sqft	32.99	1,437,000.00	0
Enclosed Parking with Elevator	1,020.00	Space	9.18	408,000.00	0
Parking Lot	400.00	Space	3.60	160,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - Project specific construction schedule.

Off-road Equipment - Assumed construction equipment.

Off-road Equipment - Assumed construction equipment

Off-road Equipment - no demolition phase

Off-road Equipment - Project specific construction equipment

Off-road Equipment - Project specific construction equipment

Off-road Equipment -

Trips and VMT - Project specific construction trips

Grading -

Architectural Coating - Assumed half of the exterior of the building will need to be painted.

Vehicle Trips - VMT estimates include mid-day employee travel, visitor travel, and service/delivery travel so all were calculated as Non Res C-W trip length

Area Coating - According to the project engineer, about half of the exterior portion of the building will be painted.

Energy Use - Assumed Title 24 2019 standards would use 30 percent less energy than those under the 2016 standards.

Construction Off-road Equipment Mitigation - Tier 4 Interim engines as mitigation

Stationary Sources - Emergency Generators and Fire Pumps - Two emergency generators will be installed in the the CUP.

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	718,500.00	359,250.00
tblAreaCoating	Area_Nonresidential_Exterior	718500	359250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	55.00	10.00
tblConstructionPhase	NumDays	740.00	769.00
tblConstructionPhase	NumDays	75.00	41.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	NumDays	30.00	202.00
tblEnergyUse	T24E	3.92	2.74

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tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24NG	12.42	8.69
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	9,564.00
tblTripsAndVMT	VendorTripNumber	329.00	200.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	30.00	40.00
tblTripsAndVMT	WorkerTripNumber	140.00	20.00
tblVehicleTrips	CC_TL	5.00	0.00
tblVehicleTrips	CC_TTP	62.00	0.00
tblVehicleTrips	CNW_TL	6.50	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	10.00	12.28

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tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	WD_TR	68.93	6.64

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1000	0.8621	1.0444	1.6100e-003	0.0371	0.0540	0.0911	9.8500e-003	0.0497	0.0596	0.0000	142.4719	142.4719	0.0365	0.0000	143.3845
2021	1.4882	11.7124	11.6846	0.0343	1.9451	0.4051	2.3502	0.5806	0.3846	0.9651	0.0000	3,098.9771	3,098.9771	0.2936	0.0000	3,106.3179
2022	1.4390	9.7671	11.8218	0.0332	1.8167	0.3488	2.1656	0.4865	0.3330	0.8195	0.0000	2,978.4020	2,978.4020	0.2548	0.0000	2,984.7713
2023	1.3305	8.8145	11.3175	0.0325	1.8167	0.3048	2.1215	0.4865	0.2908	0.7773	0.0000	2,916.6015	2,916.6015	0.2456	0.0000	2,922.7405
2024	6.0638	1.0348	1.3921	3.8500e-003	0.2074	0.0353	0.2427	0.0555	0.0335	0.0890	0.0000	345.1438	345.1438	0.0337	0.0000	345.9874
Maximum	6.0638	11.7124	11.8218	0.0343	1.9451	0.4051	2.3502	0.5806	0.3846	0.9651	0.0000	3,098.9771	3,098.9771	0.2936	0.0000	3,106.3179

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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					
2020	0.0435	0.5589	1.0696	1.6100e-003	0.0371	2.2900e-003	0.0394	9.8500e-003	2.2700e-003	0.0121	0.0000	142.4718	142.4718	0.0365	0.0000	143.3844
2021	0.8706	8.3312	12.5681	0.0343	1.9451	0.0567	2.0018	0.5806	0.0556	0.6361	0.0000	3,098.9759	3,098.9759	0.2936	0.0000	3,106.3167
2022	0.9021	7.4948	12.7275	0.0332	1.8167	0.0572	1.8739	0.4865	0.0561	0.5426	0.0000	2,978.4008	2,978.4008	0.2548	0.0000	2,984.7700
2023	0.8494	7.0619	12.2799	0.0325	1.8167	0.0535	1.8702	0.4865	0.0526	0.5391	0.0000	2,916.6003	2,916.6003	0.2456	0.0000	2,922.7393
2024	6.0078	0.8908	1.5330	3.8500e-003	0.2074	6.3700e-003	0.2137	0.0555	6.2600e-003	0.0618	0.0000	345.1436	345.1436	0.0337	0.0000	345.9873
Maximum	6.0078	8.3312	12.7275	0.0343	1.9451	0.0572	2.0018	0.5806	0.0561	0.6361	0.0000	3,098.9759	3,098.9759	0.2936	0.0000	3,106.3167

	ROG	NOx	CO	SO2	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	16.77	24.40	-7.83	0.00	0.00	84.66	13.94	0.00	84.18	33.90	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	3.1051	2.1835
2	6-1-2021	8-31-2021	3.0907	2.1691
3	9-1-2021	11-30-2021	3.0854	2.1738
4	12-1-2021	2-28-2022	2.8911	2.1252
5	3-1-2022	5-31-2022	2.8362	2.1262
6	6-1-2022	8-31-2022	2.8232	2.1132

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7	9-1-2022	11-30-2022	2.8181	2.1157
8	12-1-2022	2-28-2023	2.6260	2.0246
9	3-1-2023	5-31-2023	2.5696	2.0051
10	6-1-2023	8-31-2023	2.5587	1.9942
11	9-1-2023	11-30-2023	2.5524	1.9939
12	12-1-2023	2-29-2024	1.9922	1.6116
13	3-1-2024	5-31-2024	6.3733	6.3713
		Highest	6.3733	6.3713

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	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Energy	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	6,227.5817	6,227.5817	0.2844	0.0692	6,255.3040
Mobile	2.1705	9.9082	31.7563	0.1188	11.3625	0.0897	11.4522	3.0451	0.0836	3.1287	0.0000	10,939.2616	10,939.2616	0.4471	0.0000	10,950.4393
Stationary	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493
Waste						0.0000	0.0000		0.0000	0.0000	271.2792	0.0000	271.2792	16.0321	0.0000	672.0826
Water						0.0000	0.0000		0.0000	0.0000	101.0011	544.8357	645.8368	0.3744	0.2252	722.3012
Total	8.4993	10.6276	32.3808	0.1228	11.3625	0.1419	11.5044	3.0451	0.1358	3.1809	372.2803	17,717.8777	18,090.1580	17.1391	0.2944	18,606.3519

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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	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Energy	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	6,227.5817	6,227.5817	0.2844	0.0692	6,255.3040
Mobile	2.1705	9.9082	31.7563	0.1188	11.3625	0.0897	11.4522	3.0451	0.0836	3.1287	0.0000	10,939.2616	10,939.2616	0.4471	0.0000	10,950.4393
Stationary	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493
Waste						0.0000	0.0000		0.0000	0.0000	271.2792	0.0000	271.2792	16.0321	0.0000	672.0826
Water						0.0000	0.0000		0.0000	0.0000	101.0011	544.8357	645.8368	0.3744	0.2252	722.3012
Total	8.4993	10.6276	32.3808	0.1228	11.3625	0.1419	11.5044	3.0451	0.1358	3.1809	372.2803	17,717.8777	18,090.1580	17.1391	0.2944	18,606.3519

	ROG	NOx	CO	SO2	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	GeoTech and Foundation Investigation	Site Preparation	3/25/2020	12/31/2020	5	202	
2	Excavate Foundations and Pile Caps	Grading	1/1/2021	2/28/2021	5	41	
3	Building Construction	Building Construction	3/1/2021	2/8/2024	5	769	
4	Paving	Paving	2/9/2024	3/9/2024	5	21	
5	Architectural Coating	Architectural Coating	3/10/2024	3/24/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,155,500; Non-Residential Outdoor: 359,250; Striped Parking Area: 34,080 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
GeoTech and Foundation Investigation	Rubber Tired Dozers	0	8.00	247	0.40
GeoTech and Foundation Investigation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Excavate Foundations and Pile Claps	Excavators	4	8.00	158	0.38
Excavate Foundations and Pile Claps	Graders	2	8.00	187	0.41
Excavate Foundations and Pile Claps	Rubber Tired Dozers	2	8.00	247	0.40
Excavate Foundations and Pile Claps	Scrapers	2	8.00	367	0.48
Excavate Foundations and Pile Claps	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	5	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	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
GeoTech and Foundation Investigation	4	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Excavate Foundations and Pile Claps	12	40.00	0.00	9,564.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	24	698.00	200.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 GeoTech and Foundation Investigation - 2020**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0846	0.8505	0.9210	1.2500e-003		0.0538	0.0538		0.0495	0.0495	0.0000	110.2325	110.2325	0.0357	0.0000	111.1237
Total	0.0846	0.8505	0.9210	1.2500e-003	0.0000	0.0538	0.0538	0.0000	0.0495	0.0495	0.0000	110.2325	110.2325	0.0357	0.0000	111.1237

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3.2 GeoTech and Foundation Investigation - 2020**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	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608
Total	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608

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	0.0281	0.5473	0.9462	1.2500e-003		2.0500e-003	2.0500e-003		2.0500e-003	2.0500e-003	0.0000	110.2323	110.2323	0.0357	0.0000	111.1236
Total	0.0281	0.5473	0.9462	1.2500e-003	0.0000	2.0500e-003	2.0500e-003	0.0000	2.0500e-003	2.0500e-003	0.0000	110.2323	110.2323	0.0357	0.0000	111.1236

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3.2 GeoTech and Foundation Investigation - 2020**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	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608
Total	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608

3.3 Excavate Foundations and Pile Claps - 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	tons/yr										MT/yr					
Fugitive Dust					0.3121	0.0000	0.3121	0.1428	0.0000	0.1428	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1261	1.3859	0.8862	1.7900e-003		0.0597	0.0597		0.0550	0.0550	0.0000	157.6392	157.6392	0.0510	0.0000	158.9138
Total	0.1261	1.3859	0.8862	1.7900e-003	0.3121	0.0597	0.3719	0.1428	0.0550	0.1977	0.0000	157.6392	157.6392	0.0510	0.0000	158.9138

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3.3 Excavate Foundations and Pile Claps - 2021**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	0.0341	1.2619	0.2884	3.7200e-003	0.0807	4.3200e-003	0.0850	0.0221	4.1400e-003	0.0263	0.0000	361.6316	361.6316	0.0209	0.0000	362.1532
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8300e-003	4.2400e-003	0.0459	1.4000e-004	0.0150	1.0000e-004	0.0151	4.0000e-003	9.0000e-005	4.0900e-003	0.0000	12.6407	12.6407	3.1000e-004	0.0000	12.6485
Total	0.0399	1.2661	0.3343	3.8600e-003	0.0957	4.4200e-003	0.1001	0.0261	4.2300e-003	0.0304	0.0000	374.2723	374.2723	0.0212	0.0000	374.8017

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					0.3121	0.0000	0.3121	0.1428	0.0000	0.1428	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.5702	1.0784	1.7900e-003		2.9400e-003	2.9400e-003		2.9400e-003	2.9400e-003	0.0000	157.6390	157.6390	0.0510	0.0000	158.9136
Total	0.0284	0.5702	1.0784	1.7900e-003	0.3121	2.9400e-003	0.3151	0.1428	2.9400e-003	0.1457	0.0000	157.6390	157.6390	0.0510	0.0000	158.9136

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3.3 Excavate Foundations and Pile Claps - 2021**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	0.0341	1.2619	0.2884	3.7200e-003	0.0807	4.3200e-003	0.0850	0.0221	4.1400e-003	0.0263	0.0000	361.6316	361.6316	0.0209	0.0000	362.1532
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8300e-003	4.2400e-003	0.0459	1.4000e-004	0.0150	1.0000e-004	0.0151	4.0000e-003	9.0000e-005	4.0900e-003	0.0000	12.6407	12.6407	3.1000e-004	0.0000	12.6485
Total	0.0399	1.2661	0.3343	3.8600e-003	0.0957	4.4200e-003	0.1001	0.0261	4.2300e-003	0.0304	0.0000	374.2723	374.2723	0.0212	0.0000	374.8017

3.4 Building Construction - 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	tons/yr										MT/yr					
Off-Road	0.7072	6.4130	5.5659	0.0102		0.3256	0.3256		0.3110	0.3110	0.0000	867.2426	867.2426	0.1629	0.0000	871.3144
Total	0.7072	6.4130	5.5659	0.0102		0.3256	0.3256		0.3110	0.3110	0.0000	867.2426	867.2426	0.1629	0.0000	871.3144

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3.4 Building Construction - 2021**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	0.0692	2.2505	0.6015	5.3700e-003	0.1286	6.2200e-003	0.1348	0.0372	5.9500e-003	0.0431	0.0000	516.2181	516.2181	0.0295	0.0000	516.9560
Worker	0.5459	0.3970	4.2968	0.0131	1.4086	9.1300e-003	1.4178	0.3745	8.4200e-003	0.3829	0.0000	1,183.6049	1,183.6049	0.0291	0.0000	1,184.3320
Total	0.6151	2.6475	4.8983	0.0185	1.5372	0.0154	1.5526	0.4117	0.0144	0.4260	0.0000	1,699.8230	1,699.8230	0.0586	0.0000	1,701.2880

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	0.1873	3.8474	6.2571	0.0102		0.0340	0.0340		0.0340	0.0340	0.0000	867.2415	867.2415	0.1629	0.0000	871.3133
Total	0.1873	3.8474	6.2571	0.0102		0.0340	0.0340		0.0340	0.0340	0.0000	867.2415	867.2415	0.1629	0.0000	871.3133

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3.4 Building Construction - 2021**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	0.0692	2.2505	0.6015	5.3700e-003	0.1286	6.2200e-003	0.1348	0.0372	5.9500e-003	0.0431	0.0000	516.2181	516.2181	0.0295	0.0000	516.9560
Worker	0.5459	0.3970	4.2968	0.0131	1.4086	9.1300e-003	1.4178	0.3745	8.4200e-003	0.3829	0.0000	1,183.6049	1,183.6049	0.0291	0.0000	1,184.3320
Total	0.6151	2.6475	4.8983	0.0185	1.5372	0.0154	1.5526	0.4117	0.0144	0.4260	0.0000	1,699.8230	1,699.8230	0.0586	0.0000	1,701.2880

3.4 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	0.7582	6.8192	6.4890	0.0120		0.3319	0.3319		0.3172	0.3172	0.0000	1,025.0752	1,025.0752	0.1900	0.0000	1,029.8239
Total	0.7582	6.8192	6.4890	0.0120		0.3319	0.3319		0.3172	0.3172	0.0000	1,025.0752	1,025.0752	0.1900	0.0000	1,029.8239

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3.4 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	0.0759	2.5254	0.6555	6.2900e-003	0.1520	6.4500e-003	0.1584	0.0439	6.1700e-003	0.0501	0.0000	604.7133	604.7133	0.0339	0.0000	605.5605
Worker	0.6049	0.4225	4.6774	0.0149	1.6647	0.0105	1.6752	0.4426	9.6800e-003	0.4523	0.0000	1,348.6135	1,348.6135	0.0309	0.0000	1,349.3869
Total	0.6808	2.9479	5.3328	0.0212	1.8167	0.0170	1.8337	0.4865	0.0159	0.5024	0.0000	1,953.3268	1,953.3268	0.0648	0.0000	1,954.9474

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	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.0740	1,025.0740	0.1900	0.0000	1,029.8227
Total	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.0740	1,025.0740	0.1900	0.0000	1,029.8227

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3.4 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	0.0759	2.5254	0.6555	6.2900e-003	0.1520	6.4500e-003	0.1584	0.0439	6.1700e-003	0.0501	0.0000	604.7133	604.7133	0.0339	0.0000	605.5605
Worker	0.6049	0.4225	4.6774	0.0149	1.6647	0.0105	1.6752	0.4426	9.6800e-003	0.4523	0.0000	1,348.6135	1,348.6135	0.0309	0.0000	1,349.3869
Total	0.6808	2.9479	5.3328	0.0212	1.8167	0.0170	1.8337	0.4865	0.0159	0.5024	0.0000	1,953.3268	1,953.3268	0.0648	0.0000	1,954.9474

3.4 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	0.7024	6.2995	6.4323	0.0120		0.2915	0.2915		0.2785	0.2785	0.0000	1,025.1740	1,025.1740	0.1874	0.0000	1,029.8589
Total	0.7024	6.2995	6.4323	0.0120		0.2915	0.2915		0.2785	0.2785	0.0000	1,025.1740	1,025.1740	0.1874	0.0000	1,029.8589

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3.4 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	0.0600	2.1344	0.5799	6.1700e-003	0.1520	3.0700e-003	0.1550	0.0439	2.9300e-003	0.0469	0.0000	593.5361	593.5361	0.0304	0.0000	594.2961
Worker	0.5681	0.3806	4.3053	0.0144	1.6647	0.0102	1.6750	0.4426	9.4400e-003	0.4520	0.0000	1,297.8914	1,297.8914	0.0278	0.0000	1,298.5856
Total	0.6281	2.5150	4.8852	0.0205	1.8167	0.0133	1.8300	0.4865	0.0124	0.4989	0.0000	1,891.4275	1,891.4275	0.0582	0.0000	1,892.8817

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	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.1727	1,025.1727	0.1874	0.0000	1,029.8576
Total	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.1727	1,025.1727	0.1874	0.0000	1,029.8576

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3.4 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	0.0600	2.1344	0.5799	6.1700e-003	0.1520	3.0700e-003	0.1550	0.0439	2.9300e-003	0.0469	0.0000	593.5361	593.5361	0.0304	0.0000	594.2961
Worker	0.5681	0.3806	4.3053	0.0144	1.6647	0.0102	1.6750	0.4426	9.4400e-003	0.4520	0.0000	1,297.8914	1,297.8914	0.0278	0.0000	1,298.5856
Total	0.6281	2.5150	4.8852	0.0205	1.8167	0.0133	1.8300	0.4865	0.0124	0.4989	0.0000	1,891.4275	1,891.4275	0.0582	0.0000	1,892.8817

3.4 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	0.0732	0.6558	0.7121	1.3400e-003		0.0286	0.0286		0.0273	0.0273	0.0000	114.3522	114.3522	0.0207	0.0000	114.8686
Total	0.0732	0.6558	0.7121	1.3400e-003		0.0286	0.0286		0.0273	0.0273	0.0000	114.3522	114.3522	0.0207	0.0000	114.8686

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3.4 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	6.3800e-003	0.2335	0.0605	6.8000e-004	0.0170	3.2000e-004	0.0173	4.9000e-003	3.1000e-004	5.2100e-003	0.0000	65.8178	65.8178	3.3500e-003	0.0000	65.9015
Worker	0.0598	0.0384	0.4456	1.5400e-003	0.1857	1.1200e-003	0.1868	0.0494	1.0300e-003	0.0504	0.0000	139.1296	139.1296	2.8000e-003	0.0000	139.1995
Total	0.0662	0.2720	0.5061	2.2200e-003	0.2026	1.4400e-003	0.2041	0.0543	1.3400e-003	0.0556	0.0000	204.9474	204.9474	6.1500e-003	0.0000	205.1010

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	0.0247	0.5072	0.8248	1.3400e-003		4.4800e-003	4.4800e-003		4.4800e-003	4.4800e-003	0.0000	114.3521	114.3521	0.0207	0.0000	114.8684
Total	0.0247	0.5072	0.8248	1.3400e-003		4.4800e-003	4.4800e-003		4.4800e-003	4.4800e-003	0.0000	114.3521	114.3521	0.0207	0.0000	114.8684

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3.4 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	6.3800e-003	0.2335	0.0605	6.8000e-004	0.0170	3.2000e-004	0.0173	4.9000e-003	3.1000e-004	5.2100e-003	0.0000	65.8178	65.8178	3.3500e-003	0.0000	65.9015
Worker	0.0598	0.0384	0.4456	1.5400e-003	0.1857	1.1200e-003	0.1868	0.0494	1.0300e-003	0.0504	0.0000	139.1296	139.1296	2.8000e-003	0.0000	139.1995
Total	0.0662	0.2720	0.5061	2.2200e-003	0.2026	1.4400e-003	0.2041	0.0543	1.3400e-003	0.0556	0.0000	204.9474	204.9474	6.1500e-003	0.0000	205.1010

3.5 Paving - 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	0.0104	0.1000	0.1536	2.4000e-004		4.9200e-003	4.9200e-003		4.5300e-003	4.5300e-003	0.0000	21.0279	21.0279	6.8000e-003	0.0000	21.1979
Paving	4.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0151	0.1000	0.1536	2.4000e-004		4.9200e-003	4.9200e-003		4.5300e-003	4.5300e-003	0.0000	21.0279	21.0279	6.8000e-003	0.0000	21.1979

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3.5 Paving - 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	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662
Total	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662

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	3.5100e-003	0.1054	0.1816	2.4000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	21.0278	21.0278	6.8000e-003	0.0000	21.1979
Paving	4.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2300e-003	0.1054	0.1816	2.4000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	21.0278	21.0278	6.8000e-003	0.0000	21.1979

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3.5 Paving - 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	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662
Total	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662

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	5.9069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	5.9078	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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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	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754
Total	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754

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	5.9069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	5.3000e-003	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	5.9072	5.3000e-003	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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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	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754
Total	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1705	9.9082	31.7563	0.1188	11.3625	0.0897	11.4522	3.0451	0.0836	3.1287	0.0000	10,939.26 16	10,939.26 16	0.4471	0.0000	10,950.43 93
Unmitigated	2.1705	9.9082	31.7563	0.1188	11.3625	0.0897	11.4522	3.0451	0.0836	3.1287	0.0000	10,939.26 16	10,939.26 16	0.4471	0.0000	10,950.43 93

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	9,547.00	0.00	0.00	30,487,600	30,487,600
Parking Lot	0.00	0.00	0.00		
Total	9,547.00	0.00	0.00	30,487,600	30,487,600

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
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Government Office Building	12.28	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Government Office Building	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,509.0545	5,509.0545	0.2706	0.0560	5,532.5070
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,509.0545	5,509.0545	0.2706	0.0560	5,532.5070
NaturalGas Mitigated	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970
NaturalGas Unmitigated	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970

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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					
Enclosed 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
Government Office Building	1.34647e+007	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970
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
Total		0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970

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					
Enclosed 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
Government Office Building	1.34647e+007	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970
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
Total		0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970

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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			
Enclosed Parking with Elevator	1.90944e+006	511.2719	0.0251	5.2000e-003	513.4484
Government Office Building	1.86092e+007	4,982.7881	0.2448	0.0507	5,004.0002
Parking Lot	56000	14.9946	7.4000e-004	1.5000e-004	15.0584
Total		5,509.0545	0.2707	0.0560	5,532.5070

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	1.90944e+006	511.2719	0.0251	5.2000e-003	513.4484
Government Office Building	1.86092e+007	4,982.7881	0.2448	0.0507	5,004.0002
Parking Lot	56000	14.9946	7.4000e-004	1.5000e-004	15.0584
Total		5,509.0545	0.2707	0.0560	5,532.5070

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Unmitigated	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755

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	0.5907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Total	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Total	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755

7.0 Water Detail**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	645.8368	0.3744	0.2252	722.3012
Unmitigated	645.8368	0.3744	0.2252	722.3012

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	285.474 / 174.968	645.8368	0.3744	0.2252	722.3012
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		645.8368	0.3744	0.2252	722.3012

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	285.474 / 174.968	645.8368	0.3744	0.2252	722.3012
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		645.8368	0.3744	0.2252	722.3012

8.0 Waste Detail

8.1 Mitigation Measures Waste

DGS Richards - Sacramento County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	271.2792	16.0321	0.0000	672.0826
Unmitigated	271.2792	16.0321	0.0000	672.0826

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1336.41	271.2792	16.0321	0.0000	672.0826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		271.2792	16.0321	0.0000	672.0826

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1336.41	271.2792	16.0321	0.0000	672.0826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		271.2792	16.0321	0.0000	672.0826

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
Emergency Generator	2	0	6	1341.02	0.73	Diesel

Boilers

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

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Equipment Type	Number
----------------	--------

10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493
Total	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493

11.0 Vegetation

DGS Richards - Sacramento County, Winter

DGS Richards
Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	1,437.00	1000sqft	32.99	1,437,000.00	0
Enclosed Parking with Elevator	1,020.00	Space	9.18	408,000.00	0
Parking Lot	400.00	Space	3.60	160,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

DGS Richards - Sacramento County, Winter

Project Characteristics -

Land Use -

Construction Phase - Project specific construction schedule.

Off-road Equipment - Assumed construction equipment.

Off-road Equipment - Assumed construction equipment

Off-road Equipment - no demolition phase

Off-road Equipment - Project specific construction equipment

Off-road Equipment - Project specific construction equipment

Off-road Equipment -

Trips and VMT - Project specific construction trips

Grading -

Architectural Coating - Assumed half of the exterior of the building will need to be painted.

Vehicle Trips - VMT estimates include mid-day employee travel, visitor travel, and service/delivery travel so all were calculated as Non Res C-W trip length

Area Coating - According to the project engineer, about half of the exterior portion of the building will be painted.

Energy Use - Assumed Title 24 2019 standards would use 30 percent less energy than those under the 2016 standards.

Construction Off-road Equipment Mitigation - Tier 4 Interim engines as mitigation

Stationary Sources - Emergency Generators and Fire Pumps - Two emergency generators will be installed in the the CUP.

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	718,500.00	359,250.00
tblAreaCoating	Area_Nonresidential_Exterior	718500	359250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	55.00	10.00
tblConstructionPhase	NumDays	740.00	769.00
tblConstructionPhase	NumDays	75.00	41.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	NumDays	30.00	202.00
tblEnergyUse	T24E	3.92	2.74

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tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24NG	12.42	8.69
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	9,564.00
tblTripsAndVMT	VendorTripNumber	329.00	200.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	30.00	40.00
tblTripsAndVMT	WorkerTripNumber	140.00	20.00
tblVehicleTrips	CC_TL	5.00	0.00
tblVehicleTrips	CC_TTP	62.00	0.00
tblVehicleTrips	CNW_TL	6.50	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	10.00	12.28

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tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	WD_TR	68.93	6.64

2.0 Emissions Summary

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					
2020	1.0076	8.5495	10.3149	0.0159	0.3801	0.5349	0.9150	0.1008	0.4921	0.5929	0.0000	1,544.7828	1,544.7828	0.3981	0.0000	1,554.7357
2021	12.6066	129.6607	94.7459	0.2738	20.0429	3.1342	23.1771	8.2758	2.9597	11.1672	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476
2022	11.6250	75.4708	90.5285	0.2513	14.4672	2.6851	17.1523	3.8633	2.5633	6.4265	0.0000	24,847.2780	24,847.2780	2.1649	0.0000	24,901.4000
2023	10.7623	68.0970	86.5852	0.2462	14.4670	2.3456	16.8127	3.8632	2.2382	6.1014	0.0000	24,337.4267	24,337.4267	2.0853	0.0000	24,389.5585
2024	1,181.6956	64.2397	83.5349	0.2417	14.4669	2.0732	16.5401	3.8632	1.9766	5.8398	0.0000	23,893.4865	23,893.4865	2.0408	0.0000	23,944.5073
Maximum	1,181.6956	129.6607	94.7459	0.2738	20.0429	3.1342	23.1771	8.2758	2.9597	11.1672	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476

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2.1 Overall Construction (Maximum Daily Emission)**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	lb/day										lb/day					
2020	0.4481	5.5474	10.5644	0.0159	0.3801	0.0227	0.4028	0.1008	0.0225	0.1233	0.0000	1,544.7828	1,544.7828	0.3981	0.0000	1,554.7357
2021	7.8799	89.8745	101.0297	0.2738	20.0429	0.4508	20.4060	8.2758	0.4417	8.6292	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476
2022	7.4947	57.9917	97.4960	0.2513	14.4672	0.4415	14.9087	3.8633	0.4329	4.2962	0.0000	24,847.2780	24,847.2780	2.1649	0.0000	24,901.4000
2023	7.0615	54.6153	93.9883	0.2462	14.4670	0.4128	14.8799	3.8632	0.4055	4.2687	0.0000	24,337.4267	24,337.4267	2.0853	0.0000	24,389.5585
2024	1,181.5693	53.9915	91.3107	0.2417	14.4669	0.4097	14.8766	3.8632	0.4026	4.2658	0.0000	23,893.4865	23,893.4865	2.0408	0.0000	23,944.5073
Maximum	1,181.5693	89.8745	101.0297	0.2738	20.0429	0.4508	20.4060	8.2758	0.4417	8.6292	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476

	ROG	NOx	CO	SO2	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	1.09	24.28	-7.84	0.00	0.00	83.87	12.23	0.00	83.33	28.36	0.00	0.00	0.00	0.00	0.00	0.00

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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	lb/day										lb/day					
Area	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Energy	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.9484	4,339.9484	0.0832	0.0796	4,365.7386
Mobile	15.9231	78.8457	246.9101	0.8938	90.4829	0.6932	91.1761	24.1797	0.6461	24.8259		90,727.7691	90,727.7691	3.8213		90,823.3026
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	50.5375	82.4650	250.2393	0.9155	90.4829	0.9691	91.4520	24.1797	0.9220	25.1018		95,068.3428	95,068.3428	3.9062	0.0796	95,189.7072

DGS Richards - Sacramento County, Winter

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Energy	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.9484	4,339.9484	0.0832	0.0796	4,365.7386
Mobile	15.9231	78.8457	246.9101	0.8938	90.4829	0.6932	91.1761	24.1797	0.6461	24.8259		90,727.7691	90,727.7691	3.8213		90,823.3026
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	50.5375	82.4650	250.2393	0.9155	90.4829	0.9691	91.4520	24.1797	0.9220	25.1018		95,068.3428	95,068.3428	3.9062	0.0796	95,189.7072

	ROG	NOx	CO	SO2	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**

DGS Richards - Sacramento County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	GeoTech and Foundation Investigation	Site Preparation	3/25/2020	12/31/2020	5	202	
2	Excavate Foundations and Pile Caps	Grading	1/1/2021	2/28/2021	5	41	
3	Building Construction	Building Construction	3/1/2021	2/8/2024	5	769	
4	Paving	Paving	2/9/2024	3/9/2024	5	21	
5	Architectural Coating	Architectural Coating	3/10/2024	3/24/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,155,500; Non-Residential Outdoor: 359,250; Striped Parking Area: 34,080 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
GeoTech and Foundation Investigation	Rubber Tired Dozers	0	8.00	247	0.40
GeoTech and Foundation Investigation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Excavate Foundations and Pile Claps	Excavators	4	8.00	158	0.38
Excavate Foundations and Pile Claps	Graders	2	8.00	187	0.41
Excavate Foundations and Pile Claps	Rubber Tired Dozers	2	8.00	247	0.40
Excavate Foundations and Pile Claps	Scrapers	2	8.00	367	0.48
Excavate Foundations and Pile Claps	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	5	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	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
GeoTech and Foundation Investigation	4	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Excavate Foundations and Pile Claps	12	40.00	0.00	9,564.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	24	698.00	200.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

DGS Richards - Sacramento County, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 GeoTech and Foundation Investigation - 2020**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	0.8380	8.4206	9.1188	0.0124		0.5325	0.5325		0.4899	0.4899		1,203.074 0	1,203.074 0	0.3891		1,212.801 5
Total	0.8380	8.4206	9.1188	0.0124	0.0000	0.5325	0.5325	0.0000	0.4899	0.4899		1,203.074 0	1,203.074 0	0.3891		1,212.801 5

DGS Richards - Sacramento County, Winter

3.2 GeoTech and Foundation Investigation - 2020**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	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342
Total	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342

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	0.2785	5.4184	9.3683	0.0124		0.0203	0.0203		0.0203	0.0203	0.0000	1,203.0740	1,203.0740	0.3891		1,212.8015
Total	0.2785	5.4184	9.3683	0.0124	0.0000	0.0203	0.0203	0.0000	0.0203	0.0203	0.0000	1,203.0740	1,203.0740	0.3891		1,212.8015

DGS Richards - Sacramento County, Winter

3.2 GeoTech and Foundation Investigation - 2020**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	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342
Total	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342

3.3 Excavate Foundations and Pile Claps - 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					15.2257	0.0000	15.2257	6.9640	0.0000	6.9640			0.0000			0.0000
Off-Road	6.1489	67.6025	43.2270	0.0875		2.9144	2.9144		2.6812	2.6812		8,476.4637	8,476.4637	2.7415		8,545,0002
Total	6.1489	67.6025	43.2270	0.0875	15.2257	2.9144	18.1400	6.9640	2.6812	9.6452		8,476.4637	8,476.4637	2.7415		8,545,0002

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3.3 Excavate Foundations and Pile Claps - 2021**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	1.6914	61.8267	14.6406	0.1797	4.0571	0.2151	4.2722	1.1102	0.2058	1.3160		19,269.4671	19,269.4671	1.1510		19,298.2426
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	0.3165	0.2315	2.1890	6.6200e-003	0.7601	4.7600e-003	0.7649	0.2016	4.3800e-003	0.2059		660.1005	660.1005	0.0162		660.5048
Total	2.0079	62.0582	16.8296	0.1863	4.8172	0.2199	5.0371	1.3118	0.2102	1.5220		19,929.5676	19,929.5676	1.1672		19,958.7474

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					15.2257	0.0000	15.2257	6.9640	0.0000	6.9640			0.0000			0.0000
Off-Road	1.3857	27.8163	52.6050	0.0875		0.1432	0.1432		0.1432	0.1432	0.0000	8,476.4637	8,476.4637	2.7415		8,545,0002
Total	1.3857	27.8163	52.6050	0.0875	15.2257	0.1432	15.3689	6.9640	0.1432	7.1072	0.0000	8,476.4637	8,476.4637	2.7415		8,545,0002

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3.3 Excavate Foundations and Pile Claps - 2021**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	1.6914	61.8267	14.6406	0.1797	4.0571	0.2151	4.2722	1.1102	0.2058	1.3160		19,269.4671	19,269.4671	1.1510		19,298.2426
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	0.3165	0.2315	2.1890	6.6200e-003	0.7601	4.7600e-003	0.7649	0.2016	4.3800e-003	0.2059		660.1005	660.1005	0.0162		660.5048
Total	2.0079	62.0582	16.8296	0.1863	4.8172	0.2199	5.0371	1.3118	0.2102	1.5220		19,929.5676	19,929.5676	1.1672		19,958.7474

3.4 Building Construction - 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					
Off-Road	6.4290	58.2996	50.5988	0.0923		2.9598	2.9598		2.8273	2.8273		8,690.6481	8,690.6481	1.6321		8,731.4514
Total	6.4290	58.2996	50.5988	0.0923		2.9598	2.9598		2.8273	2.8273		8,690.6481	8,690.6481	1.6321		8,731.4514

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3.4 Building Construction - 2021**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	0.6547	20.4185	5.9491	0.0481	1.2035	0.0585	1.2620	0.3463	0.0560	0.4023		5,095.041 3	5,095.041 3	0.3095		5,102.779 5
Worker	5.5228	4.0396	38.1981	0.1156	13.2639	0.0830	13.3469	3.5170	0.0765	3.5935		11,518.753 3	11,518.753 3	0.2822		11,525.807 9
Total	6.1776	24.4581	44.1472	0.1637	14.4673	0.1415	14.6089	3.8633	0.1325	3.9958		16,613.79 46	16,613.79 46	0.5917		16,628.58 74

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,690.648 1	8,690.648 1	1.6321		8,731.451 4
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,690.648 1	8,690.648 1	1.6321		8,731.451 4

DGS Richards - Sacramento County, Winter

3.4 Building Construction - 2021**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	0.6547	20.4185	5.9491	0.0481	1.2035	0.0585	1.2620	0.3463	0.0560	0.4023		5,095.041 3	5,095.041 3	0.3095		5,102.779 5
Worker	5.5228	4.0396	38.1981	0.1156	13.2639	0.0830	13.3469	3.5170	0.0765	3.5935		11,518.753 3	11,518.753 3	0.2822		11,525.807 9
Total	6.1776	24.4581	44.1472	0.1637	14.4673	0.1415	14.6089	3.8633	0.1325	3.9958		16,613.79 46	16,613.79 46	0.5917		16,628.58 74

3.4 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	5.8326	52.4553	49.9150	0.0923		2.5529	2.5529		2.4396	2.4396		8,691.938 3	8,691.938 3	1.6106		8,732.204 2
Total	5.8326	52.4553	49.9150	0.0923		2.5529	2.5529		2.4396	2.4396		8,691.938 3	8,691.938 3	1.6106		8,732.204 2

DGS Richards - Sacramento County, Winter

3.4 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	0.6077	19.3782	5.4866	0.0476	1.2033	0.0514	1.2547	0.3463	0.0492	0.3954		5,049.7698	5,049.7698	0.3007		5,057.2883
Worker	5.1847	3.6374	35.1270	0.1114	13.2639	0.0808	13.3447	3.5170	0.0745	3.5915		11,105.5699	11,105.5699	0.2535		11,111.9076
Total	5.7924	23.0155	40.6135	0.1591	14.4672	0.1322	14.5994	3.8633	0.1236	3.9869		16,155.3397	16,155.3397	0.5543		16,169.1958

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,691.9383	8,691.9383	1.6106		8,732.2042
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,691.9383	8,691.9383	1.6106		8,732.2042

DGS Richards - Sacramento County, Winter

3.4 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	0.6077	19.3782	5.4866	0.0476	1.2033	0.0514	1.2547	0.3463	0.0492	0.3954		5,049.7698	5,049.7698	0.3007		5,057.2883
Worker	5.1847	3.6374	35.1270	0.1114	13.2639	0.0808	13.3447	3.5170	0.0745	3.5915		11,105.5699	11,105.5699	0.2535		11,111.9076
Total	5.7924	23.0155	40.6135	0.1591	14.4672	0.1322	14.5994	3.8633	0.1236	3.9869		16,155.3397	16,155.3397	0.5543		16,169.1958

3.4 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	5.4031	48.4577	49.4795	0.0923		2.2421	2.2421		2.1419	2.1419		8,692.7758	8,692.7758	1.5890		8,732.5005
Total	5.4031	48.4577	49.4795	0.0923		2.2421	2.2421		2.1419	2.1419		8,692.7758	8,692.7758	1.5890		8,732.5005

DGS Richards - Sacramento County, Winter

3.4 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	0.4816	16.3628	4.8351	0.0467	1.2032	0.0248	1.2279	0.3462	0.0237	0.3699		4,956.6347	4,956.6347	0.2693		4,963.3664
Worker	4.8776	3.2764	32.2706	0.1072	13.2639	0.0788	13.3427	3.5170	0.0726	3.5896		10,688.0162	10,688.0162	0.2270		10,693.6916
Total	5.3592	19.6392	37.1057	0.1539	14.4670	0.1036	14.5706	3.8632	0.0963	3.9595		15,644.6509	15,644.6509	0.4963		15,657.0580

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,692.7758	8,692.7758	1.5890		8,732.5005
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,692.7758	8,692.7758	1.5890		8,732.5005

DGS Richards - Sacramento County, Winter

3.4 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	0.4816	16.3628	4.8351	0.0467	1.2032	0.0248	1.2279	0.3462	0.0237	0.3699		4,956.6347	4,956.6347	0.2693		4,963.3664
Worker	4.8776	3.2764	32.2706	0.1072	13.2639	0.0788	13.3427	3.5170	0.0726	3.5896		10,688.0162	10,688.0162	0.2270		10,693.6916
Total	5.3592	19.6392	37.1057	0.1539	14.4670	0.1036	14.5706	3.8632	0.0963	3.9595		15,644.6509	15,644.6509	0.4963		15,657.0580

3.4 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	5.0480	45.2243	49.1067	0.0923		1.9727	1.9727		1.8832	1.8832		8,693.2231	8,693.2231	1.5701		8,732.4765
Total	5.0480	45.2243	49.1067	0.0923		1.9727	1.9727		1.8832	1.8832		8,693.2231	8,693.2231	1.5701		8,732.4765

DGS Richards - Sacramento County, Winter

3.4 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	0.4586	16.0501	4.5186	0.0464	1.2031	0.0234	1.2265	0.3462	0.0224	0.3686		4,928.146 1	4,928.146 1	0.2660		4,934.796 1
Worker	4.6110	2.9653	29.9095	0.1030	13.2639	0.0770	13.3409	3.5170	0.0709	3.5880		10,272.117 3	10,272.117 3	0.2047		10,277.23 48
Total	5.0696	19.0153	34.4281	0.1494	14.4669	0.1005	14.5674	3.8632	0.0934	3.9565		15,200.26 34	15,200.26 34	0.4707		15,212.03 08

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,693.223 1	8,693.223 1	1.5701		8,732.476 5
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,693.223 1	8,693.223 1	1.5701		8,732.476 5

DGS Richards - Sacramento County, Winter

3.4 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	0.4586	16.0501	4.5186	0.0464	1.2031	0.0234	1.2265	0.3462	0.0224	0.3686		4,928.146 1	4,928.146 1	0.2660		4,934.796 1
Worker	4.6110	2.9653	29.9095	0.1030	13.2639	0.0770	13.3409	3.5170	0.0709	3.5880		10,272.117 3	10,272.117 3	0.2047		10,277.23 48
Total	5.0696	19.0153	34.4281	0.1494	14.4669	0.1005	14.5674	3.8632	0.0934	3.9565		15,200.26 34	15,200.26 34	0.4707		15,212.03 08

3.5 Paving - 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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4373	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

DGS Richards - Sacramento County, Winter

3.5 Paving - 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	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575
Total	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7832	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

DGS Richards - Sacramento County, Winter

3.5 Paving - 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	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575
Total	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575

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	1,181.3827					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
Total	1,181.5635	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

DGS Richards - Sacramento 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	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766
Total	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766

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	1,181.3827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	1,181.4372	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443

DGS Richards - Sacramento 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	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766
Total	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

DGS Richards - Sacramento 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	15.9231	78.8457	246.9101	0.8938	90.4829	0.6932	91.1761	24.1797	0.6461	24.8259		90,727.76 91	90,727.76 91	3.8213		90,823.30 26
Unmitigated	15.9231	78.8457	246.9101	0.8938	90.4829	0.6932	91.1761	24.1797	0.6461	24.8259		90,727.76 91	90,727.76 91	3.8213		90,823.30 26

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	9,547.00	0.00	0.00	30,487,600	30,487,600
Parking Lot	0.00	0.00	0.00		
Total	9,547.00	0.00	0.00	30,487,600	30,487,600

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
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Government Office Building	12.28	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Government Office Building	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6
NaturalGas Unmitigated	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6

DGS Richards - Sacramento 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					
Enclosed 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
Government Office Building	36889.6	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6

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					
Enclosed 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
Government Office Building	36.8896	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6

6.0 Area Detail

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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	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Unmitigated	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661

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	3.2367					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.9530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0269	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Total	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661

DGS Richards - Sacramento 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	3.2367					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.9530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0269	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Total	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661

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

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

DGS Richards - Sacramento County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	0	6	1341.02	0.73	Diesel

Boilers

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

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

11.0 Vegetation

DGS Richards - Sacramento County, Annual

DGS Richards

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	1,437.00	1000sqft	32.99	1,437,000.00	0
Enclosed Parking with Elevator	1,020.00	Space	9.18	408,000.00	0
Parking Lot	400.00	Space	3.60	160,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	590.31	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - Project specific construction schedule.

Off-road Equipment - Assumed construction equipment.

Off-road Equipment - Assumed construction equipment

Off-road Equipment - no demolition phase

Off-road Equipment - Project specific construction equipment

Off-road Equipment - Project specific construction equipment

Off-road Equipment -

Trips and VMT - Project specific construction trips

Grading -

Architectural Coating - Assumed half of the exterior of the building will need to be painted.

Vehicle Trips - VMT estimates include mid-day employee travel, visitor travel, and service/delivery travel so all were calculated as Non Res C-W trip length

Area Coating - According to the project engineer, about half of the exterior portion of the building will be painted.

Energy Use - Assumed Title 24 2019 standards would use 30 percent less energy than those under the 2016 standards.

Construction Off-road Equipment Mitigation - Tier 4 Interim engines as mitigation

Stationary Sources - Emergency Generators and Fire Pumps - Two emergency generators will be installed in the the CUP.

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	718,500.00	359,250.00
tblAreaCoating	Area_Nonresidential_Exterior	718500	359250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	30.00	202.00
tblConstructionPhase	NumDays	75.00	41.00
tblConstructionPhase	NumDays	740.00	769.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	NumDays	55.00	10.00
tblEnergyUse	T24E	3.92	2.74

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tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24NG	12.42	8.69
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	9,564.00
tblTripsAndVMT	VendorTripNumber	329.00	200.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	30.00	40.00
tblTripsAndVMT	WorkerTripNumber	140.00	20.00

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					
2020	0.1000	0.8621	1.0444	1.6100e-003	0.0371	0.0540	0.0911	9.8500e-003	0.0497	0.0596	0.0000	142.4719	142.4719	0.0365	0.0000	143.3845
2021	1.4882	11.7124	11.6846	0.0343	1.9451	0.4051	2.3502	0.5806	0.3846	0.9651	0.0000	3,098.9771	3,098.9771	0.2936	0.0000	3,106.3179
2022	1.4390	9.7671	11.8218	0.0332	1.8167	0.3488	2.1656	0.4865	0.3330	0.8195	0.0000	2,978.4020	2,978.4020	0.2548	0.0000	2,984.7713
2023	1.3305	8.8145	11.3175	0.0325	1.8167	0.3048	2.1215	0.4865	0.2908	0.7773	0.0000	2,916.6015	2,916.6015	0.2456	0.0000	2,922.7405
2024	6.0638	1.0348	1.3921	3.8500e-003	0.2074	0.0353	0.2427	0.0555	0.0335	0.0890	0.0000	345.1438	345.1438	0.0337	0.0000	345.9874
Maximum	6.0638	11.7124	11.8218	0.0343	1.9451	0.4051	2.3502	0.5806	0.3846	0.9651	0.0000	3,098.9771	3,098.9771	0.2936	0.0000	3,106.3179

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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					
2020	0.0435	0.5589	1.0696	1.6100e-003	0.0371	2.2900e-003	0.0394	9.8500e-003	2.2700e-003	0.0121	0.0000	142.4718	142.4718	0.0365	0.0000	143.3844
2021	0.8706	8.3312	12.5681	0.0343	1.9451	0.0567	2.0018	0.5806	0.0556	0.6361	0.0000	3,098.9759	3,098.9759	0.2936	0.0000	3,106.3167
2022	0.9021	7.4948	12.7275	0.0332	1.8167	0.0572	1.8739	0.4865	0.0561	0.5426	0.0000	2,978.4008	2,978.4008	0.2548	0.0000	2,984.7700
2023	0.8494	7.0619	12.2799	0.0325	1.8167	0.0535	1.8702	0.4865	0.0526	0.5391	0.0000	2,916.6003	2,916.6003	0.2456	0.0000	2,922.7393
2024	6.0078	0.8908	1.5330	3.8500e-003	0.2074	6.3700e-003	0.2137	0.0555	6.2600e-003	0.0618	0.0000	345.1436	345.1436	0.0337	0.0000	345.9873
Maximum	6.0078	8.3312	12.7275	0.0343	1.9451	0.0572	2.0018	0.5806	0.0561	0.6361	0.0000	3,098.9759	3,098.9759	0.2936	0.0000	3,106.3167

	ROG	NOx	CO	SO2	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	16.77	24.40	-7.83	0.00	0.00	84.66	13.94	0.00	84.18	33.90	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	3.1051	2.1835
2	6-1-2021	8-31-2021	3.0907	2.1691
3	9-1-2021	11-30-2021	3.0854	2.1738
4	12-1-2021	2-28-2022	2.8911	2.1252
5	3-1-2022	5-31-2022	2.8362	2.1262
6	6-1-2022	8-31-2022	2.8232	2.1132

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7	9-1-2022	11-30-2022	2.8181	2.1157
8	12-1-2022	2-28-2023	2.6260	2.0246
9	3-1-2023	5-31-2023	2.5696	2.0051
10	6-1-2023	8-31-2023	2.5587	1.9942
11	9-1-2023	11-30-2023	2.5524	1.9939
12	12-1-2023	2-29-2024	1.9922	1.6116
13	3-1-2024	5-31-2024	6.3733	6.3713
		Highest	6.3733	6.3713

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	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Energy	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	6,227.5817	6,227.5817	0.2844	0.0692	6,255.3040
Mobile	15.0733	57.8872	138.4374	0.4272	37.9139	0.3526	38.2665	10.1608	0.3284	10.4892	0.0000	39,352.3290	39,352.3290	1.9111	0.0000	39,400.1054
Stationary	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493
Waste						0.0000	0.0000		0.0000	0.0000	271.2792	0.0000	271.2792	16.0321	0.0000	672.0826
Water						0.0000	0.0000		0.0000	0.0000	101.0011	544.8357	645.8368	0.3744	0.2252	722.3012
Total	21.4021	58.6066	139.0619	0.4312	37.9139	0.4049	38.3188	10.1608	0.3806	10.5414	372.2803	46,130.9450	46,503.2253	18.6031	0.2944	47,056.0180

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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	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Energy	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	6,227.5817	6,227.5817	0.2844	0.0692	6,255.3040
Mobile	15.0733	57.8872	138.4374	0.4272	37.9139	0.3526	38.2665	10.1608	0.3284	10.4892	0.0000	39,352.3290	39,352.3290	1.9111	0.0000	39,400.1054
Stationary	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493
Waste						0.0000	0.0000		0.0000	0.0000	271.2792	0.0000	271.2792	16.0321	0.0000	672.0826
Water						0.0000	0.0000		0.0000	0.0000	101.0011	544.8357	645.8368	0.3744	0.2252	722.3012
Total	21.4021	58.6066	139.0619	0.4312	37.9139	0.4049	38.3188	10.1608	0.3806	10.5414	372.2803	46,130.9450	46,503.2253	18.6031	0.2944	47,056.0180

	ROG	NOx	CO	SO2	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	GeoTech and Foundation Investigation	Site Preparation	3/25/2020	12/31/2020	5	202	
2	Excavate Foundations and Pile Caps	Grading	1/1/2021	2/28/2021	5	41	
3	Building Construction	Building Construction	3/1/2021	2/8/2024	5	769	
4	Paving	Paving	2/9/2024	3/9/2024	5	21	
5	Architectural Coating	Architectural Coating	3/10/2024	3/24/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,155,500; Non-Residential Outdoor: 359,250; Striped Parking Area: 34,080 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
GeoTech and Foundation Investigation	Rubber Tired Dozers	0	8.00	247	0.40
GeoTech and Foundation Investigation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Excavate Foundations and Pile Claps	Excavators	4	8.00	158	0.38
Excavate Foundations and Pile Claps	Graders	2	8.00	187	0.41
Excavate Foundations and Pile Claps	Rubber Tired Dozers	2	8.00	247	0.40
Excavate Foundations and Pile Claps	Scrapers	2	8.00	367	0.48
Excavate Foundations and Pile Claps	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	5	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	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
GeoTech and Foundation Investigation	4	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Excavate Foundations and Pile Claps	12	40.00	0.00	9,564.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	24	698.00	200.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 GeoTech and Foundation Investigation - 2020**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0846	0.8505	0.9210	1.2500e-003		0.0538	0.0538		0.0495	0.0495	0.0000	110.2325	110.2325	0.0357	0.0000	111.1237
Total	0.0846	0.8505	0.9210	1.2500e-003	0.0000	0.0538	0.0538	0.0000	0.0495	0.0495	0.0000	110.2325	110.2325	0.0357	0.0000	111.1237

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3.2 GeoTech and Foundation Investigation - 2020**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	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608
Total	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608

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	0.0281	0.5473	0.9462	1.2500e-003		2.0500e-003	2.0500e-003		2.0500e-003	2.0500e-003	0.0000	110.2323	110.2323	0.0357	0.0000	111.1236
Total	0.0281	0.5473	0.9462	1.2500e-003	0.0000	2.0500e-003	2.0500e-003	0.0000	2.0500e-003	2.0500e-003	0.0000	110.2323	110.2323	0.0357	0.0000	111.1236

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3.2 GeoTech and Foundation Investigation - 2020**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	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608
Total	0.0154	0.0116	0.1234	3.6000e-004	0.0371	2.5000e-004	0.0373	9.8500e-003	2.3000e-004	0.0101	0.0000	32.2395	32.2395	8.5000e-004	0.0000	32.2608

3.3 Excavate Foundations and Pile Claps - 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	tons/yr										MT/yr					
Fugitive Dust					0.3121	0.0000	0.3121	0.1428	0.0000	0.1428	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1261	1.3859	0.8862	1.7900e-003		0.0597	0.0597		0.0550	0.0550	0.0000	157.6392	157.6392	0.0510	0.0000	158.9138
Total	0.1261	1.3859	0.8862	1.7900e-003	0.3121	0.0597	0.3719	0.1428	0.0550	0.1977	0.0000	157.6392	157.6392	0.0510	0.0000	158.9138

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3.3 Excavate Foundations and Pile Claps - 2021**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	0.0341	1.2619	0.2884	3.7200e-003	0.0807	4.3200e-003	0.0850	0.0221	4.1400e-003	0.0263	0.0000	361.6316	361.6316	0.0209	0.0000	362.1532
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8300e-003	4.2400e-003	0.0459	1.4000e-004	0.0150	1.0000e-004	0.0151	4.0000e-003	9.0000e-005	4.0900e-003	0.0000	12.6407	12.6407	3.1000e-004	0.0000	12.6485
Total	0.0399	1.2661	0.3343	3.8600e-003	0.0957	4.4200e-003	0.1001	0.0261	4.2300e-003	0.0304	0.0000	374.2723	374.2723	0.0212	0.0000	374.8017

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					0.3121	0.0000	0.3121	0.1428	0.0000	0.1428	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.5702	1.0784	1.7900e-003		2.9400e-003	2.9400e-003		2.9400e-003	2.9400e-003	0.0000	157.6390	157.6390	0.0510	0.0000	158.9136
Total	0.0284	0.5702	1.0784	1.7900e-003	0.3121	2.9400e-003	0.3151	0.1428	2.9400e-003	0.1457	0.0000	157.6390	157.6390	0.0510	0.0000	158.9136

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3.3 Excavate Foundations and Pile Claps - 2021**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	0.0341	1.2619	0.2884	3.7200e-003	0.0807	4.3200e-003	0.0850	0.0221	4.1400e-003	0.0263	0.0000	361.6316	361.6316	0.0209	0.0000	362.1532
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8300e-003	4.2400e-003	0.0459	1.4000e-004	0.0150	1.0000e-004	0.0151	4.0000e-003	9.0000e-005	4.0900e-003	0.0000	12.6407	12.6407	3.1000e-004	0.0000	12.6485
Total	0.0399	1.2661	0.3343	3.8600e-003	0.0957	4.4200e-003	0.1001	0.0261	4.2300e-003	0.0304	0.0000	374.2723	374.2723	0.0212	0.0000	374.8017

3.4 Building Construction - 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	tons/yr										MT/yr					
Off-Road	0.7072	6.4130	5.5659	0.0102		0.3256	0.3256		0.3110	0.3110	0.0000	867.2426	867.2426	0.1629	0.0000	871.3144
Total	0.7072	6.4130	5.5659	0.0102		0.3256	0.3256		0.3110	0.3110	0.0000	867.2426	867.2426	0.1629	0.0000	871.3144

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3.4 Building Construction - 2021**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	0.0692	2.2505	0.6015	5.3700e-003	0.1286	6.2200e-003	0.1348	0.0372	5.9500e-003	0.0431	0.0000	516.2181	516.2181	0.0295	0.0000	516.9560
Worker	0.5459	0.3970	4.2968	0.0131	1.4086	9.1300e-003	1.4178	0.3745	8.4200e-003	0.3829	0.0000	1,183.6049	1,183.6049	0.0291	0.0000	1,184.3320
Total	0.6151	2.6475	4.8983	0.0185	1.5372	0.0154	1.5526	0.4117	0.0144	0.4260	0.0000	1,699.8230	1,699.8230	0.0586	0.0000	1,701.2880

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	0.1873	3.8474	6.2571	0.0102		0.0340	0.0340		0.0340	0.0340	0.0000	867.2415	867.2415	0.1629	0.0000	871.3133
Total	0.1873	3.8474	6.2571	0.0102		0.0340	0.0340		0.0340	0.0340	0.0000	867.2415	867.2415	0.1629	0.0000	871.3133

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3.4 Building Construction - 2021**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	0.0692	2.2505	0.6015	5.3700e-003	0.1286	6.2200e-003	0.1348	0.0372	5.9500e-003	0.0431	0.0000	516.2181	516.2181	0.0295	0.0000	516.9560
Worker	0.5459	0.3970	4.2968	0.0131	1.4086	9.1300e-003	1.4178	0.3745	8.4200e-003	0.3829	0.0000	1,183.6049	1,183.6049	0.0291	0.0000	1,184.3320
Total	0.6151	2.6475	4.8983	0.0185	1.5372	0.0154	1.5526	0.4117	0.0144	0.4260	0.0000	1,699.8230	1,699.8230	0.0586	0.0000	1,701.2880

3.4 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	0.7582	6.8192	6.4890	0.0120		0.3319	0.3319		0.3172	0.3172	0.0000	1,025.0752	1,025.0752	0.1900	0.0000	1,029.8239
Total	0.7582	6.8192	6.4890	0.0120		0.3319	0.3319		0.3172	0.3172	0.0000	1,025.0752	1,025.0752	0.1900	0.0000	1,029.8239

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3.4 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	0.0759	2.5254	0.6555	6.2900e-003	0.1520	6.4500e-003	0.1584	0.0439	6.1700e-003	0.0501	0.0000	604.7133	604.7133	0.0339	0.0000	605.5605
Worker	0.6049	0.4225	4.6774	0.0149	1.6647	0.0105	1.6752	0.4426	9.6800e-003	0.4523	0.0000	1,348.6135	1,348.6135	0.0309	0.0000	1,349.3869
Total	0.6808	2.9479	5.3328	0.0212	1.8167	0.0170	1.8337	0.4865	0.0159	0.5024	0.0000	1,953.3268	1,953.3268	0.0648	0.0000	1,954.9474

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	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.0740	1,025.0740	0.1900	0.0000	1,029.8227
Total	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.0740	1,025.0740	0.1900	0.0000	1,029.8227

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3.4 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	0.0759	2.5254	0.6555	6.2900e-003	0.1520	6.4500e-003	0.1584	0.0439	6.1700e-003	0.0501	0.0000	604.7133	604.7133	0.0339	0.0000	605.5605
Worker	0.6049	0.4225	4.6774	0.0149	1.6647	0.0105	1.6752	0.4426	9.6800e-003	0.4523	0.0000	1,348.6135	1,348.6135	0.0309	0.0000	1,349.3869
Total	0.6808	2.9479	5.3328	0.0212	1.8167	0.0170	1.8337	0.4865	0.0159	0.5024	0.0000	1,953.3268	1,953.3268	0.0648	0.0000	1,954.9474

3.4 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	0.7024	6.2995	6.4323	0.0120		0.2915	0.2915		0.2785	0.2785	0.0000	1,025.1740	1,025.1740	0.1874	0.0000	1,029.8589
Total	0.7024	6.2995	6.4323	0.0120		0.2915	0.2915		0.2785	0.2785	0.0000	1,025.1740	1,025.1740	0.1874	0.0000	1,029.8589

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3.4 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	0.0600	2.1344	0.5799	6.1700e-003	0.1520	3.0700e-003	0.1550	0.0439	2.9300e-003	0.0469	0.0000	593.5361	593.5361	0.0304	0.0000	594.2961
Worker	0.5681	0.3806	4.3053	0.0144	1.6647	0.0102	1.6750	0.4426	9.4400e-003	0.4520	0.0000	1,297.8914	1,297.8914	0.0278	0.0000	1,298.5856
Total	0.6281	2.5150	4.8852	0.0205	1.8167	0.0133	1.8300	0.4865	0.0124	0.4989	0.0000	1,891.4275	1,891.4275	0.0582	0.0000	1,892.8817

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	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.1727	1,025.1727	0.1874	0.0000	1,029.8576
Total	0.2213	4.5469	7.3947	0.0120		0.0402	0.0402		0.0402	0.0402	0.0000	1,025.1727	1,025.1727	0.1874	0.0000	1,029.8576

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3.4 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	0.0600	2.1344	0.5799	6.1700e-003	0.1520	3.0700e-003	0.1550	0.0439	2.9300e-003	0.0469	0.0000	593.5361	593.5361	0.0304	0.0000	594.2961
Worker	0.5681	0.3806	4.3053	0.0144	1.6647	0.0102	1.6750	0.4426	9.4400e-003	0.4520	0.0000	1,297.8914	1,297.8914	0.0278	0.0000	1,298.5856
Total	0.6281	2.5150	4.8852	0.0205	1.8167	0.0133	1.8300	0.4865	0.0124	0.4989	0.0000	1,891.4275	1,891.4275	0.0582	0.0000	1,892.8817

3.4 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	0.0732	0.6558	0.7121	1.3400e-003		0.0286	0.0286		0.0273	0.0273	0.0000	114.3522	114.3522	0.0207	0.0000	114.8686
Total	0.0732	0.6558	0.7121	1.3400e-003		0.0286	0.0286		0.0273	0.0273	0.0000	114.3522	114.3522	0.0207	0.0000	114.8686

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3.4 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	6.3800e-003	0.2335	0.0605	6.8000e-004	0.0170	3.2000e-004	0.0173	4.9000e-003	3.1000e-004	5.2100e-003	0.0000	65.8178	65.8178	3.3500e-003	0.0000	65.9015
Worker	0.0598	0.0384	0.4456	1.5400e-003	0.1857	1.1200e-003	0.1868	0.0494	1.0300e-003	0.0504	0.0000	139.1296	139.1296	2.8000e-003	0.0000	139.1995
Total	0.0662	0.2720	0.5061	2.2200e-003	0.2026	1.4400e-003	0.2041	0.0543	1.3400e-003	0.0556	0.0000	204.9474	204.9474	6.1500e-003	0.0000	205.1010

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	0.0247	0.5072	0.8248	1.3400e-003		4.4800e-003	4.4800e-003		4.4800e-003	4.4800e-003	0.0000	114.3521	114.3521	0.0207	0.0000	114.8684
Total	0.0247	0.5072	0.8248	1.3400e-003		4.4800e-003	4.4800e-003		4.4800e-003	4.4800e-003	0.0000	114.3521	114.3521	0.0207	0.0000	114.8684

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3.4 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	6.3800e-003	0.2335	0.0605	6.8000e-004	0.0170	3.2000e-004	0.0173	4.9000e-003	3.1000e-004	5.2100e-003	0.0000	65.8178	65.8178	3.3500e-003	0.0000	65.9015
Worker	0.0598	0.0384	0.4456	1.5400e-003	0.1857	1.1200e-003	0.1868	0.0494	1.0300e-003	0.0504	0.0000	139.1296	139.1296	2.8000e-003	0.0000	139.1995
Total	0.0662	0.2720	0.5061	2.2200e-003	0.2026	1.4400e-003	0.2041	0.0543	1.3400e-003	0.0556	0.0000	204.9474	204.9474	6.1500e-003	0.0000	205.1010

3.5 Paving - 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	0.0104	0.1000	0.1536	2.4000e-004		4.9200e-003	4.9200e-003		4.5300e-003	4.5300e-003	0.0000	21.0279	21.0279	6.8000e-003	0.0000	21.1979
Paving	4.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0151	0.1000	0.1536	2.4000e-004		4.9200e-003	4.9200e-003		4.5300e-003	4.5300e-003	0.0000	21.0279	21.0279	6.8000e-003	0.0000	21.1979

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3.5 Paving - 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	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662
Total	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662

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	3.5100e-003	0.1054	0.1816	2.4000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	21.0278	21.0278	6.8000e-003	0.0000	21.1979
Paving	4.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2300e-003	0.1054	0.1816	2.4000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	21.0278	21.0278	6.8000e-003	0.0000	21.1979

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3.5 Paving - 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	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662
Total	9.3000e-004	6.0000e-004	6.9300e-003	2.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.8000e-004	0.0000	2.1651	2.1651	4.0000e-005	0.0000	2.1662

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	5.9069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	5.9078	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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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	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754
Total	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754

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	5.9069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	5.3000e-003	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	5.9072	5.3000e-003	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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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	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754
Total	5.9000e-004	3.8000e-004	4.4000e-003	2.0000e-005	1.8300e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3747	1.3747	3.0000e-005	0.0000	1.3754

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	15.0733	57.8872	138.4374	0.4272	37.9139	0.3526	38.2665	10.1608	0.3284	10.4892	0.0000	39,352.32 90	39,352.32 90	1.9111	0.0000	39,400.10 54
Unmitigated	15.0733	57.8872	138.4374	0.4272	37.9139	0.3526	38.2665	10.1608	0.3284	10.4892	0.0000	39,352.32 90	39,352.32 90	1.9111	0.0000	39,400.10 54

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	99,052.41	0.00	0.00	101,730,044	101,730,044
Parking Lot	0.00	0.00	0.00		
Total	99,052.41	0.00	0.00	101,730,044	101,730,044

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
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Government Office Building	10.00	5.00	6.50	33.00	62.00	5.00	50	34	16
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Government Office Building	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,509.0545	5,509.0545	0.2706	0.0560	5,532.5070
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,509.0545	5,509.0545	0.2706	0.0560	5,532.5070
NaturalGas Mitigated	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970
NaturalGas Unmitigated	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970

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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					
Enclosed 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
Government Office Building	1.34647e+007	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970
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
Total		0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970

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					
Enclosed 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
Government Office Building	1.34647e+007	0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970
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
Total		0.0726	0.6600	0.5544	3.9600e-003		0.0502	0.0502		0.0502	0.0502	0.0000	718.5271	718.5271	0.0138	0.0132	722.7970

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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			
Enclosed Parking with Elevator	1.90944e+006	511.2719	0.0251	5.2000e-003	513.4484
Government Office Building	1.86092e+007	4,982.7881	0.2448	0.0507	5,004.0002
Parking Lot	56000	14.9946	7.4000e-004	1.5000e-004	15.0584
Total		5,509.0545	0.2707	0.0560	5,532.5070

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	1.90944e+006	511.2719	0.0251	5.2000e-003	513.4484
Government Office Building	1.86092e+007	4,982.7881	0.2448	0.0507	5,004.0002
Parking Lot	56000	14.9946	7.4000e-004	1.5000e-004	15.0584
Total		5,509.0545	0.2707	0.0560	5,532.5070

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Unmitigated	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755

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	0.5907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Total	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3600e-003	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755
Total	6.2430	3.3000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0709	0.0709	1.9000e-004	0.0000	0.0755

7.0 Water Detail**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	645.8368	0.3744	0.2252	722.3012
Unmitigated	645.8368	0.3744	0.2252	722.3012

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	285.474 / 174.968	645.8368	0.3744	0.2252	722.3012
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		645.8368	0.3744	0.2252	722.3012

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Government Office Building	285.474 / 174.968	645.8368	0.3744	0.2252	722.3012
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		645.8368	0.3744	0.2252	722.3012

8.0 Waste Detail

8.1 Mitigation Measures Waste

DGS Richards - Sacramento County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	271.2792	16.0321	0.0000	672.0826
Unmitigated	271.2792	16.0321	0.0000	672.0826

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1336.41	271.2792	16.0321	0.0000	672.0826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		271.2792	16.0321	0.0000	672.0826

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1336.41	271.2792	16.0321	0.0000	672.0826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		271.2792	16.0321	0.0000	672.0826

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
Emergency Generator	2	0	6	1341.02	0.73	Diesel

Boilers

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

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Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493
Total	0.0132	0.0591	0.0337	6.0000e-005		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	6.1278	6.1278	8.6000e-004	0.0000	6.1493

11.0 Vegetation

DGS Richards - Sacramento County, Winter

DGS Richards
Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	1,437.00	1000sqft	32.99	1,437,000.00	0
Enclosed Parking with Elevator	1,020.00	Space	9.18	408,000.00	0
Parking Lot	400.00	Space	3.60	160,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

DGS Richards - Sacramento County, Winter

Project Characteristics -

Land Use -

Construction Phase - Project specific construction schedule.

Off-road Equipment - Assumed construction equipment.

Off-road Equipment - Assumed construction equipment

Off-road Equipment - no demolition phase

Off-road Equipment - Project specific construction equipment

Off-road Equipment - Project specific construction equipment

Off-road Equipment -

Trips and VMT - Project specific construction trips

Grading -

Architectural Coating - Assumed half of the exterior of the building will need to be painted.

Vehicle Trips - VMT estimates include mid-day employee travel, visitor travel, and service/delivery travel so all were calculated as Non Res C-W trip length

Area Coating - According to the project engineer, about half of the exterior portion of the building will be painted.

Energy Use - Assumed Title 24 2019 standards would use 30 percent less energy than those under the 2016 standards.

Construction Off-road Equipment Mitigation - Tier 4 Interim engines as mitigation

Stationary Sources - Emergency Generators and Fire Pumps - Two emergency generators will be installed in the the CUP.

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	718,500.00	359,250.00
tblAreaCoating	Area_Nonresidential_Exterior	718500	359250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	30.00	202.00
tblConstructionPhase	NumDays	75.00	41.00
tblConstructionPhase	NumDays	740.00	769.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	NumDays	55.00	10.00
tblEnergyUse	T24E	3.92	2.74

DGS Richards - Sacramento County, Winter

tblEnergyUse	T24E	4.98	3.49
tblEnergyUse	T24NG	12.42	8.69
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	9,564.00
tblTripsAndVMT	VendorTripNumber	329.00	200.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripLength	10.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	30.00	40.00
tblTripsAndVMT	WorkerTripNumber	140.00	20.00

2.0 Emissions Summary

DGS Richards - Sacramento 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					
2020	1.0076	8.5495	10.3149	0.0159	0.3801	0.5349	0.9150	0.1008	0.4921	0.5929	0.0000	1,544.7828	1,544.7828	0.3981	0.0000	1,554.7357
2021	12.6066	129.6607	94.7459	0.2738	20.0429	3.1342	23.1771	8.2758	2.9597	11.1672	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476
2022	11.6250	75.4708	90.5285	0.2513	14.4672	2.6851	17.1523	3.8633	2.5633	6.4265	0.0000	24,847.2780	24,847.2780	2.1649	0.0000	24,901.4000
2023	10.7623	68.0970	86.5852	0.2462	14.4670	2.3456	16.8127	3.8632	2.2382	6.1014	0.0000	24,337.4267	24,337.4267	2.0853	0.0000	24,389.5585
2024	1,181.6956	64.2397	83.5349	0.2417	14.4669	2.0732	16.5401	3.8632	1.9766	5.8398	0.0000	23,893.4865	23,893.4865	2.0408	0.0000	23,944.5073
Maximum	1,181.6956	129.6607	94.7459	0.2738	20.0429	3.1342	23.1771	8.2758	2.9597	11.1672	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476

DGS Richards - Sacramento County, Winter

2.1 Overall Construction (Maximum Daily Emission)**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	lb/day										lb/day					
2020	0.4481	5.5474	10.5644	0.0159	0.3801	0.0227	0.4028	0.1008	0.0225	0.1233	0.0000	1,544.7828	1,544.7828	0.3981	0.0000	1,554.7357
2021	7.8799	89.8745	101.0297	0.2738	20.0429	0.4508	20.4060	8.2758	0.4417	8.6292	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476
2022	7.4947	57.9917	97.4960	0.2513	14.4672	0.4415	14.9087	3.8633	0.4329	4.2962	0.0000	24,847.2780	24,847.2780	2.1649	0.0000	24,901.4000
2023	7.0615	54.6153	93.9883	0.2462	14.4670	0.4128	14.8799	3.8632	0.4055	4.2687	0.0000	24,337.4267	24,337.4267	2.0853	0.0000	24,389.5585
2024	1,181.5693	53.9915	91.3107	0.2417	14.4669	0.4097	14.8766	3.8632	0.4026	4.2658	0.0000	23,893.4865	23,893.4865	2.0408	0.0000	23,944.5073
Maximum	1,181.5693	89.8745	101.0297	0.2738	20.0429	0.4508	20.4060	8.2758	0.4417	8.6292	0.0000	28,406.0313	28,406.0313	3.9087	0.0000	28,503.7476

	ROG	NOx	CO	SO2	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	1.09	24.28	-7.84	0.00	0.00	83.87	12.23	0.00	83.33	28.36	0.00	0.00	0.00	0.00	0.00	0.00

DGS Richards - Sacramento 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	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Energy	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.9484	4,339.9484	0.0832	0.0796	4,365.7386
Mobile	107.6652	453.6043	1,131.4849	3.2089	301.9206	2.7406	304.6611	80.6822	2.5528	83.2349		325,719.4021	325,719.4021	16.7202		326,137.4081
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	142.2796	457.2236	1,134.8141	3.2306	301.9206	3.0165	304.9370	80.6822	2.8287	83.5108		330,059.9757	330,059.9757	16.8051	0.0796	330,503.8128

DGS Richards - Sacramento County, Winter

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Energy	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.9484	4,339.9484	0.0832	0.0796	4,365.7386
Mobile	107.6652	453.6043	1,131.4849	3.2089	301.9206	2.7406	304.6611	80.6822	2.5528	83.2349		325,719.4021	325,719.4021	16.7202		326,137.4081
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	142.2796	457.2236	1,134.8141	3.2306	301.9206	3.0165	304.9370	80.6822	2.8287	83.5108		330,059.9757	330,059.9757	16.8051	0.0796	330,503.8128

	ROG	NOx	CO	SO2	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**

DGS Richards - Sacramento County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	GeoTech and Foundation Investigation	Site Preparation	3/25/2020	12/31/2020	5	202	
2	Excavate Foundations and Pile Caps	Grading	1/1/2021	2/28/2021	5	41	
3	Building Construction	Building Construction	3/1/2021	2/8/2024	5	769	
4	Paving	Paving	2/9/2024	3/9/2024	5	21	
5	Architectural Coating	Architectural Coating	3/10/2024	3/24/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,155,500; Non-Residential Outdoor: 359,250; Striped Parking Area: 34,080 (Architectural Coating – sqft)

OffRoad Equipment

DGS Richards - Sacramento County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
GeoTech and Foundation Investigation	Rubber Tired Dozers	0	8.00	247	0.40
GeoTech and Foundation Investigation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Excavate Foundations and Pile Claps	Excavators	4	8.00	158	0.38
Excavate Foundations and Pile Claps	Graders	2	8.00	187	0.41
Excavate Foundations and Pile Claps	Rubber Tired Dozers	2	8.00	247	0.40
Excavate Foundations and Pile Claps	Scrapers	2	8.00	367	0.48
Excavate Foundations and Pile Claps	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	5	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	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
GeoTech and Foundation Investigation	4	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Excavate Foundations and Pile Claps	12	40.00	0.00	9,564.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	24	698.00	200.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	25.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

DGS Richards - Sacramento County, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 GeoTech and Foundation Investigation - 2020**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	0.8380	8.4206	9.1188	0.0124		0.5325	0.5325		0.4899	0.4899		1,203.074 0	1,203.074 0	0.3891		1,212.801 5
Total	0.8380	8.4206	9.1188	0.0124	0.0000	0.5325	0.5325	0.0000	0.4899	0.4899		1,203.074 0	1,203.074 0	0.3891		1,212.801 5

DGS Richards - Sacramento County, Winter

3.2 GeoTech and Foundation Investigation - 2020**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	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342
Total	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342

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	0.2785	5.4184	9.3683	0.0124		0.0203	0.0203		0.0203	0.0203	0.0000	1,203.0740	1,203.0740	0.3891		1,212.8015
Total	0.2785	5.4184	9.3683	0.0124	0.0000	0.0203	0.0203	0.0000	0.0203	0.0203	0.0000	1,203.0740	1,203.0740	0.3891		1,212.8015

DGS Richards - Sacramento County, Winter

3.2 GeoTech and Foundation Investigation - 2020**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	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342
Total	0.1695	0.1290	1.1961	3.4300e-003	0.3801	2.4500e-003	0.3825	0.1008	2.2600e-003	0.1030		341.7088	341.7088	9.0200e-003		341.9342

3.3 Excavate Foundations and Pile Claps - 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					15.2257	0.0000	15.2257	6.9640	0.0000	6.9640			0.0000			0.0000
Off-Road	6.1489	67.6025	43.2270	0.0875		2.9144	2.9144		2.6812	2.6812		8,476.4637	8,476.4637	2.7415		8,545,0002
Total	6.1489	67.6025	43.2270	0.0875	15.2257	2.9144	18.1400	6.9640	2.6812	9.6452		8,476.4637	8,476.4637	2.7415		8,545,0002

DGS Richards - Sacramento County, Winter

3.3 Excavate Foundations and Pile Claps - 2021**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	1.6914	61.8267	14.6406	0.1797	4.0571	0.2151	4.2722	1.1102	0.2058	1.3160		19,269.4671	19,269.4671	1.1510		19,298.2426
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	0.3165	0.2315	2.1890	6.6200e-003	0.7601	4.7600e-003	0.7649	0.2016	4.3800e-003	0.2059		660.1005	660.1005	0.0162		660.5048
Total	2.0079	62.0582	16.8296	0.1863	4.8172	0.2199	5.0371	1.3118	0.2102	1.5220		19,929.5676	19,929.5676	1.1672		19,958.7474

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					15.2257	0.0000	15.2257	6.9640	0.0000	6.9640			0.0000			0.0000
Off-Road	1.3857	27.8163	52.6050	0.0875		0.1432	0.1432		0.1432	0.1432	0.0000	8,476.4637	8,476.4637	2.7415		8,545,0002
Total	1.3857	27.8163	52.6050	0.0875	15.2257	0.1432	15.3689	6.9640	0.1432	7.1072	0.0000	8,476.4637	8,476.4637	2.7415		8,545,0002

DGS Richards - Sacramento County, Winter

3.3 Excavate Foundations and Pile Claps - 2021**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	1.6914	61.8267	14.6406	0.1797	4.0571	0.2151	4.2722	1.1102	0.2058	1.3160		19,269.4671	19,269.4671	1.1510		19,298.2426
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	0.3165	0.2315	2.1890	6.6200e-003	0.7601	4.7600e-003	0.7649	0.2016	4.3800e-003	0.2059		660.1005	660.1005	0.0162		660.5048
Total	2.0079	62.0582	16.8296	0.1863	4.8172	0.2199	5.0371	1.3118	0.2102	1.5220		19,929.5676	19,929.5676	1.1672		19,958.7474

3.4 Building Construction - 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					
Off-Road	6.4290	58.2996	50.5988	0.0923		2.9598	2.9598		2.8273	2.8273		8,690.6481	8,690.6481	1.6321		8,731.4514
Total	6.4290	58.2996	50.5988	0.0923		2.9598	2.9598		2.8273	2.8273		8,690.6481	8,690.6481	1.6321		8,731.4514

DGS Richards - Sacramento County, Winter

3.4 Building Construction - 2021**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	0.6547	20.4185	5.9491	0.0481	1.2035	0.0585	1.2620	0.3463	0.0560	0.4023		5,095.041 3	5,095.041 3	0.3095		5,102.779 5
Worker	5.5228	4.0396	38.1981	0.1156	13.2639	0.0830	13.3469	3.5170	0.0765	3.5935		11,518.753 3	11,518.753 3	0.2822		11,525.807 9
Total	6.1776	24.4581	44.1472	0.1637	14.4673	0.1415	14.6089	3.8633	0.1325	3.9958		16,613.79 46	16,613.79 46	0.5917		16,628.58 74

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,690.648 1	8,690.648 1	1.6321		8,731.451 4
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,690.648 1	8,690.648 1	1.6321		8,731.451 4

DGS Richards - Sacramento County, Winter

3.4 Building Construction - 2021**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	0.6547	20.4185	5.9491	0.0481	1.2035	0.0585	1.2620	0.3463	0.0560	0.4023		5,095.041 3	5,095.041 3	0.3095		5,102.779 5
Worker	5.5228	4.0396	38.1981	0.1156	13.2639	0.0830	13.3469	3.5170	0.0765	3.5935		11,518.753 3	11,518.753 3	0.2822		11,525.807 9
Total	6.1776	24.4581	44.1472	0.1637	14.4673	0.1415	14.6089	3.8633	0.1325	3.9958		16,613.79 46	16,613.79 46	0.5917		16,628.58 74

3.4 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	5.8326	52.4553	49.9150	0.0923		2.5529	2.5529		2.4396	2.4396		8,691.938 3	8,691.938 3	1.6106		8,732.204 2
Total	5.8326	52.4553	49.9150	0.0923		2.5529	2.5529		2.4396	2.4396		8,691.938 3	8,691.938 3	1.6106		8,732.204 2

DGS Richards - Sacramento County, Winter

3.4 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	0.6077	19.3782	5.4866	0.0476	1.2033	0.0514	1.2547	0.3463	0.0492	0.3954		5,049.7698	5,049.7698	0.3007		5,057.2883
Worker	5.1847	3.6374	35.1270	0.1114	13.2639	0.0808	13.3447	3.5170	0.0745	3.5915		11,105.5699	11,105.5699	0.2535		11,111.9076
Total	5.7924	23.0155	40.6135	0.1591	14.4672	0.1322	14.5994	3.8633	0.1236	3.9869		16,155.3397	16,155.3397	0.5543		16,169.1958

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,691.9383	8,691.9383	1.6106		8,732.2042
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,691.9383	8,691.9383	1.6106		8,732.2042

DGS Richards - Sacramento County, Winter

3.4 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	0.6077	19.3782	5.4866	0.0476	1.2033	0.0514	1.2547	0.3463	0.0492	0.3954		5,049.7698	5,049.7698	0.3007		5,057.2883
Worker	5.1847	3.6374	35.1270	0.1114	13.2639	0.0808	13.3447	3.5170	0.0745	3.5915		11,105.5699	11,105.5699	0.2535		11,111.9076
Total	5.7924	23.0155	40.6135	0.1591	14.4672	0.1322	14.5994	3.8633	0.1236	3.9869		16,155.3397	16,155.3397	0.5543		16,169.1958

3.4 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	5.4031	48.4577	49.4795	0.0923		2.2421	2.2421		2.1419	2.1419		8,692.7758	8,692.7758	1.5890		8,732.5005
Total	5.4031	48.4577	49.4795	0.0923		2.2421	2.2421		2.1419	2.1419		8,692.7758	8,692.7758	1.5890		8,732.5005

DGS Richards - Sacramento County, Winter

3.4 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	0.4816	16.3628	4.8351	0.0467	1.2032	0.0248	1.2279	0.3462	0.0237	0.3699		4,956.6347	4,956.6347	0.2693		4,963.3664
Worker	4.8776	3.2764	32.2706	0.1072	13.2639	0.0788	13.3427	3.5170	0.0726	3.5896		10,688.0162	10,688.0162	0.2270		10,693.6916
Total	5.3592	19.6392	37.1057	0.1539	14.4670	0.1036	14.5706	3.8632	0.0963	3.9595		15,644.6509	15,644.6509	0.4963		15,657.0580

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,692.7758	8,692.7758	1.5890		8,732.5005
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,692.7758	8,692.7758	1.5890		8,732.5005

DGS Richards - Sacramento County, Winter

3.4 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	0.4816	16.3628	4.8351	0.0467	1.2032	0.0248	1.2279	0.3462	0.0237	0.3699		4,956.6347	4,956.6347	0.2693		4,963.3664
Worker	4.8776	3.2764	32.2706	0.1072	13.2639	0.0788	13.3427	3.5170	0.0726	3.5896		10,688.0162	10,688.0162	0.2270		10,693.6916
Total	5.3592	19.6392	37.1057	0.1539	14.4670	0.1036	14.5706	3.8632	0.0963	3.9595		15,644.6509	15,644.6509	0.4963		15,657.0580

3.4 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	5.0480	45.2243	49.1067	0.0923		1.9727	1.9727		1.8832	1.8832		8,693.2231	8,693.2231	1.5701		8,732.4765
Total	5.0480	45.2243	49.1067	0.0923		1.9727	1.9727		1.8832	1.8832		8,693.2231	8,693.2231	1.5701		8,732.4765

DGS Richards - Sacramento County, Winter

3.4 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	0.4586	16.0501	4.5186	0.0464	1.2031	0.0234	1.2265	0.3462	0.0224	0.3686		4,928.146 1	4,928.146 1	0.2660		4,934.796 1
Worker	4.6110	2.9653	29.9095	0.1030	13.2639	0.0770	13.3409	3.5170	0.0709	3.5880		10,272.117 3	10,272.117 3	0.2047		10,277.23 48
Total	5.0696	19.0153	34.4281	0.1494	14.4669	0.1005	14.5674	3.8632	0.0934	3.9565		15,200.26 34	15,200.26 34	0.4707		15,212.03 08

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	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,693.223 1	8,693.223 1	1.5701		8,732.476 5
Total	1.7023	34.9761	56.8825	0.0923		0.3093	0.3093		0.3093	0.3093	0.0000	8,693.223 1	8,693.223 1	1.5701		8,732.476 5

DGS Richards - Sacramento County, Winter

3.4 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	0.4586	16.0501	4.5186	0.0464	1.2031	0.0234	1.2265	0.3462	0.0224	0.3686		4,928.146 1	4,928.146 1	0.2660		4,934.796 1
Worker	4.6110	2.9653	29.9095	0.1030	13.2639	0.0770	13.3409	3.5170	0.0709	3.5880		10,272.117 3	10,272.117 3	0.2047		10,277.23 48
Total	5.0696	19.0153	34.4281	0.1494	14.4669	0.1005	14.5674	3.8632	0.0934	3.9565		15,200.26 34	15,200.26 34	0.4707		15,212.03 08

3.5 Paving - 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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4373	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

DGS Richards - Sacramento County, Winter

3.5 Paving - 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	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575
Total	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3341	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7832	10.0395	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

DGS Richards - Sacramento County, Winter

3.5 Paving - 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	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575
Total	0.0991	0.0637	0.6428	2.2100e-003	0.2850	1.6600e-003	0.2867	0.0756	1.5200e-003	0.0771		220.7475	220.7475	4.4000e-003		220.8575

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	1,181.3827					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
Total	1,181.5635	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

DGS Richards - Sacramento 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	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766
Total	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766

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	1,181.3827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	1,181.4372	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443

DGS Richards - Sacramento 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	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766
Total	0.1321	0.0850	0.8570	2.9500e-003	0.3801	2.2100e-003	0.3823	0.1008	2.0300e-003	0.1028		294.3300	294.3300	5.8700e-003		294.4766

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

DGS Richards - Sacramento 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	107.6652	453.6043	1,131.4849	3.2089	301.9206	2.7406	304.6611	80.6822	2.5528	83.2349		325,719.4021	325,719.4021	16.7202		326,137.4081
Unmitigated	107.6652	453.6043	1,131.4849	3.2089	301.9206	2.7406	304.6611	80.6822	2.5528	83.2349		325,719.4021	325,719.4021	16.7202		326,137.4081

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	99,052.41	0.00	0.00	101,730,044	101,730,044
Parking Lot	0.00	0.00	0.00		
Total	99,052.41	0.00	0.00	101,730,044	101,730,044

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
Enclosed Parking with Elevator	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Government Office Building	10.00	5.00	6.50	33.00	62.00	5.00	50	34	16
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

DGS Richards - Sacramento County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Government Office Building	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6
NaturalGas Unmitigated	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6

DGS Richards - Sacramento 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					
Enclosed 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
Government Office Building	36889.6	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6

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					
Enclosed 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
Government Office Building	36.8896	0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.3978	3.6166	3.0380	0.0217		0.2749	0.2749		0.2749	0.2749		4,339.948 4	4,339.948 4	0.0832	0.0796	4,365.738 6

6.0 Area Detail

DGS Richards - Sacramento County, Winter

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	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Unmitigated	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661

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	3.2367					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.9530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0269	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Total	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661

DGS Richards - Sacramento 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	3.2367					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.9530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0269	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661
Total	34.2165	2.6400e-003	0.2912	2.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		0.6253	0.6253	1.6300e-003		0.6661

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

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

DGS Richards - Sacramento County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	0	6	1341.02	0.73	Diesel

Boilers

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

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

11.0 Vegetation

EMFAC2014_B+P

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: Sacramento

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

average emission factor 3.99 g/mile

Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	ROG_RUNE	TOG_RUNE	CO_RUNEX	NOx_RUNE	CO2_RUNE	PM10_RUNE	PM2_5_RUNEX
Sacramento	2024	All Other B	Aggregatec		5 DSL	175.8536	0.278479	0.317027	1.46582	10.89769	2223.387	0.007007	0.006704
Sacramento	2024	LDA	Aggregatec		5 GAS	861.5494	0.062015	0.090492	1.051957	0.083774	815.4769	0.011904	0.010945
Sacramento	2024	LDA	Aggregatec		5 DSL	10.23876	0.172077	0.195898	3.210384	0.127724	600.4381	0.025558	0.024453
Sacramento	2024	LDT1	Aggregatec		5 GAS	61.10202	0.128594	0.187613	2.217426	0.201388	958.6843	0.014621	0.013444
Sacramento	2024	LDT1	Aggregatec		5 DSL	0.113033	0.609498	0.693873	3.810104	0.735664	902.2707	0.355815	0.340423
Sacramento	2024	LDT2	Aggregatec		5 GAS	342.7627	0.084786	0.123717	1.36463	0.129862	1083.561	0.011725	0.010781
Sacramento	2024	LDT2	Aggregatec		5 DSL	0.676862	0.262585	0.298935	2.466324	0.159845	767.3249	0.014345	0.013725
Sacramento	2024	LHD1	Aggregatec		5 GAS	8583.096	0.232845	0.339767	2.582836	0.53725	1377.797	0.008764	0.008058
Sacramento	2024	LHD1	Aggregatec		5 DSL	6202.035	0.80543	0.916929	3.435949	2.462462	1237.007	0.09496	0.090852
Sacramento	2024	LHD2	Aggregatec		5 GAS	1690.111	0.09208	0.134363	0.991779	0.250282	1433.988	0.006755	0.006211
Sacramento	2024	LHD2	Aggregatec		5 DSL	2368.119	0.754083	0.858473	3.185027	1.357901	1269.929	0.053003	0.05071
Sacramento	2024	MCY	Aggregatec		5 GAS	9.498009	12.9026	15.9214	52.17788	1.579508	555.5031	0.011109	0.010365
Sacramento	2024	MDV	Aggregatec		5 GAS	183.1306	0.156082	0.227665	2.121025	0.241206	1475.83	0.01166	0.010721
Sacramento	2024	MDV	Aggregatec		5 DSL	3.961758	0.168366	0.191674	3.439724	0.114922	942.3723	0.013359	0.013002
Sacramento	2024	MH	Aggregatec		5 GAS	206.2826	0.400871	0.58495	5.67743	0.742874	3837.458	0.009644	0.008867
Sacramento	2024	MH	Aggregatec		5 DSL	52.83614	1.060232	1.207004	2.419869	14.38413	2067.418	0.286385	0.273997
Sacramento	2024	Motor Coa	Aggregatec		5 DSL	128.7678	0.560818	0.638449	3.311503	18.81208	3105.433	0.010764	0.010298
Sacramento	2024	OBUS	Aggregatec		5 GAS	316.2373	0.225142	0.328526	1.707838	0.510173	3761.984	0.006271	0.005766
Sacramento	2024	SBUS	Aggregatec		5 GAS	77.86874	0.20122	0.29362	1.479703	0.496191	1796.682	0.005433	0.004995
Sacramento	2024	SBUS	Aggregatec		5 DSL	161.831	0.634006	0.721767	1.353795	14.843	2260.579	0.090232	0.086329
Sacramento	2024	T6 Ag	Aggregatec		5 DSL	141.5869	0.296005	0.33698	1.558075	10.22605	2284.121	0.007459	0.007136
Sacramento	2024	T6 CAIRP h	Aggregatec		5 DSL	23.38639	0.23519	0.267746	1.237964	9.210301	2135.451	0.00566	0.005415
Sacramento	2024	T6 CAIRP si	Aggregatec		5 DSL	71.79044	0.215521	0.245354	1.134429	8.579019	2132.596	0.005056	0.004837
Sacramento	2024	T6 instate r	Aggregatec		5 DSL	86.79238	0.26003	0.296024	1.351061	9.839792	2204.627	0.006948	0.006647
Sacramento	2024	T6 instate r	Aggregatec		5 DSL	654.0021	0.234016	0.266409	1.224486	9.355664	2157.573	0.005844	0.005591
Sacramento	2024	T6 instate f	Aggregatec		5 DSL	1014.492	0.269416	0.306709	1.418116	10.02092	2187.661	0.006689	0.006399
Sacramento	2024	T6 instate t	Aggregatec		5 DSL	2561.959	0.236625	0.269379	1.245514	9.510061	2166.167	0.005723	0.005475
Sacramento	2024	T6 OOS he	Aggregatec		5 DSL	13.39952	0.236133	0.26882	1.242929	9.227226	2135.976	0.005688	0.005442
Sacramento	2024	T6 OOS sm	Aggregatec		5 DSL	41.13322	0.215521	0.245354	1.134429	8.579019	2132.596	0.005056	0.004837
Sacramento	2024	T6 Public	Aggregatec		5 DSL	539.8532	0.343539	0.391093	1.001442	10.67815	2227.345	0.048845	0.046732
Sacramento	2024	T6 utility	Aggregatec		5 DSL	23.13477	0.182442	0.207696	0.960313	6.115636	2177.947	0.003953	0.003782
Sacramento	2024	T6TS	Aggregatec		5 GAS	698.2438	0.352099	0.513782	2.981682	0.738264	3801.82	0.006211	0.005711
Sacramento	2024	T7 Ag	Aggregatec		5 DSL	16.92745	0.6656	0.757735	3.930212	17.80415	3193.475	0.012966	0.012405
Sacramento	2024	T7 CAIRP	Aggregatec		5 DSL	574.9843	0.628426	0.715416	3.710712	21.21639	2864.996	0.012385	0.011849
Sacramento	2024	T7 CAIRP cr	Aggregatec		5 DSL	27.75722	0.601651	0.684934	3.537546	21.15512	2855.772	0.012027	0.011507
Sacramento	2024	T7 NNOOS	Aggregatec		5 DSL	712.9813	0.509006	0.579465	3.005564	17.29099	2784.126	0.009531	0.009119
Sacramento	2024	T7 NOOS	Aggregatec		5 DSL	227.1186	0.630887	0.718217	3.725243	21.26576	2866.665	0.012442	0.011903
Sacramento	2024	T7 other pr	Aggregatec		5 DSL	7.07803	0.630775	0.71809	3.724582	21.17585	2921.457	0.012422	0.011884
Sacramento	2024	T7 POAK	Aggregatec		5 DSL	15.76995	0.65915	0.750392	3.892126	21.86282	2952.864	0.013078	0.012512
Sacramento	2024	T7 Public	Aggregatec		5 DSL	376.9001	0.697355	0.793885	2.181705	19.3913	3224.521	0.090218	0.086315
Sacramento	2024	T7 Single	Aggregatec		5 DSL	655.1247	0.454667	0.517603	2.684701	13.76289	2897.151	0.008114	0.007763
Sacramento	2024	T7 single cr	Aggregatec		5 DSL	71.80428	0.475952	0.541835	2.751616	14.1236	2931.254	0.010191	0.00975
Sacramento	2024	T7 SWCV	Aggregatec		5 DSL	1802.545	0.40834	6.22565	15.89236	10.78468	6374.358	0.015295	0.014633
Sacramento	2024	T7 tractor	Aggregatec		5 DSL	388.2487	0.636416	0.724511	3.757888	20.91833	2893.418	0.012531	0.011989
Sacramento	2024	T7 tractor r	Aggregatec		5 DSL	53.5354	0.64114	0.729889	3.744226	21.08014	2939.673	0.013376	0.012798
Sacramento	2024	T7 utility	Aggregatec		5 DSL	1.910107	0.3767	0.428845	2.224328	9.542214	3010.109	0.006178	0.00591
Sacramento	2024	T7IS	Aggregatec		5 GAS	33.69801	2.427767	3.542591	57.24121	5.626661	4035.381	0.005618	0.005166
Sacramento	2024	UBUS	Aggregatec		5 GAS	491.8898	0.793296	1.157576	5.343345	1.640916	3838.459	0.006255	0.005751
Sacramento	2024	UBUS	Aggregatec		5 DSL	590.9657	2.741792	19.25541	39.70457	19.05738	3236.542	0.208318	0.199306

EMFAC2014_C+P

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: Sacramento

Calendar Year: 2036

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

average emission factor 3.74 g/mile

Region	CalYr	VehClass	MdlYr	Speed	Fuel	VMT	ROG_RUNE	TOG_RUNE	CO_RUNEX	NOx_RUNE	CO2_RUNE	PM10_RUN	PM2_5_RUNEX
Sacramento	2036	All Other B	Aggregatec		5 DSL	180.5422	0.26279	0.299166	1.383239	11.18135	2143.501	0.006587	0.006302
Sacramento	2036	LDA	Aggregatec		5 GAS	916.555	0.029288	0.042738	0.620583	0.044081	642.4019	0.006419	0.005902
Sacramento	2036	LDA	Aggregatec		5 DSL	12.55946	0.086437	0.098403	2.656198	0.04855	483.7251	0.002349	0.002247
Sacramento	2036	LDT1	Aggregatec		5 GAS	63.52808	0.038829	0.056659	0.737841	0.056832	704.8288	0.006851	0.006299
Sacramento	2036	LDT1	Aggregatec		5 DSL	0.042989	0.296997	0.338111	2.823927	0.316205	605.2544	0.054521	0.052162
Sacramento	2036	LDT2	Aggregatec		5 GAS	398.5159	0.040184	0.058637	0.826061	0.058696	811.991	0.006583	0.006053
Sacramento	2036	LDT2	Aggregatec		5 DSL	0.867292	0.263408	0.299873	2.669769	0.152638	598.6961	0.009277	0.008876
Sacramento	2036	LHD1	Aggregatec		5 GAS	4970.476	0.056584	0.082567	0.460471	0.204614	1314.294	0.007545	0.006938
Sacramento	2036	LHD1	Aggregatec		5 DSL	5090.355	0.769649	0.876194	3.514226	0.813474	1153.563	0.032255	0.03086
Sacramento	2036	LHD2	Aggregatec		5 GAS	1577.918	0.024321	0.035489	0.229768	0.07436	1375.124	0.007601	0.006989
Sacramento	2036	LHD2	Aggregatec		5 DSL	2402.367	0.744986	0.848117	3.309252	0.341936	1194.146	0.018821	0.018006
Sacramento	2036	MCY	Aggregatec		5 GAS	10.09544	12.64174	15.84218	44.78631	1.656941	565.7358	0.013328	0.012427
Sacramento	2036	MDV	Aggregatec		5 GAS	190.477	0.06208	0.090588	1.064363	0.094384	1084.963	0.007015	0.00645
Sacramento	2036	MDV	Aggregatec		5 DSL	5.229469	0.102191	0.116338	3.027082	0.056718	741.3973	0.002937	0.00281
Sacramento	2036	MH	Aggregatec		5 GAS	168.4167	0.097923	0.142889	0.607948	0.281969	3696.252	0.007603	0.006991
Sacramento	2036	MH	Aggregatec		5 DSL	44.19862	0.815677	0.928594	2.17136	11.30494	2008.076	0.08738	0.0836
Sacramento	2036	Motor Coa	Aggregatec		5 DSL	150.2893	0.508512	0.578902	3.002645	17.65143	3017.215	0.009555	0.009142
Sacramento	2036	OBUS	Aggregatec		5 GAS	326.2972	0.078231	0.114154	0.46906	0.200656	3666.936	0.007657	0.00704
Sacramento	2036	SBUS	Aggregatec		5 GAS	102.9903	0.056961	0.083118	0.321239	0.162626	1744.574	0.007191	0.006612
Sacramento	2036	SBUS	Aggregatec		5 DSL	159.8242	0.266389	0.303263	1.237297	9.331145	2135.403	0.008637	0.008263
Sacramento	2036	T6 Ag	Aggregatec		5 DSL	141.5869	0.289864	0.329988	1.525747	11.88281	2169.359	0.007402	0.007082
Sacramento	2036	T6 CAIRP h	Aggregatec		5 DSL	27.29506	0.227306	0.258771	1.196464	9.467961	2092.086	0.005458	0.005222
Sacramento	2036	T6 CAIRP si	Aggregatec		5 DSL	83.7891	0.215232	0.245025	1.13291	8.756907	2109.487	0.005062	0.004843
Sacramento	2036	T6 instate r	Aggregatec		5 DSL	137.4407	0.25855	0.29434	1.360004	11.07863	2126.666	0.006484	0.006203
Sacramento	2036	T6 instate r	Aggregatec		5 DSL	1035.65	0.236947	0.269746	1.246335	9.986349	2117.94	0.005786	0.005536
Sacramento	2036	T6 instate l	Aggregatec		5 DSL	1143.476	0.254568	0.289807	1.339964	10.73796	2108.166	0.006322	0.006048
Sacramento	2036	T6 instate t	Aggregatec		5 DSL	2888.555	0.238374	0.271371	1.254723	10.05533	2120.526	0.005814	0.005563
Sacramento	2036	T6 OOS he	Aggregatec		5 DSL	15.63904	0.227456	0.258941	1.197251	9.473282	2092.171	0.005462	0.005226
Sacramento	2036	T6 OOS sm	Aggregatec		5 DSL	48.008	0.215232	0.245025	1.13291	8.756907	2109.487	0.005062	0.004843
Sacramento	2036	T6 Public	Aggregatec		5 DSL	596.2923	0.214393	0.24407	1.004737	7.544374	2131.057	0.009849	0.009423
Sacramento	2036	T6 utility	Aggregatec		5 DSL	25.79941	0.177834	0.202451	0.936062	6.429484	2110.153	0.003828	0.003663
Sacramento	2036	T6TS	Aggregatec		5 GAS	616.0765	0.081957	0.119591	0.51001	0.211564	3669.825	0.007539	0.006932
Sacramento	2036	T7 Ag	Aggregatec		5 DSL	16.92745	0.676167	0.769764	3.992606	21.39001	2990.091	0.013424	0.012844
Sacramento	2036	T7 CAIRP	Aggregatec		5 DSL	671.084	0.567646	0.646222	3.35182	20.59399	2766.852	0.011043	0.010565
Sacramento	2036	T7 CAIRP cr	Aggregatec		5 DSL	43.95515	0.58181	0.662346	3.43403	21.38594	2789.325	0.011424	0.01093
Sacramento	2036	T7 NNOOS	Aggregatec		5 DSL	832.145	0.49725	0.566081	2.936146	17.20513	2760.5	0.009276	0.008874
Sacramento	2036	T7 NOOS	Aggregatec		5 DSL	265.078	0.567933	0.646548	3.353512	20.59971	2767.125	0.011049	0.010571
Sacramento	2036	T7 other pr	Aggregatec		5 DSL	8.762498	0.619155	0.704861	3.655969	23.35417	2784.966	0.012358	0.011824
Sacramento	2036	T7 POAK	Aggregatec		5 DSL	26.01536	0.623704	0.710039	3.682825	23.58359	2784.966	0.012473	0.011934
Sacramento	2036	T7 Public	Aggregatec		5 DSL	454.0346	0.487268	0.554717	2.282343	13.50877	2913.723	0.024923	0.023844
Sacramento	2036	T7 Single	Aggregatec		5 DSL	927.3268	0.471386	0.536637	2.783422	15.50003	2811.584	0.008591	0.008219
Sacramento	2036	T7 single cr	Aggregatec		5 DSL	113.7062	0.482439	0.54922	2.840487	15.75998	2826.488	0.009021	0.008631
Sacramento	2036	T7 SWCV	Aggregatec		5 DSL	2148.866	0.194903	5.886052	19.51346	3.661995	5857.463	0.010145	0.009706
Sacramento	2036	T7 tractor	Aggregatec		5 DSL	457.7621	0.585965	0.667077	3.459989	21.17821	2781.679	0.011479	0.010982
Sacramento	2036	T7 tractor r	Aggregatec		5 DSL	84.77636	0.604941	0.688679	3.569682	22.13679	2810.232	0.011994	0.011475
Sacramento	2036	T7 utility	Aggregatec		5 DSL	2.130112	0.367174	0.418	2.168077	10.49847	2801.606	0.00598	0.005721
Sacramento	2036	T7IS	Aggregatec		5 GAS	34.03984	2.082832	3.039263	54.22863	5.664663	3800.197	0.007657	0.007041
Sacramento	2036	UBUS	Aggregatec		5 GAS	431.0104	0.27506	0.401367	2.043411	0.97712	3711.084	0.007171	0.006593
Sacramento	2036	UBUS	Aggregatec		5 DSL	448.9237	1.04488	13.24422	40.6851	6.802761	2964.262	0.041711	0.039906

CO_DGS_Intersection2.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 2
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	100	5	0	5	* AG	1044	4.0	0.0	13.0
B. 0->W	*	0	5	-75	5	* AG	615	4.0	0.0	16.5
C. W->0	*	-75	-5	0	-5	* AG	966	4.0	0.0	16.5
D. W->N	*	-75	-4	0	0	* AG	117	4.0	0.0	10.0
E. 0->E	*	0	-5	100	-5	* AG	2131	4.0	0.0	20.0
F. S->0	*	-49	-142	0	0	* AG	1243	4.0	0.0	16.5
G. 0->N	*	0	0	0	150	* AG	624	4.0	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	6	-13	1.8
3. R_SW-3m	*	-9	-13	1.8
4. R_NW-3m	*	-7	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	8	-15	1.8
7. R_SW-7m	*	-12	-15	1.8
8. R_NW-7m	*	-10	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Existing plus Project, intersection 2
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	*	PRED	*	CONC/LINK							
	*	BRG	*	CONC	*	(PPM)						
	*	(DEG)	*	(PPM)	*	A	B	C	D	E	F	G
	*		*		*							
1. R_NE-3m	*	200.	*	1.4	*	0.3	0.0	0.0	0.0	0.3	0.7	0.1
2. R_SE-3m	*	77.	*	1.2	*	0.2	0.0	0.0	0.0	1.0	0.0	0.0
3. R_SW-3m	*	80.	*	1.4	*	0.2	0.0	0.1	0.0	0.9	0.3	0.0
4. R_NW-3m	*	101.	*	1.3	*	0.5	0.1	0.0	0.0	0.5	0.0	0.2
5. R_NE-7m	*	202.	*	1.3	*	0.3	0.0	0.0	0.0	0.3	0.7	0.0
6. R_SE-7m	*	75.	*	1.1	*	0.2	0.0	0.0	0.0	0.9	0.0	0.0
7. R_SW-7m	*	78.	*	1.3	*	0.2	0.0	0.0	0.0	0.8	0.3	0.0
8. R_NW-7m	*	104.	*	1.1	*	0.4	0.1	0.0	0.0	0.5	0.0	0.1



CO_DGS_Intersection4.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 4
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1906	4.0	0.0	13.0
B. E->S	*	150	4	0	0	* AG	3	4.0	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	2022	4.0	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	971	4.0	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	29	4.0	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1002	4.0	0.0	13.0
G. S->0	*	4	-150	4	0	* AG	11	4.0	0.0	10.0
H. S->W	*	4	-150	0	0	* AG	101	4.0	0.0	10.0
I. 0->N1	*	4	0	4	10	* AG	42	4.0	0.0	10.0
J. 0->N2	*	4	10	47	143	* AG	42	4.0	0.0	11.5
K. N1->N2	*	40	143	-4	10	* AG	66	4.0	0.0	11.5
L. N2->0	*	-4	10	-4	0	* AG	66	4.0	0.0	10.0
M. 0->S	*	-4	0	-4	-150	* AG	21	4.0	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	7	-11	1.8
3. R_SW-3m	*	-7	-11	1.8
4. R_NW-3m	*	-7	11	1.8

CO_DGS_Intersection4.dat

5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	10	-14	1.8
7. R_SW-7m	*	-10	-14	1.8
8. R_NW-7m	*	-10	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Existing plus Project, intersection 4
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC (PPM)	*	A	B	C	CONC/LINK (PPM)					H
	*		*	*				D	E	F	G		
1. R_NE-3m	*	264.	* 1.8	*	0.3	0.0	1.3	0.2	0.0	0.0	0.0	0.0	
2. R_SE-3m	*	279.	* 1.3	*	0.0	0.0	0.5	0.6	0.0	0.1	0.0	0.0	
3. R_SW-3m	*	81.	* 1.2	*	0.5	0.0	0.0	0.1	0.0	0.6	0.0	0.0	
4. R_NW-3m	*	264.	* 1.8	*	0.0	0.0	1.6	0.2	0.0	0.0	0.0	0.0	
5. R_NE-7m	*	260.	* 1.3	*	0.0	0.0	0.9	0.2	0.0	0.0	0.0	0.0	
6. R_SE-7m	*	281.	* 1.0	*	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	
7. R_SW-7m	*	79.	* 1.0	*	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0	
8. R_NW-7m	*	100.	* 1.2	*	0.9	0.0	0.0	0.0	0.0	0.3	0.0	0.0	

RECEPTOR	*	CONC/LINK (PPM)				
	*	I	J	K	L	M
1. R_NE-3m	*	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	*	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	*	0.0	0.0	0.0	0.0	0.0

CO_DGS_Intersection4.dat



CO_DGS_Intersection5.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 5
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK	COORDINATES (M)	*	EF	H	W			
DESCRIPTION	*	X1	Y1	X2	Y2	TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1759	4.0	0.0	13.0
B. E->S	*	150	4	0	0	* AG	12	4.0	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1909	4.0	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	991	4.0	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	11	4.0	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1030	4.0	0.0	13.0
G. S->0	*	4	-150	4	0	* AG	40	4.0	0.0	10.0
H. S->W	*	4	-150	0	0	* AG	101	4.0	0.0	10.0
I. 0->N1	*	4	0	4	10	* AG	20	4.0	0.0	10.0
J. 0->N2	*	4	10	47	143	* AG	20	4.0	0.0	11.5
K. N1->N2	*	40	143	-4	10	* AG	62	4.0	0.0	11.5
L. N2->0	*	-4	10	-4	0	* AG	62	4.0	0.0	10.0
M. N1->N2	*	40	143	-4	10	* AG	21	4.0	0.0	12.0
N. N2->0	*	-4	10	0	0	* AG	21	4.0	0.0	10.0
O. 0->S	*	-4	0	-4	-150	* AG	38	4.0	0.0	10.0



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Existing plus Project, intersection 5

RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	7	-11	1.8
3. R_SW-3m	*	-7	-11	1.8
4. R_NW-3m	*	-7	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	10	-14	1.8
7. R_SW-7m	*	-10	-14	1.8
8. R_NW-7m	*	-10	14	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	*	CONC/LINK (PPM)							
					A	B	C	D	E	F	G	H
1. R_NE-3m	*	264.	* 1.7	*	0.2	0.0	1.2	0.2	0.0	0.0	0.0	0.0
2. R_SE-3m	*	279.	* 1.3	*	0.0	0.0	0.5	0.6	0.0	0.1	0.0	0.0
3. R_SW-3m	*	82.	* 1.3	*	0.4	0.0	0.0	0.1	0.0	0.6	0.0	0.0
4. R_NW-3m	*	264.	* 1.7	*	0.0	0.0	1.5	0.2	0.0	0.0	0.0	0.0
5. R_NE-7m	*	260.	* 1.2	*	0.0	0.0	0.9	0.2	0.0	0.0	0.0	0.0
6. R_SE-7m	*	281.	* 1.0	*	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0
7. R_SW-7m	*	79.	* 1.0	*	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0
8. R_NW-7m	*	100.	* 1.2	*	0.8	0.0	0.0	0.0	0.0	0.3	0.0	0.0

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 3

JOB: Existing plus Project, intersection 5
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

CO_DGS_Intersection5.dat

RECEPTOR	*	CONC/LINK						
	*	(PPM)						
	*	I	J	K	L	M	N	O
1. R_NE-3m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0



CO_DGS_Intersection6.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 6
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1684	4.0	0.0	13.0
B. E->S	*	150	4	0	0	* AG	8	4.0	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1771	4.0	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	1010	4.0	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	20	4.0	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1023	4.0	0.0	13.0
G. S->0	*	2	-150	4	0	* AG	24	4.0	0.0	13.0
H. 0->N	*	4	0	2	150	* AG	23	4.0	0.0	13.0
I. N->0	*	-2	150	-4	0	* AG	88	4.0	0.0	13.0
J. 0->S	*	-4	0	-2	-150	* AG	17	4.0	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	9	11	1.8
2. R_SE-3m	*	9	-11	1.8
3. R_SW-3m	*	-9	-11	1.8
4. R_NW-3m	*	-9	11	1.8
5. R_NE-7m	*	12	14	1.8
6. R_SE-7m	*	12	-14	1.8
7. R_SW-7m	*	-12	-14	1.8

8. R_NW-7m * -12 14 1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Existing plus Project, intersection 6
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	*	PRED	*	CONC/LINK									
	*	BRG	*	CONC	*	(PPM)								
	*	(DEG)	*	(PPM)	*	A	B	C	D	E	F	G	H	
	*	*	*	*										
1. R_NE-3m	*	264.	*	1.6	*	0.3	0.0	1.1	0.2	0.0	0.0	0.0	0.0	
2. R_SE-3m	*	278.	*	1.2	*	0.0	0.0	0.4	0.6	0.0	0.2	0.0	0.0	
3. R_SW-3m	*	82.	*	1.2	*	0.4	0.0	0.0	0.2	0.0	0.6	0.0	0.0	
4. R_NW-3m	*	264.	*	1.6	*	0.0	0.0	1.4	0.2	0.0	0.0	0.0	0.0	
5. R_NE-7m	*	260.	*	1.2	*	0.1	0.0	0.8	0.3	0.0	0.0	0.0	0.0	
6. R_SE-7m	*	281.	*	1.0	*	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	
7. R_SW-7m	*	79.	*	1.0	*	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0	
8. R_NW-7m	*	100.	*	1.1	*	0.8	0.0	0.1	0.0	0.0	0.3	0.0	0.0	

RECEPTOR	* * CONC/LINK * (PPM)	* * I	* * J
1. R_NE-3m	* 0.0	0.0	
2. R_SE-3m	* 0.0	0.0	
3. R_SW-3m	* 0.0	0.0	
4. R_NW-3m	* 0.0	0.0	
5. R_NE-7m	* 0.0	0.0	
6. R_SE-7m	* 0.0	0.0	
7. R_SW-7m	* 0.0	0.0	
8. R_NW-7m	* 0.0	0.0	

↑

CO_DGS_Intersection7.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 7
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1079	4.0	0.0	13.0
B. E->S	*	150	4	0	0	* AG	351	4.0	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1410	4.0	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	979	4.0	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	10	4.0	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1452	4.0	0.0	13.0
G. S->0	*	7	-150	9	0	* AG	578	4.0	0.0	13.0
H. S->W	*	7	-150	0	0	* AG	231	4.0	0.0	13.0
I. 0->N	*	9	0	5	150	* AG	42	4.0	0.0	16.5
J. N->0	*	-8	150	-6	0	* AG	119	4.0	0.0	13.0
K. N->E	*	6	150	0	0	* AG	89	4.0	0.0	10.0
L. N->W	*	-10	150	-10	0	* AG	118	4.0	0.0	10.0
M. 0->S	*	-6	0	-6	-150	* AG	650	4.0	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	14	11	1.8
2. R_SE-3m	*	14	-11	1.8
3. R_SW-3m	*	-12	-11	1.8
4. R_NW-3m	*	-14	11	1.8

CO_DGS_Intersection7.dat

5. R_NE-7m	*	17	14	1.8
6. R_SE-7m	*	17	-14	1.8
7. R_SW-7m	*	-15	-14	1.8
8. R_NW-7m	*	-16	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
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JOB: Existing plus Project, intersection 7
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * * *	BRG (DEG)	* * * *	PRED CONC (PPM)	* * * *	A	B	C	CONC/LINK (PPM)				D	E	F	G	H
1. R_NE-3m	*	99.	*	1.3	*	0.8	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.1	0.0	
2. R_SE-3m	*	277.	*	1.5	*	0.0	0.0	0.3	0.5	0.0	0.4	0.1	0.0	0.0	0.0	0.0	
3. R_SW-3m	*	83.	*	1.7	*	0.3	0.1	0.0	0.2	0.0	0.8	0.1	0.0	0.0	0.0	0.0	
4. R_NW-3m	*	97.	*	1.5	*	0.6	0.2	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
5. R_NE-7m	*	190.	*	1.1	*	0.3	0.1	0.0	0.0	0.0	0.2	0.3	0.1	0.0	0.0	0.0	
6. R_SE-7m	*	281.	*	1.2	*	0.0	0.0	0.4	0.4	0.0	0.2	0.1	0.0	0.0	0.0	0.0	
7. R_SW-7m	*	80.	*	1.4	*	0.3	0.1	0.0	0.1	0.0	0.7	0.1	0.0	0.0	0.0	0.0	
8. R_NW-7m	*	101.	*	1.2	*	0.5	0.1	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	

RECEPTOR	* * * *	CONC/LINK (PPM)				
		I	J	K	L	M
1. R_NE-3m	*	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	0.0	0.1
3. R_SW-3m	*	0.0	0.0	0.0	0.0	0.2
4. R_NW-3m	*	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	0.0	0.0	0.0	0.0	0.1
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.1
7. R_SW-7m	*	0.0	0.0	0.0	0.0	0.2
8. R_NW-7m	*	0.0	0.0	0.0	0.0	0.0

CO_DGS_Intersection7.dat



CO_DGS_Intersection8.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Existing plus Project, intersection 8
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK	COORDINATES (M)	*	EF	H	W			
DESCRIPTION	*	X1	Y1	X2	Y2	TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	137	66	0	6	AG	1198	4.0	0.0	13.0
B. E->S	*	137	64	0	0	AG	9	4.0	0.0	10.0
C. 0->W1	*	0	6	-46	-14	AG	1389	4.0	0.0	13.0
D. W1->W2	*	-46	-14	-95	-25	AG	1389	4.0	0.0	13.0
E. W2->W3	*	-95	-25	-145	-25	AG	1389	4.0	0.0	13.0
F. W3->W2	*	-145	-63	-95	-63	AG	1483	4.0	0.0	13.0
G. W2->W1	*	-95	-63	-46	-26	AG	1483	4.0	0.0	13.0
H. W1->0	*	-46	-26	0	-6	AG	1483	4.0	0.0	13.0
I. W3->N	*	-145	-61	-95	-61	AG	24	4.0	0.0	10.0
J. W2->N	*	-95	-61	-46	-24	AG	24	4.0	0.0	10.0
K. W1->N	*	-46	-24	0	0	AG	24	4.0	0.0	10.0
L. 0->E	*	0	-6	137	55	AG	1536	4.0	0.0	13.0
M. S->0	*	5	-150	5	0	AG	29	4.0	0.0	13.0
N. S->W	*	2	-150	0	0	AG	30	4.0	0.0	10.0
O. 0->N	*	5	0	5	150	AG	42	4.0	0.0	13.0
P. N->0	*	-5	150	-5	0	AG	230	4.0	0.0	13.0
Q. N->E	*	-2	150	0	0	AG	101	4.0	0.0	10.0
R. 0->S	*	-5	0	-5	-150	AG	137	4.0	0.0	13.0



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Existing plus Project, intersection 8

RUN: Hour 1 (WORST CASE ANGLE)

POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
	*	-----*		
1. R_NE-3m	*	11	15	1.8
2. R_SE-3m	*	11	-8	1.8
3. R_SW-3m	*	-11	-15	1.8
4. R_NW-3m	*	-11	8	1.8
5. R_NE-7m	*	14	18	1.8
6. R_SE-7m	*	14	-10	1.8
7. R_SW-7m	*	-14	-18	1.8
8. R_NW-7m	*	-14	10	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*		* PRED	*	CONC/LINK								
	*	BRG	* CONC	*	(PPM)								
	*	(DEG)	* (PPM)	*	A	B	C	D	E	F	G	H	
	*	*	*	*									
1. R_NE-3m	*	234.	*	1.5	*	0.3	0.0	0.4	0.0	0.0	0.1	0.3	0.2
2. R_SE-3m	*	59.	*	1.4	*	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	61.	*	1.6	*	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4
4. R_NW-3m	*	74.	*	1.4	*	0.7	0.0	0.2	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	234.	*	1.4	*	0.4	0.0	0.4	0.0	0.0	0.1	0.3	0.2
6. R_SE-7m	*	264.	*	1.1	*	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.5
7. R_SW-7m	*	60.	*	1.6	*	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4
8. R_NW-7m	*	77.	*	1.0	*	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL

JUNE 1989 VERSION

PAGE 3

JOB: Existing plus Project, intersection 8

RUN: Hour 1 (WORST CASE ANGLE)

POLLUTANT:

CO_DGS_Intersection8.dat

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM)									
		I	J	K	L	M	N	O	P	Q	R
1. R_NE-3m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	*	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
5. R_NE-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	*	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0



CO_DGS_Intersection10.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 10
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M)	*	EF (G/MI)	H (M)	W (M)
	*	X1 Y1 X2 Y2	* TYPE VPH			
A. N2->N1	*	-53 145 -47 95	* AG 2908	4.0	0.0	18.0
B. N1->0	*	-47 95 -16 0	* AG 2908	4.0	0.0	22.0
C. 0->S1	*	-16 0 -16 -50	* AG 1934	4.0	0.0	22.0
D. S1->S2	*	-16 -50 -35 -148	* AG 1934	4.0	0.0	22.0
E. S->0	*	68 -142 20 0	* AG 3671	4.0	0.0	22.0
F. S->W	*	61 -142 0 0	* AG 55	4.0	0.0	10.0
G. 0->N1	*	20 0 1 72	* AG 5088	4.0	0.0	18.0
H. N1->N2	*	1 72 -4 97	* AG 5088	4.0	0.0	18.0
I. N2->N3	*	-4 97 -8 147	* AG 5088	4.0	0.0	18.0
J. E->0	*	54 -5 0 5	* AG 15	4.0	0.0	10.0
K. 0->W	*	0 5 -150 5	* AG 1144	4.0	0.0	14.0
L. W1->N	*	-150 -2 0 0	* AG 710	4.0	0.0	10.0
M. W2->N	*	-150 -6 0 0	* AG 710	4.0	0.0	10.0
N. 0->E	*	1 1 55 -9	* AG 6	4.0	0.0	10.0
O. W->S	*	-150 -10 0 -10	* AG 103	4.0	0.0	10.0



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Existing plus Project, intersection 10

RUN: Hour 1

(WORST CASE ANGLE)

POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
	*	-----*		
1. R_NE-3m	*	29	4	1.8
2. R_SE-3m	*	32	-8	1.8
3. R_SW-3m	*	-26	-14	1.8
4. R_NW-3m	*	-26	9	1.8
5. R_NE-7m	*	32	7	1.8
6. R_SE-7m	*	35	-11	1.8
7. R_SW-7m	*	-29	-17	1.8
8. R_NW-7m	*	-29	12	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*		* PRED	*	CONC/LINK								
	*	BRG	* CONC	*	(PPM)								
	*	(DEG)	* (PPM)	*	A	B	C	D	E	F	G	H	
-----*													
1. R_NE-3m	*	267.	*	2.7	*	0.0	0.2	0.0	0.0	0.0	0.0	1.1	0.0
2. R_SE-3m	*	339.	*	2.4	*	0.0	0.0	0.0	0.0	0.4	0.0	1.6	0.3
3. R_SW-3m	*	10.	*	1.9	*	0.0	0.6	0.2	0.0	0.0	0.0	0.0	0.2
4. R_NW-3m	*	141.	*	1.8	*	0.0	0.3	0.3	0.0	0.5	0.0	0.0	0.0
5. R_NE-7m	*	266.	*	2.4	*	0.0	0.2	0.0	0.0	0.0	0.0	0.9	0.0
6. R_SE-7m	*	336.	*	2.1	*	0.0	0.0	0.0	0.0	0.4	0.0	1.4	0.2
7. R_SW-7m	*	12.	*	1.7	*	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.2
8. R_NW-7m	*	141.	*	1.8	*	0.0	0.4	0.3	0.0	0.4	0.0	0.0	0.0

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Existing plus Project, intersection 10
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

CO_DGS_Intersection10.dat
 CONC/LINK
 (PPM)

RECEPTOR	*	I	J	K	L	M	N	O
	*							
1. R_NE-3m	*	0.0	0.0	0.5	0.4	0.4	0.0	0.0
2. R_SE-3m	*	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.3	0.0	0.2	0.1	0.1	0.0	0.0
4. R_NW-3m	*	0.0	0.0	0.3	0.2	0.2	0.0	0.0
5. R_NE-7m	*	0.0	0.0	0.5	0.3	0.3	0.0	0.0
6. R_SE-7m	*	0.1	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.3	0.0	0.2	0.1	0.1	0.0	0.0
8. R_NW-7m	*	0.0	0.0	0.4	0.2	0.2	0.0	0.0



CO_DGS_Intersection11.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 11
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*	EF	H	W	
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->S	*	25	2	0	0	* AG	4	4.0	0.0	10.0
B. E->N	*	25	2	0	2	* AG	11	4.0	0.0	10.0
C. 0->W	*	0	2	25	2	* AG	274	4.0	0.0	10.0
D. W->N	*	-25	-2	0	0	* AG	281	4.0	0.0	10.0
E. W->S	*	-25	-2	0	-2	* AG	490	4.0	0.0	10.0
F. 0->E	*	0	-2	25	-2	* AG	3	4.0	0.0	10.0
G. S->0	*	5	-150	5	0	* AG	517	4.0	0.0	13.0
H. S->W	*	4	-150	0	0	* AG	126	4.0	0.0	10.0
I. 0->N	*	5	0	5	150	* AG	809	4.0	0.0	10.0
J. N->0	*	-4	150	-4	0	* AG	647	4.0	0.0	10.0
K. N->E	*	-4	150	0	0	* AG	3	4.0	0.0	10.0
L. 0->S	*	-4	0	-4	-150	* AG	933	4.0	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	11	6	1.8
2. R_SE-3m	*	11	-6	1.8
3. R_SW-3m	*	-7	-6	1.8
4. R_NW-3m	*	-7	6	1.8
5. R_NE-7m	*	14	8	1.8

CO_DGS_Intersection11.dat

6. R_SE-7m * 14 -8 1.8
 7. R_SW-7m * -10 -8 1.8
 8. R_NW-7m * -10 8 1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Existing plus Project, intersection 11
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* PRED *		CONC/LINK (PPM)									
	* BRG *	* CONC *	A	B	C	D	E	F	G	H		
	* (DEG) *	* (PPM) *										
1. R_NE-3m	* 188. *	* 0.8 *	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.1		
2. R_SE-3m	* 353. *	* 0.9 *	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0		
3. R_SW-3m	* 6. *	* 1.1 *	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0		
4. R_NW-3m	* 175. *	* 1.3 *	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1		
5. R_NE-7m	* 189. *	* 0.7 *	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.1		
6. R_SE-7m	* 350. *	* 0.6 *	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
7. R_SW-7m	* 9. *	* 0.8 *	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0		
8. R_NW-7m	* 172. *	* 1.0 *	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1		

RECEPTOR	* CONC/LINK (PPM) *			
	* I *	* J *	* K *	* L *
1. R_NE-3m	* 0.0	* 0.0	* 0.0	* 0.3
2. R_SE-3m	* 0.6	* 0.2	* 0.0	* 0.0
3. R_SW-3m	* 0.2	* 0.5	* 0.0	* 0.1
4. R_NW-3m	* 0.0	* 0.1	* 0.0	* 0.8
5. R_NE-7m	* 0.0	* 0.0	* 0.0	* 0.2
6. R_SE-7m	* 0.4	* 0.2	* 0.0	* 0.0
7. R_SW-7m	* 0.2	* 0.4	* 0.0	* 0.0
8. R_NW-7m	* 0.0	* 0.0	* 0.0	* 0.6



CO_DGS_Intersection12.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 12
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	4	0	4	* AG	324	4.0	0.0	13.0
B. 0->W	*	0	4	-150	2	* AG	327	4.0	0.0	10.0
C. W->0	*	-150	-2	0	-2	* AG	150	4.0	0.0	10.0
D. 0->E	*	0	-2	150	-2	* AG	550	4.0	0.0	10.0
E. S->0	*	2	-150	2	0	* AG	1080	4.0	0.0	10.0
F. 0->N	*	2	0	2	150	* AG	643	4.0	0.0	10.0
G. N->0	*	-4	-150	-4	0	* AG	890	4.0	0.0	10.0
H. N->E	*	-4	-150	0	0	* AG	103	4.0	0.0	10.0
I. 0->S	*	-4	0	-2	-150	* AG	1027	4.0	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	6	9	1.8
2. R_SE-3m	*	6	-6	1.8
3. R_SW-3m	*	-7	-6	1.8
4. R_NW-3m	*	-7	9	1.8
5. R_NE-7m	*	8	12	1.8
6. R_SE-7m	*	8	-8	1.8
7. R_SW-7m	*	-10	-8	1.8
8. R_NW-7m	*	-10	12	1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
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JOB: Existing plus Project, intersection 12
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * BRG * (DEG)	* PRED * CONC * (PPM)	* * *	A	B	C	CONC/LINK (PPM) D	E	F	G	H
1. R_NE-3m	* 186.	* 2.1	* 0.1	0.0	0.0	0.0	0.1	0.8	0.2	0.4	0.1
2. R_SE-3m	* 186.	* 2.0	* 0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.4	0.1
3. R_SW-3m	* 175.	* 2.4	* 0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.9	0.1
4. R_NW-3m	* 175.	* 2.1	* 0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.7	0.1
5. R_NE-7m	* 188.	* 1.6	* 0.1	0.0	0.0	0.0	0.1	0.6	0.0	0.3	0.1
6. R_SE-7m	* 189.	* 1.4	* 0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.3	0.1
7. R_SW-7m	* 171.	* 1.6	* 0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.5	0.1
8. R_NW-7m	* 173.	* 1.7	* 0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.5	0.1

RECEPTOR	*CONC/LINK * (PPM) * I
1. R_NE-3m	* 0.5
2. R_SE-3m	* 0.4
3. R_SW-3m	* 1.0
4. R_NW-3m	* 0.8
5. R_NE-7m	* 0.4
6. R_SE-7m	* 0.4
7. R_SW-7m	* 0.6
8. R_NW-7m	* 0.6

↑

CO_DGS_Intersection14.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 14
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W	
DESCRIPTION	*	X1	Y1	X2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
A. 0->W	*	0	4	-150	4	*	AG	583	4.0	0.0	13.0
B. W->0	*	-150	-4	0	-4	*	AG	776	4.0	0.0	13.0
C. S->0	*	2	-150	2	0	*	AG	420	4.0	0.0	10.0
D. 0->N	*	2	0	2	150	*	AG	1080	4.0	0.0	10.0
E. N->0	*	-4	-150	-4	0	*	AG	1027	4.0	0.0	10.0
F. 0->S	*	-4	0	-2	-150	*	AG	560	4.0	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	6	9	1.8
2. R_SE-3m	*	6	-9	1.8
3. R_SW-3m	*	-7	-9	1.8
4. R_NW-3m	*	-7	9	1.8
5. R_NE-7m	*	8	12	1.8
6. R_SE-7m	*	8	-12	1.8
7. R_SW-7m	*	-10	-12	1.8
8. R_NW-7m	*	-10	12	1.8



CO_DGS_Intersection14.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Existing plus Project, intersection 14
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	* PRED *	CONC/LINK							
	* BRG *	* CONC *	(PPM)							
	* (DEG) *	* (PPM) *	A	B	C	D	E	F		
1. R_NE-3m	* 186. *	* 1.3 *	0.0	0.0	0.3	0.3	0.4	0.3		
2. R_SE-3m	* 276. *	* 1.2 *	0.2	0.6	0.1	0.0	0.2	0.1		
3. R_SW-3m	* 176. *	* 1.8 *	0.0	0.0	0.2	0.0	1.0	0.6		
4. R_NW-3m	* 176. *	* 1.7 *	0.1	0.2	0.2	0.0	0.8	0.5		
5. R_NE-7m	* 189. *	* 0.9 *	0.0	0.0	0.3	0.1	0.4	0.2		
6. R_SE-7m	* 279. *	* 1.0 *	0.2	0.4	0.1	0.0	0.2	0.1		
7. R_SW-7m	* 172. *	* 1.1 *	0.0	0.0	0.2	0.0	0.6	0.4		
8. R_NW-7m	* 173. *	* 1.4 *	0.1	0.1	0.2	0.0	0.6	0.4		



CO_DGS_Intersection15.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Existing plus Project, intersection 15
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	100	5	0	5	* AG	1215	4.0	0.0	13.0
B. E->S	*	150	4	0	0	* AG	185	4.0	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1635	4.0	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	1325	4.0	0.0	13.0
E. 0->E	*	0	-5	150	-5	* AG	1085	4.0	0.0	13.0
F. 0->S	*	4	0	4	-25	* AG	445	4.0	0.0	10.0
G. S->E	*	4	-25	4	0	* AG	420	4.0	0.0	10.0
H. S->W	*	4	-25	0	0	* AG	20	4.0	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	7	-11	1.8
3. R_SW-3m	*	-6	-11	1.8
4. R_NW-3m	*	-6	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	10	-14	1.8
7. R_SW-7m	*	-8	-14	1.8
8. R_NW-7m	*	-8	14	1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Existing plus Project, intersection 15
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	* PRED *	CONC/LINK									
	* BRG *	* CONC *	(PPM)									
	* (DEG) *	* (PPM) *	A	B	C	D	E	F	G	H		
1. R_NE-3m	* 264. *	* 1.5 *	0.2	0.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	* 277. *	* 1.6 *	0.0	0.0	0.4	0.9	0.1	0.1	0.1	0.1	0.0	0.0
3. R_SW-3m	* 81. *	* 1.3 *	0.2	0.1	0.0	0.1	0.7	0.1	0.1	0.1	0.0	0.0
4. R_NW-3m	* 263. *	* 1.5 *	0.0	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	* 260. *	* 1.1 *	0.0	0.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	* 281. *	* 1.3 *	0.0	0.0	0.4	0.6	0.0	0.1	0.1	0.1	0.0	0.0
7. R_SW-7m	* 76. *	* 1.0 *	0.3	0.1	0.0	0.0	0.5	0.1	0.1	0.1	0.0	0.0
8. R_NW-7m	* 259. *	* 1.1 *	0.0	0.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0

↑

CO_DGS_Intersection1.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 1
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W	
DESCRIPTION	*	X1	Y1	X2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	100	7	0	7	*	AG	115	3.7	0.0	10.0
B. E->S	*	100	7	0	0	*	AG	670	3.7	0.0	13.0
C. 0->W	*	0	7	-75	11	*	AG	440	3.7	0.0	10.0
D. W->0	*	-75	-7	0	-7	*	AG	200	3.7	0.0	16.5
E. 0->E	*	0	-7	100	-7	*	AG	1945	3.7	0.0	16.5
F. N->0	*	-24	-148	0	0	*	AG	2165	3.7	0.0	16.5
G. 0->S	*	0	0	30	147	*	AG	765	3.7	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	4	-14	1.8
3. R_SW-3m	*	-9	-14	1.8
4. R_NW-3m	*	-6	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	7	-17	1.8
7. R_SW-7m	*	-12	-17	1.8
8. R_NW-7m	*	-9	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative plus Project, intersection 1
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	*	PRED	*	CONC/LINK							
	*	BRG	*	CONC	*	(PPM)						
	*	(DEG)	*	(PPM)	*	A	B	C	D	E	F	G
	*	*		*								
1. R_NE-3m	*	192.	*	1.7	*	0.0	0.1	0.0	0.0	0.3	1.1	0.2
2. R_SE-3m	*	7.	*	1.4	*	0.0	0.1	0.0	0.0	0.4	0.4	0.5
3. R_SW-3m	*	80.	*	1.5	*	0.0	0.1	0.0	0.0	0.8	0.5	0.0
4. R_NW-3m	*	184.	*	1.3	*	0.0	0.0	0.1	0.0	0.0	1.1	0.0
5. R_NE-7m	*	195.	*	1.5	*	0.0	0.1	0.0	0.0	0.3	1.0	0.1
6. R_SE-7m	*	355.	*	1.1	*	0.0	0.1	0.0	0.0	0.4	0.3	0.2
7. R_SW-7m	*	77.	*	1.4	*	0.0	0.1	0.0	0.0	0.7	0.5	0.0
8. R_NW-7m	*	181.	*	1.0	*	0.0	0.0	0.1	0.0	0.0	0.9	0.0



CO_DGS_Intersection2.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 2
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	100	5	0	5	* AG	1635	3.7	0.0	13.0
B. 0->W	*	0	5	-75	5	* AG	785	3.7	0.0	16.5
C. W->0	*	-75	-5	0	-5	* AG	1805	3.7	0.0	16.5
D. W->N	*	-75	-4	0	0	* AG	140	3.7	0.0	10.0
E. 0->E	*	0	-5	100	-5	* AG	3190	3.7	0.0	20.0
F. S->0	*	-49	-142	0	0	* AG	1450	3.7	0.0	16.5
G. 0->N	*	0	0	0	150	* AG	1055	3.7	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	6	-13	1.8
3. R_SW-3m	*	-9	-13	1.8
4. R_NW-3m	*	-7	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	8	-15	1.8
7. R_SW-7m	*	-12	-15	1.8
8. R_NW-7m	*	-10	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative plus Project, intersection 2
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	*	PRED	*	CONC/LINK							
	*	BRG	*	CONC	*	(PPM)						
	*	(DEG)	*	(PPM)	*	A	B	C	D	E	F	G
	*	*		*								
1. R_NE-3m	*	201.	*	1.8	*	0.4	0.0	0.1	0.0	0.4	0.8	0.2
2. R_SE-3m	*	77.	*	1.6	*	0.3	0.0	0.0	0.0	1.3	0.0	0.0
3. R_SW-3m	*	80.	*	1.9	*	0.3	0.0	0.2	0.0	1.1	0.3	0.0
4. R_NW-3m	*	101.	*	1.8	*	0.8	0.1	0.0	0.0	0.7	0.0	0.3
5. R_NE-7m	*	202.	*	1.6	*	0.4	0.0	0.0	0.0	0.4	0.7	0.1
6. R_SE-7m	*	75.	*	1.5	*	0.3	0.0	0.0	0.0	1.3	0.0	0.0
7. R_SW-7m	*	76.	*	1.7	*	0.3	0.0	0.1	0.0	1.0	0.4	0.0
8. R_NW-7m	*	104.	*	1.6	*	0.6	0.1	0.0	0.0	0.6	0.0	0.2



CO_DGS_Intersection4.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 4
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1540	3.7	0.0	13.0
B. E->S	*	150	4	0	0	* AG	5	3.7	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1940	3.7	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	1120	3.7	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	220	3.7	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1130	3.7	0.0	13.0
G. S->0	*	4	-150	4	0	* AG	40	3.7	0.0	10.0
H. S->W	*	4	-150	0	0	* AG	180	3.7	0.0	10.0
I. 0->N1	*	4	0	4	10	* AG	250	3.7	0.0	10.0
J. 0->N2	*	4	10	47	143	* AG	250	3.7	0.0	11.5
K. N1->N2	*	40	143	-4	10	* AG	285	3.7	0.0	11.5
L. N2->0	*	-4	10	-4	0	* AG	285	3.7	0.0	10.0
M. 0->S	*	-4	0	-4	-150	* AG	70	3.7	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	7	-11	1.8
3. R_SW-3m	*	-7	-11	1.8
4. R_NW-3m	*	-7	11	1.8

CO_DGS_Intersection4.dat

5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	10	-14	1.8
7. R_SW-7m	*	-10	-14	1.8
8. R_NW-7m	*	-10	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative plus Project, intersection 4
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG	*	PRED	*	CONC/LINK (PPM)							
	*	(DEG)	*	CONC	*	A	B	C	D	E	F	G	H
	*		*	(PPM)	*								
1. R_NE-3m	*	263.	*	1.8	*	0.2	0.0	1.1	0.2	0.1	0.0	0.0	0.0
2. R_SE-3m	*	278.	*	1.4	*	0.0	0.0	0.4	0.6	0.1	0.1	0.0	0.0
3. R_SW-3m	*	279.	*	1.3	*	0.0	0.0	0.4	0.8	0.1	0.0	0.0	0.0
4. R_NW-3m	*	263.	*	1.7	*	0.0	0.0	1.4	0.2	0.1	0.0	0.0	0.0
5. R_NE-7m	*	260.	*	1.3	*	0.0	0.0	0.9	0.3	0.1	0.0	0.0	0.0
6. R_SE-7m	*	281.	*	1.1	*	0.0	0.0	0.4	0.5	0.1	0.0	0.0	0.0
7. R_SW-7m	*	79.	*	1.0	*	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0
8. R_NW-7m	*	259.	*	1.2	*	0.0	0.0	0.9	0.2	0.1	0.0	0.0	0.0

RECEPTOR	*	CONC/LINK (PPM)				
	*	I	J	K	L	M
	*					
1. R_NE-3m	*	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	*	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	0.0	0.1	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	*	0.0	0.0	0.0	0.0	0.0

CO_DGS_Intersection4.dat



CO_DGS_Intersection5.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 5
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK	COORDINATES (M)	*	EF	H	W		
DESCRIPTION	*	X1	Y1	X2	Y2	TYPE	VPH (G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	AG	1445	3.7	0.0 13.0
B. E->S	*	150	4	0	0	AG	10	3.7	0.0 10.0
C. 0->W	*	0	5	-150	5	AG	1545	3.7	0.0 13.0
D. W->0	*	-150	-5	0	-5	AG	1085	3.7	0.0 13.0
E. W->N	*	-150	-4	0	0	AG	45	3.7	0.0 10.0
F. 0->E	*	0	-5	150	-5	AG	1205	3.7	0.0 13.0
G. S->0	*	4	-150	4	0	AG	435	3.7	0.0 10.0
H. S->W	*	4	-150	0	0	AG	230	3.7	0.0 10.0
I. 0->N1	*	4	0	4	10	AG	665	3.7	0.0 10.0
J. 0->N2	*	4	10	47	143	AG	665	3.7	0.0 11.5
K. N1->N2	*	40	143	-4	10	AG	455	3.7	0.0 11.5
L. N2->0	*	-4	10	-4	0	AG	455	3.7	0.0 10.0
M. N1->N2	*	40	143	-4	10	AG	240	3.7	0.0 12.0
N. N2->0	*	-4	10	0	0	AG	240	3.7	0.0 10.0
O. 0->S	*	-4	0	-4	-150	AG	530	3.7	0.0 10.0



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative plus Project, intersection 5

RUN: Hour 1

(WORST CASE ANGLE)

POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
	*	-----*		
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	7	-11	1.8
3. R_SW-3m	*	-7	-11	1.8
4. R_NW-3m	*	-7	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	10	-14	1.8
7. R_SW-7m	*	-10	-14	1.8
8. R_NW-7m	*	-10	14	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*		* PRED	*	CONC/LINK								
	*	BRG	* CONC	*	(PPM)								
	*	(DEG)	* (PPM)	*	A	B	C	D	E	F	G	H	
	*	*	*	*									
1. R_NE-3m	*	263.	*	1.6	*	0.2	0.0	0.9	0.2	0.0	0.0	0.0	0.0
2. R_SE-3m	*	278.	*	1.4	*	0.0	0.0	0.4	0.6	0.0	0.2	0.1	0.1
3. R_SW-3m	*	19.	*	1.6	*	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0
4. R_NW-3m	*	97.	*	1.6	*	0.9	0.0	0.2	0.0	0.0	0.3	0.0	0.0
5. R_NE-7m	*	260.	*	1.3	*	0.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0
6. R_SE-7m	*	281.	*	1.1	*	0.0	0.0	0.4	0.5	0.0	0.0	0.1	0.0
7. R_SW-7m	*	20.	*	1.4	*	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0
8. R_NW-7m	*	101.	*	1.3	*	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Cumulative plus Project, intersection 5
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

CO_DGS_Intersection5.dat								
		CONC/LINK						
		(PPM)						
RECEPTOR		I	J	K	L	M	N	O

1. R_NE-3m	*	0.0	0.1	0.0	0.1	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3. R_SW-3m	*	0.0	0.4	0.2	0.1	0.1	0.0	0.1
4. R_NW-3m	*	0.1	0.0	0.1	0.0	0.0	0.0	0.0
5. R_NE-7m	*	0.0	0.2	0.1	0.0	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7. R_SW-7m	*	0.0	0.3	0.2	0.1	0.1	0.0	0.1
8. R_NW-7m	*	0.0	0.1	0.1	0.0	0.1	0.0	0.0



CO_DGS_Intersection6.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 6
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1355	3.7	0.0	13.0
B. E->S	*	150	4	0	0	* AG	280	3.7	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1675	3.7	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	1185	3.7	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	20	3.7	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1105	3.7	0.0	13.0
G. S->0	*	2	-150	4	0	* AG	380	3.7	0.0	13.0
H. 0->N	*	4	0	2	150	* AG	195	3.7	0.0	13.0
I. N->0	*	-2	150	-4	0	* AG	290	3.7	0.0	13.0
J. 0->S	*	-4	0	-2	-150	* AG	535	3.7	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	9	11	1.8
2. R_SE-3m	*	9	-11	1.8
3. R_SW-3m	*	-9	-11	1.8
4. R_NW-3m	*	-9	11	1.8
5. R_NE-7m	*	12	14	1.8
6. R_SE-7m	*	12	-14	1.8
7. R_SW-7m	*	-12	-14	1.8

8. R_NW-7m * -12 14 1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative plus Project, intersection 6
RUN: Hour 1 (WORST CASE ANGLE)

POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* PRED *		CONC/LINK									
	* BRG * CONC *		(PPM)									
	* (DEG) *	* (PPM) *	A	B	C	D	E	F	G	H		
1. R_NE-3m	* 264. *	* 1.5 *	0.2	0.0	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	* 278. *	* 1.4 *	0.0	0.0	0.4	0.6	0.0	0.2	0.1	0.0	0.0	0.0
3. R_SW-3m	* 82. *	* 1.4 *	0.3	0.1	0.0	0.2	0.0	0.6	0.1	0.0	0.0	0.0
4. R_NW-3m	* 96. *	* 1.5 *	0.8	0.1	0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0
5. R_NE-7m	* 260. *	* 1.2 *	0.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	* 281. *	* 1.1 *	0.0	0.0	0.4	0.5	0.0	0.0	0.1	0.0	0.0	0.0
7. R_SW-7m	* 79. *	* 1.2 *	0.3	0.1	0.0	0.1	0.0	0.5	0.1	0.0	0.0	0.0
8. R_NW-7m	* 100. *	* 1.1 *	0.6	0.1	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0

RECEPTOR	* CONC/LINK *	
	* (PPM) *	
	* I *	* J *
1. R_NE-3m	* 0.1 *	* 0.0 *
2. R_SE-3m	* 0.0 *	* 0.1 *
3. R_SW-3m	* 0.0 *	* 0.1 *
4. R_NW-3m	* 0.1 *	* 0.0 *
5. R_NE-7m	* 0.1 *	* 0.0 *
6. R_SE-7m	* 0.0 *	* 0.1 *
7. R_SW-7m	* 0.0 *	* 0.1 *
8. R_NW-7m	* 0.1 *	* 0.0 *

↑

CO_DGS_Intersection7.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 7
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	5	0	5	* AG	1135	3.7	0.0	13.0
B. E->S	*	150	4	0	0	* AG	495	3.7	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1400	3.7	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	1080	3.7	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	5	3.7	0.0	10.0
F. 0->E	*	0	-5	150	-5	* AG	1070	3.7	0.0	13.0
G. S->0	*	7	-150	9	0	* AG	495	3.7	0.0	13.0
H. S->W	*	7	-150	0	0	* AG	230	3.7	0.0	13.0
I. 0->N	*	9	0	5	150	* AG	235	3.7	0.0	16.5
J. N->0	*	-8	150	-6	0	* AG	405	3.7	0.0	13.0
K. N->E	*	6	150	0	0	* AG	80	3.7	0.0	10.0
L. N->W	*	-10	150	-10	0	* AG	50	3.7	0.0	10.0
M. 0->S	*	-6	0	-6	-150	* AG	1270	3.7	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	14	11	1.8
2. R_SE-3m	*	14	-11	1.8
3. R_SW-3m	*	-12	-11	1.8
4. R_NW-3m	*	-14	11	1.8

CO_DGS_Intersection7.dat

5. R_NE-7m	*	17	14	1.8
6. R_SE-7m	*	17	-14	1.8
7. R_SW-7m	*	-15	-14	1.8
8. R_NW-7m	*	-16	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative plus Project, intersection 7
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC (PPM)	*	A	B	C	CONC/LINK (PPM)					D	E	F	G	H
1. R_NE-3m	*	264.	* 1.4	*	0.3	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	277.	* 1.5	*	0.0	0.0	0.3	0.6	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	82.	* 1.7	*	0.3	0.2	0.0	0.2	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	*	97.	* 1.5	*	0.6	0.2	0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	260.	* 1.1	*	0.1	0.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	*	281.	* 1.2	*	0.0	0.0	0.3	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	79.	* 1.4	*	0.3	0.2	0.0	0.1	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	*	100.	* 1.2	*	0.5	0.2	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	*	CONC/LINK (PPM)				
	*	I	J	K	L	M
1. R_NE-3m	*	0.0	0.1	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	0.0	0.2
3. R_SW-3m	*	0.0	0.0	0.0	0.0	0.3
4. R_NW-3m	*	0.0	0.1	0.0	0.0	0.0
5. R_NE-7m	*	0.1	0.1	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.0	0.2
7. R_SW-7m	*	0.0	0.0	0.0	0.0	0.3
8. R_NW-7m	*	0.0	0.1	0.0	0.0	0.0

CO_DGS_Intersection7.dat



CO_DGS_Intersection8.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 8
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK	COORDINATES (M)	*	EF	H	W			
DESCRIPTION	*	X1	Y1	X2	Y2	TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	137	66	0	6	AG	1840	3.7	0.0	13.0
B. E->S	*	137	64	0	0	AG	135	3.7	0.0	10.0
C. 0->W1	*	0	6	-46	-14	AG	1710	3.7	0.0	13.0
D. W1->W2	*	-46	-14	-95	-25	AG	1710	3.7	0.0	13.0
E. W2->W3	*	-95	-25	-145	-25	AG	1710	3.7	0.0	13.0
F. W3->W2	*	-145	-63	-95	-63	AG	1055	3.7	0.0	13.0
G. W2->W1	*	-95	-63	-46	-26	AG	1055	3.7	0.0	13.0
H. W1->0	*	-46	-26	0	-6	AG	1055	3.7	0.0	13.0
I. W3->N	*	-145	-61	-95	-61	AG	120	3.7	0.0	10.0
J. W2->N	*	-95	-61	-46	-24	AG	120	3.7	0.0	10.0
K. W1->N	*	-46	-24	0	0	AG	120	3.7	0.0	10.0
L. 0->E	*	0	-6	137	55	AG	1570	3.7	0.0	13.0
M. S->0	*	5	-150	5	0	AG	415	3.7	0.0	13.0
N. S->W	*	2	-150	0	0	AG	15	3.7	0.0	10.0
O. 0->N	*	5	0	5	150	AG	355	3.7	0.0	13.0
P. N->0	*	-5	150	-5	0	AG	65	3.7	0.0	13.0
Q. N->E	*	-2	150	0	0	AG	150	3.7	0.0	10.0
R. 0->S	*	-5	0	-5	-150	AG	160	3.7	0.0	13.0



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Cumulative plus Project, intersection 8

RUN: Hour 1 (WORST CASE ANGLE)

POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
	*	-----*		
1. R_NE-3m	*	11	15	1.8
2. R_SE-3m	*	11	-8	1.8
3. R_SW-3m	*	-11	-15	1.8
4. R_NW-3m	*	-11	8	1.8
5. R_NE-7m	*	14	18	1.8
6. R_SE-7m	*	14	-10	1.8
7. R_SW-7m	*	-14	-18	1.8
8. R_NW-7m	*	-14	10	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*		* PRED	*	CONC/LINK								
	*	BRG	* CONC	*	(PPM)								
	*	(DEG)	* (PPM)	*	A	B	C	D	E	F	G	H	
	*	*	*	*									
1. R_NE-3m	*	73.	*	1.7	*	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	58.	*	1.5	*	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	60.	*	1.6	*	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3
4. R_NW-3m	*	73.	*	1.8	*	1.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	*	234.	*	1.6	*	0.5	0.0	0.5	0.0	0.0	0.1	0.2	0.1
6. R_SE-7m	*	54.	*	1.0	*	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	59.	*	1.6	*	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3
8. R_NW-7m	*	77.	*	1.2	*	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL

JUNE 1989 VERSION

PAGE 3

JOB: Cumulative plus Project, intersection 8

RUN: Hour 1 (WORST CASE ANGLE)

POLLUTANT:

CO_DGS_Intersection8.dat

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM)									
		I	J	K	L	M	N	O	P	Q	R
1. R_NE-3m	*	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	*	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.0	0.0	0.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	*	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0
5. R_NE-7m	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.0	0.0	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	*	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0



CO_DGS_Intersection 9F.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative + Project, intersection 9F
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	137	66	0	6	* AG	1930	3.7	0.0	13.0
B. E->S	*	137	64	0	0	* AG	120	3.7	0.0	10.0
C. 0->W	*	0	6	-137	-55	* AG	1975	3.7	0.0	13.0
D. W->0	*	-137	-66	0	-6	* AG	1490	3.7	0.0	13.0
E. W->N	*	-137	-64	0	0	* AG	80	3.7	0.0	10.0
F. 0->E	*	0	-6	137	55	* AG	2005	3.7	0.0	13.0
G. S->0	*	4	-150	4	0	* AG	465	3.7	0.0	10.0
H. S->W	*	4	-150	0	0	* AG	35	3.7	0.0	10.0
I. 0->N	*	4	0	4	150	* AG	170	3.7	0.0	10.0
J. N->0	*	-4	150	-4	0	* AG	80	3.7	0.0	10.0
K. N->E	*	-4	150	0	0	* AG	115	3.7	0.0	10.0
L. 0->S	*	-4	0	-4	-150	* AG	165	3.7	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	14	1.8
2. R_SE-3m	*	7	-9	1.8
3. R_SW-3m	*	-7	-14	1.8
4. R_NW-3m	*	-7	9	1.8
5. R_NE-7m	*	10	17	1.8

CO_DGS_Intersection 9F.dat

6. R_SE-7m * 10 -12 1.8
 7. R_SW-7m * -10 -17 1.8
 8. R_NW-7m * -10 12 1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Cumulative + Project, intersection 9F
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * BRG * (DEG)	* * PRED * CONC * (PPM)	CONC/LINK (PPM)							
			A	B	C	D	E	F	G	H
1. R_NE-3m	* 241.	* 1.9 *	0.3	0.0	1.1	0.3	0.0	0.0	0.0	0.0
2. R_SE-3m	* 59.	* 1.8 *	0.3	0.1	0.0	0.0	0.0	1.4	0.0	0.0
3. R_SW-3m	* 60.	* 2.0 *	0.4	0.1	0.0	0.3	0.0	1.1	0.1	0.0
4. R_NW-3m	* 74.	* 1.9 *	1.1	0.1	0.2	0.0	0.0	0.4	0.0	0.0
5. R_NE-7m	* 240.	* 1.9 *	0.4	0.0	1.0	0.3	0.0	0.0	0.0	0.0
6. R_SE-7m	* 258.	* 1.2 *	0.0	0.0	0.4	0.6	0.0	0.0	0.1	0.0
7. R_SW-7m	* 59.	* 1.9 *	0.4	0.1	0.0	0.3	0.0	0.9	0.1	0.0
8. R_NW-7m	* 78.	* 1.3 *	0.8	0.0	0.0	0.0	0.0	0.4	0.0	0.0

RECEPTOR	* * CONC/LINK * (PPM)	I	J	K	L
1. R_NE-3m	* 0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	* 0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	* 0.0	0.0	0.0	0.0	0.0
4. R_NW-3m	* 0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	* 0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	* 0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	* 0.0	0.0	0.0	0.0	0.0
8. R_NW-7m	* 0.0	0.0	0.0	0.0	0.0

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CO_DGS_Intersection 12F.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative + Project, intersection 12F
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	4	0	4	* AG	655	3.7	0.0	13.0
B. E->S	*	150	4	0	0	* AG	400	3.7	0.0	10.0
C. 0->W	*	0	4	-150	2	* AG	730	3.7	0.0	13.0
D. W->0	*	-150	-4	0	-4	* AG	470	3.7	0.0	13.0
E. W->N	*	-150	-4	0	0	* AG	145	3.7	0.0	10.0
F. 0->E	*	0	-4	150	-4	* AG	1600	3.7	0.0	13.0
G. S->0	*	5	-150	5	0	* AG	1160	3.7	0.0	10.0
H. S->W	*	4	-150	0	0	* AG	85	3.7	0.0	10.0
I. 0->N	*	5	0	5	150	* AG	545	3.7	0.0	10.0
J. N->0	*	-5	150	-5	0	* AG	1045	3.7	0.0	10.0
K. N->E	*	-4	150	0	0	* AG	250	3.7	0.0	10.0
L. 0->S	*	-5	0	-5	-150	* AG	1335	3.7	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	11	7	1.8
2. R_SE-3m	*	11	-7	1.8
3. R_SW-3m	*	-11	-7	1.8
4. R_NW-3m	*	-11	7	1.8
5. R_NE-7m	*	14	10	1.8

CO_DGS_Intersection 12F.dat

6. R_SE-7m * 14 -10 1.8
 7. R_SW-7m * -14 -10 1.8
 8. R_NW-7m * -14 10 1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Cumulative + Project, intersection 12F
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * * *	BRG (DEG)	* * * *	PRED CONC (PPM)	* * * *	A	B	C	CONC/LINK (PPM)				D	E	F	G	H
1. R_NE-3m	*	188.	*	1.6	*	0.1	0.1	0.0	0.0	0.0	0.3	0.7	0.0				
2. R_SE-3m	*	84.	*	1.6	*	0.2	0.2	0.0	0.0	0.0	1.2	0.0	0.0				
3. R_SW-3m	*	85.	*	2.0	*	0.2	0.2	0.0	0.1	0.0	0.9	0.2	0.0				
4. R_NW-3m	*	97.	*	1.7	*	0.4	0.2	0.1	0.0	0.0	0.6	0.0	0.0				
5. R_NE-7m	*	190.	*	1.4	*	0.2	0.1	0.0	0.0	0.0	0.3	0.5	0.0				
6. R_SE-7m	*	82.	*	1.4	*	0.2	0.2	0.0	0.0	0.0	1.1	0.0	0.0				
7. R_SW-7m	*	83.	*	1.7	*	0.2	0.2	0.0	0.1	0.0	0.8	0.2	0.0				
8. R_NW-7m	*	98.	*	1.5	*	0.3	0.2	0.1	0.0	0.0	0.5	0.0	0.0				

RECEPTOR	* * * *	CONC/LINK (PPM)			
		I	J	K	L
1. R_NE-3m	*	0.0	0.0	0.0	0.3
2. R_SE-3m	*	0.0	0.0	0.0	0.0
3. R_SW-3m	*	0.0	0.0	0.0	0.3
4. R_NW-3m	*	0.1	0.3	0.1	0.0
5. R_NE-7m	*	0.0	0.0	0.0	0.3
6. R_SE-7m	*	0.0	0.0	0.0	0.0
7. R_SW-7m	*	0.0	0.0	0.0	0.3
8. R_NW-7m	*	0.1	0.2	0.0	0.0

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CO_DGS_Intersection14F.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative + Project, intersection 14F
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W	
DESCRIPTION	*	X1	Y1	X2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	4	0	4	*	AG	390	3.7	0.0	13.0
B. E->S	*	150	4	0	0	*	AG	380	3.7	0.0	10.0
C. 0->W	*	0	4	-150	4	*	AG	890	3.7	0.0	10.0
D. W->0	*	-150	-5	0	-5	*	AG	1055	3.7	0.0	13.0
E. W->N	*	-150	-4	0	0	*	AG	365	3.7	0.0	10.0
F. 0->E	*	0	-5	150	-4	*	AG	800	3.7	0.0	10.0
G. S->0	*	5	-150	5	0	*	AG	1035	3.7	0.0	13.0
H. S->W	*	4	-150	0	0	*	AG	270	3.7	0.0	10.0
I. 0->N	*	5	0	5	150	*	AG	1170	3.7	0.0	10.0
J. N->0	*	-5	150	-5	0	*	AG	920	3.7	0.0	13.0
K. N->E	*	-4	150	0	0	*	AG	40	3.7	0.0	10.0
L. 0->S	*	-5	0	-5	-150	*	AG	1595	3.7	0.0	13.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	11	9	1.8
2. R_SE-3m	*	11	-11	1.8
3. R_SW-3m	*	-11	-11	1.8
4. R_NW-3m	*	-11	9	1.8
5. R_NE-7m	*	14	12	1.8

CO_DGS_Intersection14F.dat

6. R_SE-7m * 14 -14 1.8
 7. R_SW-7m * -14 -14 1.8
 8. R_NW-7m * -14 12 1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Cumulative + Project, intersection 14F
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * * *	BRG (DEG)	* * * *	PRED CONC (PPM)	* * * *	A	B	C	CONC/LINK (PPM)				D	E	F	G	H
1. R_NE-3m	*	189.	*	1.5	*	0.1	0.1	0.0	0.0	0.0	0.1	0.5	0.1				
2. R_SE-3m	*	277.	*	1.6	*	0.0	0.0	0.2	0.6	0.2	0.1	0.2	0.1				
3. R_SW-3m	*	83.	*	1.6	*	0.1	0.1	0.0	0.2	0.0	0.5	0.2	0.1				
4. R_NW-3m	*	173.	*	1.9	*	0.0	0.0	0.2	0.2	0.1	0.0	0.2	0.1				
5. R_NE-7m	*	260.	*	1.2	*	0.0	0.0	0.4	0.3	0.1	0.0	0.0	0.0				
6. R_SE-7m	*	279.	*	1.4	*	0.0	0.0	0.2	0.5	0.1	0.0	0.2	0.0				
7. R_SW-7m	*	79.	*	1.3	*	0.1	0.1	0.0	0.1	0.0	0.4	0.2	0.0				
8. R_NW-7m	*	170.	*	1.5	*	0.0	0.0	0.2	0.2	0.1	0.0	0.2	0.1				

RECEPTOR	* * * *	CONC/LINK (PPM)			
		I	J	K	L
1. R_NE-3m	*	0.1	0.0	0.0	0.4
2. R_SE-3m	*	0.0	0.0	0.0	0.2
3. R_SW-3m	*	0.0	0.0	0.0	0.4
4. R_NW-3m	*	0.0	0.1	0.0	0.9
5. R_NE-7m	*	0.3	0.1	0.0	0.0
6. R_SE-7m	*	0.0	0.0	0.0	0.2
7. R_SW-7m	*	0.0	0.0	0.0	0.4
8. R_NW-7m	*	0.0	0.0	0.0	0.7

↑

CO_DGS_Intersection15.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative plus Project, intersection 15
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	100	5	0	5	* AG	1215	3.7	0.0	13.0
B. E->S	*	150	4	0	0	* AG	185	3.7	0.0	10.0
C. 0->W	*	0	5	-150	5	* AG	1635	3.7	0.0	13.0
D. W->0	*	-150	-5	0	-5	* AG	1325	3.7	0.0	13.0
E. 0->E	*	0	-5	150	-5	* AG	1085	3.7	0.0	13.0
F. 0->S	*	4	0	4	-25	* AG	445	3.7	0.0	10.0
G. S->E	*	4	-25	4	0	* AG	420	3.7	0.0	10.0
H. S->W	*	4	-25	0	0	* AG	20	3.7	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	11	1.8
2. R_SE-3m	*	7	-11	1.8
3. R_SW-3m	*	-6	-11	1.8
4. R_NW-3m	*	-6	11	1.8
5. R_NE-7m	*	10	14	1.8
6. R_SE-7m	*	10	-14	1.8
7. R_SW-7m	*	-8	-14	1.8
8. R_NW-7m	*	-8	14	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Cumulative plus Project, intersection 15
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	* PRED *	CONC/LINK									
	* BRG *	* CONC *	(PPM)									
	* (DEG) *	* (PPM) *	A	B	C	D	E	F	G	H		
1. R_NE-3m	* 264. *	* 1.4 *	0.2	0.0	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	* 277. *	* 1.5 *	0.0	0.0	0.3	0.8	0.1	0.1	0.1	0.1	0.0	0.0
3. R_SW-3m	* 81. *	* 1.2 *	0.2	0.1	0.0	0.1	0.6	0.1	0.1	0.1	0.0	0.0
4. R_NW-3m	* 263. *	* 1.4 *	0.0	0.0	1.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	* 260. *	* 1.1 *	0.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
6. R_SE-7m	* 281. *	* 1.2 *	0.0	0.0	0.4	0.6	0.0	0.1	0.1	0.1	0.0	0.0
7. R_SW-7m	* 76. *	* 1.0 *	0.3	0.1	0.0	0.0	0.5	0.1	0.1	0.1	0.0	0.0
8. R_NW-7m	* 259. *	* 1.1 *	0.0	0.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0



CO_DGS_Intersection16F.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative + Project, intersection 16F
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. E->0	*	150	4	0	4	* AG	940	3.7	0.0	13.0
B. E->N	*	150	5	0	5	* AG	445	3.7	0.0	10.0
C. 0->W	*	0	4	-150	4	* AG	1015	3.7	0.0	13.0
D. W->0	*	-150	-11	0	-11	* AG	1090	3.7	0.0	13.0
E. W->N	*	-150	-9	0	0	* AG	985	3.7	0.0	10.0
F. 0->E	*	0	-11	150	-11	* AG	1365	3.7	0.0	10.0
G. S->0	*	0	-150	0	0	* AG	3865	3.7	0.0	16.5
H. S->E	*	5	-150	5	0	* AG	275	3.7	0.0	10.0
I. 0->N	*	0	0	0	150	* AG	5220	3.7	0.0	16.5

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	7	13	1.8
2. R_SE-3m	*	11	-16	1.8
3. R_SW-3m	*	-7	-16	1.8
4. R_NW-3m	*	-7	9	1.8
5. R_NE-7m	*	10	15	1.8
6. R_SE-7m	*	14	-19	1.8
7. R_SW-7m	*	-10	-19	1.8
8. R_NW-7m	*	-10	12	1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Cumulative + Project, intersection 16F
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * BRG * (DEG)	* PRED * CONC * (PPM)	* * *	A	B	C	CONC/LINK (PPM)					
				D	E	F	G	H				
1. R_NE-3m	* 184.	* 3.2	*	0.2	0.1	0.0	0.0	0.0	0.2	1.7	0.2	
2. R_SE-3m	* 351.	* 2.4	*	0.1	0.1	0.0	0.0	0.0	0.4	0.1	0.1	
3. R_SW-3m	* 5.	* 3.3	*	0.0	0.0	0.1	0.3	0.2	0.0	0.8	0.0	
4. R_NW-3m	* 175.	* 3.1	*	0.0	0.0	0.2	0.2	0.2	0.0	1.8	0.1	
5. R_NE-7m	* 189.	* 2.2	*	0.2	0.1	0.0	0.0	0.0	0.2	1.4	0.1	
6. R_SE-7m	* 350.	* 1.9	*	0.1	0.1	0.0	0.0	0.0	0.3	0.0	0.0	
7. R_SW-7m	* 9.	* 2.5	*	0.0	0.0	0.1	0.2	0.1	0.0	0.3	0.0	
8. R_NW-7m	* 170.	* 2.2	*	0.0	0.0	0.2	0.1	0.2	0.0	1.4	0.1	

RECEPTOR	*CONC/LINK * (PPM) * I
1. R_NE-3m	* 0.8
2. R_SE-3m	* 1.7
3. R_SW-3m	* 2.0
4. R_NW-3m	* 0.6
5. R_NE-7m	* 0.3
6. R_SE-7m	* 1.4
7. R_SW-7m	* 1.7
8. R_NW-7m	* 0.1



CO_DGS_Intersection17F.dat

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Cumulative + Project, intersection 17F
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 400. CM ALT= 7. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 16.1 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*		EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. N->0	*	0	150	0	0	* AG	3685	3.7	0.0	16.5
B. N->W	*	-4	150	-4	0	* AG	450	3.7	0.0	10.0
C. N->E	*	4	150	4	0	* AG	810	3.7	0.0	10.0
D. 0->S	*	0	0	0	-150	* AG	3780	3.7	0.0	16.5
E. E->0	*	150	4	0	4	* AG	70	3.7	0.0	10.0
F. E->S	*	150	4	0	0	* AG	80	3.7	0.0	10.0
G. 0->W	*	0	4	-150	4	* AG	880	3.7	0.0	10.0
H. W->0	*	-150	-2	0	0	* AG	405	3.7	0.0	10.0
I. 0->E	*	-150	-6	0	0	* AG	840	3.7	0.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
	*	X	Y	Z
1. R_NE-3m	*	9	7	1.8
2. R_SE-3m	*	9	-7	1.8
3. R_SW-3m	*	-9	-7	1.8
4. R_NW-3m	*	-9	7	1.8
5. R_NE-7m	*	12	10	1.8
6. R_SE-7m	*	12	-10	1.8
7. R_SW-7m	*	-12	-10	1.8
8. R_NW-7m	*	-12	10	1.8

↑

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Cumulative + Project, intersection 17F
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT:

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * BRG * (DEG)	* PRED * CONC * (PPM)	* * *	A	B	C	CONC/LINK (PPM) D	E	F	G	H
1. R_NE-3m	* 352.	* 2.5	* 1.8	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2. R_SE-3m	* 353.	* 2.5	* 1.7	0.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0
3. R_SW-3m	* 8.	* 2.8	* 1.6	0.3	0.3	0.1	0.0	0.0	0.0	0.2	0.1
4. R_NW-3m	* 8.	* 2.4	* 1.8	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
5. R_NE-7m	* 261.	* 1.9	* 0.7	0.1	0.2	0.0	0.0	0.0	0.0	0.5	0.2
6. R_SE-7m	* 350.	* 1.7	* 1.2	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
7. R_SW-7m	* 10.	* 2.0	* 1.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1
8. R_NW-7m	* 170.	* 1.7	* 0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.2	0.1

RECEPTOR	*CONC/LINK * (PPM) * I
1. R_NE-3m	* 0.0
2. R_SE-3m	* 0.0
3. R_SW-3m	* 0.2
4. R_NW-3m	* 0.0
5. R_NE-7m	* 0.3
6. R_SE-7m	* 0.0
7. R_SW-7m	* 0.2
8. R_NW-7m	* 0.2

↑

Results_B+P

	1-hour (ppm)	8-hour (ppm)
ambient background	1.539	1.1

Background = second highest of last two years (2017-2018) per SMAQMD CARBON MONOXIDE DISPERSION MODELING GUIDANCE, Sacramento Metropolitan Air Quality Management District. CEQA Guide December 2009, Revised June 2014

Results + Background

		CO Concentrations	
		1-hour (ppm)	8-hour (ppm)
2	I-5 NB Ramps/Richards Boulevard	2.94	2.08
4	N 3rd Street/Richards Boulevard	3.34	2.36
5	Sequoia Pacific Boulevard/Richards Boulevard	3.24	2.29
6	N 5th Street/Richards Boulevard	3.14	2.22
7	N 7th Street/Richards Boulevard	3.24	2.29
8	N 10th Street/Richards Boulevard	3.14	2.22
10	N 12th St-N 16th St/Richard Boulevard	4.24	2.99
11	N 7th Street/Project Driveway	2.84	2.01
12	N 7th Street/N B Street	3.94	2.78
14	N 7th Street/Railyards Boulevard	3.34	2.36
15	North Project Driveway/Richards Boulevard	3.14	2.22

CALINE4 Output

at R=3m from intersection corners				at R=7m from intersection corners			
R _{NE}	R _{SE}	R _{SW}	R _{NW}	R _{NE}	R _{SE}	R _{SW}	R _{NW}
1.4	1.2	1.4	1.3	1.3	1.1	1.3	1.1
1.8	1.3	1.2	1.8	1.3	1	1	1.2
1.7	1.3	1.3	1.7	1.2	1	1	1.2
1.6	1.2	1.2	1.6	1.2	1	1	1.1
1.3	1.5	1.7	1.5	1.1	1.2	1.4	1.2
1.5	1.4	1.6	1.4	1.4	1.1	1.6	1
2.7	2.4	1.9	1.8	2.4	2.1	1.7	1.8
0.8	0.9	1.1	1.3	0.7	0.6	0.8	1
2.1	2	2.4	2.1	1.6	1.4	1.6	1.7
1.3	1.2	1.8	1.7	0.9	1	1.1	1.4
1.5	1.6	1.3	1.5	1.1	1.3	1	1.1

Results_C+P

	1-hour (ppm)	8-hour (ppm)
ambient background	1.539	1.1

Background = second highest of last two years (2017-2018) per SMAQMD CARBON MONOXIDE DISPERSION MODELING GUIDANCE, Sacramento Metropolitan Air Quality Management District. CEQA Guide December 2009, Revised June 2014

Results + Background

		CO Concentrations	
Intersection		1-hour (ppm)	8-hour (ppm)
1	I-5 SB Ramps/Richards Boulevard	3.24	2.29
2	I-5 NB Ramps/Richards Boulevard	3.44	2.43
4	N 3rd Street/Richards Boulevard	3.34	2.36
5	Sequoia Pacific Boulevard/Richards Boulevard	3.14	2.22
6	N 5th Street/Richards Boulevard	3.04	2.15
7	N 7th Street/Richards Boulevard	3.24	2.29
8	N 10th Street/Richards Boulevard	3.34	2.36
9	Dos Rios Street/Richards Boulevard	3.54	2.50
12	N 7th Street/N B Street	3.54	2.50
14	N 7th Street/Railyards Boulevard	3.44	2.43
16	N 16th Street/Richards Boulevard	4.84	3.41
17	N 12th St/Vine St	4.34	3.06

CALINE4 Output

at R=3m from intersection corners				at R=7m from intersection corners			
R _{NE}	R _{SE}	R _{SW}	R _{NW}	R _{NE}	R _{SE}	R _{SW}	R _{NW}
1.7	1.4	1.5	1.3	1.5	1.1	1.4	1
1.8	1.6	1.9	1.8	1.6	1.5	1.7	1.6
1.8	1.4	1.3	1.7	1.3	1.1	1	1.2
1.6	1.4	1.6	1.6	1.3	1.1	1.4	1.3
1.5	1.4	1.4	1.5	1.2	1.1	1.2	1.1
1.4	1.5	1.7	1.5	1.1	1.2	1.4	1.2
1.7	1.5	1.6	1.8	1.6	1	1.6	1.2
1.9	1.8	2	1.9	1.9	1.2	1.9	1.3
1.6	1.6	2	1.7	1.4	1.4	1.7	1.5
1.5	1.6	1.6	1.9	1.2	1.4	1.3	1.5
3.2	2.4	3.3	3.1	2.2	1.9	2.5	2.2
2.5	2.5	2.8	2.4	1.9	1.7	2	1.7

DGS_Richards_Unmitigated

Start date and time 01/04/19 11:24:05

AERSCREEN 16216

DGS_RICHARDS_OFFROAD

----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

** AREADATA ** -----

Emission Rate: 0.705E-02 g/s 0.560E-01 lb/hr

Area Height: 3.89 meters 12.76 feet

Area Source Length: 379.00 meters 1243.44 feet

Area Source Width: 197.00 meters 646.33 feet

Vertical Dimension: 1.40 meters 4.59 feet

Model Mode: URBAN

Population: 501901

Dist to Ambient Air: 1.0 meters 3. feet

** BUILDING DATA **

No Building Downwash Parameters

DGS_Richards_Unmitigated

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

Flagpole Receptor Height: 1.5 meters 5. feet

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 277.0 / 304.0 K 38.9 / 87.5 Deg F

Minimum Wind Speed: 0.5 m/s

DGS_Richards_Unmitigated
Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u^*): not adjusted

DEBUG OPTION OFF

AERSCREEN output file:

DGS_RICHARDS_OFFROAD.OUT

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

DGS_Richards_Unmitigated

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 01/04/19 11:24:51

Running AERMOD

Processing Winter

DGS_Richards_Unmitigated
Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****

DGS_Richards_Unmitigated
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****

DGS_Richards_Unmitigated
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Unmitigated

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Unmitigated

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Unmitigated

Running AERMOD

Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

DGS_Richards_Unmitigated

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

DGS_Richards_Unmitigated

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

DGS_Richards_Unmitigated

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

DGS_Richards_Unmitigated

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

DGS_Richards_Unmitigated

***** WARNING MESSAGES *****

*** NONE ***

FLOWSECTOR ended 01/04/19 11:25:19

REFINE started 01/04/19 11:25:19

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

REFINE ended 01/04/19 11:25:22

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

Ending date and time 01/04/19 11:25:23

DGS_Richards_Unmitigated_max_conc_distance

Concentration		Distance	Elevation	Diag	Season/Month	Zo	sector	Date					
H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	HT
REF	TA	HT											
	0.29303E+01		1.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.30824E+01		25.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.32232E+01		50.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.33498E+01		75.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.34642E+01		100.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.35676E+01		125.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.36648E+01		150.00	0.00	5.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.37525E+01		175.00	0.00	5.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.38080E+01		200.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
*	0.38109E+01		201.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.31970E+01		225.00	0.00	25.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.24814E+01		250.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.21214E+01		275.01	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.18716E+01		300.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.16955E+01		325.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												

DGS_Richards_Unmitigated_max_conc_distance											
0.15467E+01	350.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.14183E+01	375.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13076E+01	400.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12114E+01	425.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11255E+01	450.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10502E+01	475.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.98320E+00	500.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.92336E+00	525.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.86908E+00	550.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.82048E+00	575.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.77594E+00	600.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.73586E+00	625.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.69942E+00	650.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.66537E+00	675.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.63424E+00	700.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.60575E+00	725.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.57942E+00	750.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.55476E+00	775.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.53199E+00	800.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.51091E+00	825.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.49130E+00	850.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.47289E+00	875.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.45538E+00	900.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.43902E+00	925.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.42370E+00	950.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.40933E+00	975.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.39583E+00	1000.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.38312E+00	1025.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.37115E+00	1050.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.35975E+00	1075.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.34886E+00	1100.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.33856E+00	1125.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.32872E+00	1150.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.31938E+00	1175.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.31050E+00	1200.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.30206E+00	1225.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.29403E+00	1250.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.28637E+00	1275.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.27908E+00	1300.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.27211E+00	1325.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.26545E+00	1350.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.25900E+00	1375.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.25283E+00	1400.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.24693E+00	1425.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.24127E+00	1450.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.23585E+00	1475.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.23065E+00	1500.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.22566E+00	1525.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.22086E+00	1550.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.21626E+00	1575.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.21182E+00	1600.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.20753E+00	1625.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.20339E+00	1650.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.19942E+00	1675.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.19558E+00	1700.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.19189E+00	1725.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.18834E+00	1750.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.18491E+00	1775.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.18160E+00	1800.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.17839E+00	1825.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.17527E+00	1850.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.17226E+00	1875.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.16935E+00	1900.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.16654E+00	1925.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.16383E+00	1950.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.16121E+00	1975.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.15867E+00	2000.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.15623E+00	2025.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.15386E+00	2050.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.15157E+00	2075.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.14935E+00	2100.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.14719E+00	2125.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.14510E+00	2150.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.14308E+00	2175.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.14113E+00	2200.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13923E+00	2225.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13740E+00	2250.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13562E+00	2275.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13389E+00	2300.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13222E+00	2325.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.13060E+00	2350.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12902E+00	2375.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12749E+00	2400.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12600E+00	2425.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12456E+00	2450.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12316E+00	2475.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12178E+00	2500.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12045E+00	2525.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11916E+00	2550.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11790E+00	2575.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11667E+00	2600.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11548E+00	2625.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11432E+00	2650.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11319E+00	2675.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11209E+00	2700.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11101E+00	2725.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.10995E+00	2750.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10893E+00	2775.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10793E+00	2800.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10696E+00	2825.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10601E+00	2850.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10509E+00	2875.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10419E+00	2900.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10330E+00	2925.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10245E+00	2950.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10161E+00	2975.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10080E+00	3000.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.99998E-01	3025.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.99218E-01	3050.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.98455E-01	3075.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.97709E-01	3100.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.96980E-01	3125.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.96268E-01	3150.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.95571E-01	3175.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.94889E-01	3200.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.94222E-01	3225.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.93569E-01	3250.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.92929E-01	3275.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.92304E-01	3300.00	0.00	10.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.91693E-01	3325.00	0.00	10.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.91092E-01	3350.00	0.00	10.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.90502E-01	3375.00	0.00	10.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.89924E-01	3400.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.89358E-01	3425.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.88803E-01	3450.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.88259E-01	3475.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.87725E-01	3500.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.87201E-01	3525.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.86687E-01	3550.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.86183E-01	3575.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.85687E-01	3600.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.85981E-01	3625.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.85491E-01	3650.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.85010E-01	3675.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.84537E-01	3700.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.84071E-01	3725.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.83614E-01	3750.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.83164E-01	3775.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.82721E-01	3800.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.82286E-01	3825.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.81857E-01	3850.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.81435E-01	3875.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.81020E-01	3900.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.80611E-01	3925.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.80208E-01	3950.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.79811E-01	3975.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.79420E-01	4000.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.79034E-01	4025.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.78655E-01	4050.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.78280E-01	4075.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.77911E-01	4100.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.77547E-01	4125.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.77188E-01	4150.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.76834E-01	4175.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.76485E-01	4200.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.76140E-01	4225.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.75800E-01	4250.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.75464E-01	4275.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.75132E-01	4300.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.74805E-01	4325.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Unmitigated_max_conc_distance												
0.74482E-01	4350.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.74163E-01	4375.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.73847E-01	4400.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.73536E-01	4425.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.73228E-01	4450.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.72924E-01	4475.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.72623E-01	4500.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.72326E-01	4525.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.72033E-01	4550.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.71742E-01	4575.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.71455E-01	4600.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.71171E-01	4625.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.70891E-01	4650.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.70613E-01	4675.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.70338E-01	4700.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.70067E-01	4725.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											

DGS_Richards_Unmitigated_max_conc_distance											
0.69798E-01	4750.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.69532E-01	4775.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.69269E-01	4800.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.69008E-01	4825.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.68750E-01	4850.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.68495E-01	4875.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.68242E-01	4900.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.67992E-01	4925.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.67744E-01	4950.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.67499E-01	4975.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.67256E-01	5000.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Mitigated_MM-3.2-2b

Start date and time 01/04/19 16:59:41

AERSCREEN 16216

DGS_RICHARDS_OFFROAD

----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

** AREADATA ** -----

Emission Rate: 0.388E-02 g/s 0.308E-01 lb/hr

Area Height: 3.89 meters 12.76 feet

Area Source Length: 379.00 meters 1243.44 feet

Area Source Width: 197.00 meters 646.33 feet

Vertical Dimension: 1.40 meters 4.59 feet

Model Mode: URBAN

Population: 501901

Dist to Ambient Air: 1.0 meters 3. feet

** BUILDING DATA **

No Building Downwash Parameters

DGS_Richards_Mitigated_MM-3.2-2b

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

Flagpole Receptor Height: 1.5 meters 5. feet

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 277.0 / 304.0 K 38.9 / 87.5 Deg F

Minimum Wind Speed: 0.5 m/s

DGS_Richards_Mitigated_MM-3.2-2b
Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u^*): not adjusted

DEBUG OPTION OFF

AERSCREEN output file:

DGS_RICHARDS_OFFROAD.OUT

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

DGS_Richards_Mitigated_MM-3.2-2b

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 01/04/19 17:00:16

Running AERMOD

Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****

DGS_Richards_Mitigated_MM-3.2-2b
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****

DGS_Richards_Mitigated_MM-3.2-2b
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Mitigated_MM-3.2-2b

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Mitigated_MM-3.2-2b

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Mitigated_MM-3.2-2b

Running AERMOD

Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

DGS_Richards_Mitigated_MM-3.2-2b

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

DGS_Richards_Mitigated_MM-3.2-2b

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

DGS_Richards_Mitigated_MM-3.2-2b

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

DGS_Richards_Mitigated_MM-3.2-2b

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

DGS_Richards_Mitigated_MM-3.2-2b

***** WARNING MESSAGES *****

*** NONE ***

FLOWSECTOR ended 01/04/19 17:00:43

REFINE started 01/04/19 17:00:43

AERMOD Finishes Successfully for REFIN stage 3 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

REFINE ended 01/04/19 17:00:46

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

Ending date and time 01/04/19 17:00:46

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

Concentration		Distance	Elevation	Diag	Season/Month	Zo	sector	Date					
H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	HT
REF	TA	HT											
	0.16129E+01		1.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.16966E+01		25.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.17741E+01		50.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.18438E+01		75.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.19068E+01		100.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.19637E+01		125.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.20171E+01		150.00	0.00	5.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.20654E+01		175.00	0.00	5.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.20960E+01		200.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
*	0.20975E+01		201.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.17596E+01		225.00	0.00	25.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.13658E+01		250.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.11676E+01		275.01	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.10302E+01		300.00	0.00	20.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												
	0.93324E+00		325.00	0.00	0.0			Winter		0-360	10011001		
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0												

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.85133E+00	350.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.78066E+00	375.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.71970E+00	400.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.66677E+00	425.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.61950E+00	450.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.57803E+00	475.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.54117E+00	500.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.50823E+00	525.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.47835E+00	550.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.45160E+00	575.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.42709E+00	600.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.40503E+00	625.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.38497E+00	650.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.36623E+00	675.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.34909E+00	700.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.33341E+00	725.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.31892E+00	750.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.30535E+00	775.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.29282E+00	800.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.28121E+00	825.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.27042E+00	850.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.26028E+00	875.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.25065E+00	900.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.24164E+00	925.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.23321E+00	950.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.22530E+00	975.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.21787E+00	1000.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.21088E+00	1025.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.20428E+00	1050.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.19801E+00	1075.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.19202E+00	1100.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.18635E+00	1125.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.18093E+00	1150.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.17579E+00	1175.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.17090E+00	1200.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.16626E+00	1225.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.16184E+00	1250.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.15762E+00	1275.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.15361E+00	1300.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.14977E+00	1325.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.14611E+00	1350.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.14256E+00	1375.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.13916E+00	1400.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.13591E+00	1425.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.13280E+00	1450.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.12981E+00	1475.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.12695E+00	1500.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.12420E+00	1525.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.12157E+00	1550.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.11903E+00	1575.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.11659E+00	1600.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.11423E+00	1625.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.11195E+00	1650.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.10976E+00	1675.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.10765E+00	1700.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.10562E+00	1725.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.10366E+00	1750.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.10178E+00	1775.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.99955E-01	1800.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.98188E-01	1825.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.96471E-01	1850.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.94814E-01	1875.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.93214E-01	1900.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.91668E-01	1925.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.90174E-01	1950.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.88731E-01	1975.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.87335E-01	2000.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.85992E-01	2025.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.84689E-01	2050.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.83426E-01	2075.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.82202E-01	2100.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.81015E-01	2125.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.79866E-01	2150.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.78754E-01	2175.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.77678E-01	2200.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.76636E-01	2225.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.75626E-01	2250.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.74647E-01	2275.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.73697E-01	2300.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.72775E-01	2325.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.71882E-01	2350.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.71014E-01	2375.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.70172E-01	2400.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.69355E-01	2425.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.68561E-01	2450.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.67786E-01	2475.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.67032E-01	2500.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.66298E-01	2525.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.65585E-01	2550.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.64892E-01	2575.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.64218E-01	2600.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.63562E-01	2625.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.62924E-01	2650.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.62303E-01	2675.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.61694E-01	2700.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.61099E-01	2725.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.60521E-01	2750.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.59957E-01	2775.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.59408E-01	2800.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.58872E-01	2825.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.58350E-01	2850.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.57841E-01	2875.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.57345E-01	2900.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.56860E-01	2925.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.56388E-01	2950.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.55927E-01	2975.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.55479E-01	3000.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.55040E-01	3025.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.54611E-01	3050.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.54191E-01	3075.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.53780E-01	3100.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.53379E-01	3125.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.52987E-01	3150.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.52603E-01	3175.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.52228E-01	3200.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.51861E-01	3225.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.51501E-01	3250.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.51149E-01	3275.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.50805E-01	3300.00	0.00	10.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.50469E-01	3325.00	0.00	10.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.50138E-01	3350.00	0.00	10.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.49813E-01	3375.00	0.00	10.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.49495E-01	3400.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.49184E-01	3425.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.48878E-01	3450.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.48579E-01	3475.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.48285E-01	3500.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.47997E-01	3525.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.47714E-01	3550.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.47436E-01	3575.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.47163E-01	3600.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.47325E-01	3625.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.47056E-01	3650.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.46790E-01	3675.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.46530E-01	3700.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.46274E-01	3725.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.46022E-01	3750.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.45775E-01	3775.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.45531E-01	3800.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.45291E-01	3825.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.45055E-01	3850.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.44823E-01	3875.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.44594E-01	3900.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.44369E-01	3925.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.44147E-01	3950.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.43929E-01	3975.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.43714E-01	4000.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.43502E-01	4025.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.43293E-01	4050.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.43086E-01	4075.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.42883E-01	4100.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.42683E-01	4125.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.42485E-01	4150.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.42291E-01	4175.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.42098E-01	4200.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.41908E-01	4225.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.41721E-01	4250.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.41536E-01	4275.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.41354E-01	4300.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.41174E-01	4325.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.40996E-01	4350.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.40820E-01	4375.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.40647E-01	4400.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.40475E-01	4425.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.40306E-01	4450.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.40138E-01	4475.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39973E-01	4500.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39809E-01	4525.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39648E-01	4550.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39488E-01	4575.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39330E-01	4600.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39174E-01	4625.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.39019E-01	4650.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.38866E-01	4675.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.38715E-01	4700.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.38566E-01	4725.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated_MM-3.2-2b_max_conc_distance

0.38418E-01	4750.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.38271E-01	4775.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.38126E-01	4800.00	0.00	5.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37983E-01	4825.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37841E-01	4850.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37701E-01	4875.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37561E-01	4900.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37424E-01	4925.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37287E-01	4950.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37152E-01	4975.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						
0.37019E-01	5000.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000 0.020 -999. 21.	6.0 1.000 1.50	0.35	0.50	10.0		
304.0 2.0						

DGS_Richards_Mitigated Tier 4

Start date and time 01/04/19 10:35:48

AERSCREEN 16216

DGS_RICHARDS_OFFROAD

----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

** AREADATA **

Emission Rate: 0.814E-03 g/s 0.646E-02 lb/hr

Area Height: 3.89 meters 12.76 feet

Area Source Length: 379.00 meters 1243.44 feet

Area Source Width: 197.00 meters 646.33 feet

Vertical Dimension: 1.40 meters 4.59 feet

Model Mode: URBAN

Population: 501901

Dist to Ambient Air: 1.0 meters 3. feet

** BUILDING DATA **

No Building Downwash Parameters

DGS_Richards_Mitigated Tier 4

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

Flagpole Receptor Height: 1.5 meters 5. feet

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 277.0 / 304.0 K 38.9 / 87.5 Deg F

Minimum Wind Speed: 0.5 m/s

DGS_Richards_Mitigated Tier 4
Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u^*): not adjusted

DEBUG OPTION OFF

AERSCREEN output file:

DGS_RICHARDS_MITIGATED.OUT

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

DGS_Richards_Mitigated Tier 4

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 01/04/19 10:36:25

Running AERMOD

Processing Winter

DGS_Richards_Mitigated Tier 4
Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****

DGS_Richards_Mitigated Tier 4
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****

DGS_Richards_Mitigated Tier 4
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Mitigated Tier 4

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Mitigated Tier 4

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

***** WARNING MESSAGES *****

*** NONE ***

DGS_Richards_Mitigated Tier 4

Running AERMOD

Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

DGS_Richards_Mitigated Tier 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

DGS_Richards_Mitigated Tier 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

DGS_Richards_Mitigated Tier 4

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

DGS_Richards_Mitigated Tier 4

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

DGS_Richards_Mitigated Tier 4

***** WARNING MESSAGES *****

*** NONE ***

FLOWSECTOR ended 01/04/19 10:36:53

REFINE started 01/04/19 10:36:53

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

REFINE ended 01/04/19 10:36:56

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

Ending date and time 01/04/19 10:36:56

DGS_Richards_Mitigated_Tier4_max_conc_distance

Concentration			Distance	Elevation	Diag	Season/Month		Zo sector		Date		
H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS	HT
REF	TA	HT										
	0.33828E+00		1.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.35583E+00		25.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.37209E+00		50.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.38670E+00		75.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.39992E+00		100.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.41185E+00		125.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.42307E+00		150.00	0.00	5.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.43320E+00		175.00	0.00	5.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.43961E+00		200.00	0.00	20.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
*	0.43993E+00		201.00	0.00	20.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.36906E+00		225.00	0.00	25.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.28645E+00		250.00	0.00	20.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.24490E+00		275.01	0.00	20.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.21606E+00		300.00	0.00	20.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											
	0.19573E+00		325.00	0.00	0.0			Winter		0-360	10011001	
-1.28	0.043	-9.000	0.020	-999.	21.		6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.17855E+00	350.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.16373E+00	375.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.15095E+00	400.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.13985E+00	425.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12993E+00	450.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.12123E+00	475.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.11350E+00	500.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10659E+00	525.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.10033E+00	550.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.94718E-01	575.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.89576E-01	600.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.84949E-01	625.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.80742E-01	650.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.76811E-01	675.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.73217E-01	700.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.69929E-01	725.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance

0.66889E-01	750.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.64043E-01	775.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.61414E-01	800.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.58981E-01	825.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.56717E-01	850.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.54591E-01	875.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.52570E-01	900.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.50681E-01	925.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.48912E-01	950.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.47254E-01	975.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.45695E-01	1000.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.44228E-01	1025.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.42846E-01	1050.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.41530E-01	1075.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.40273E-01	1100.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						
0.39084E-01	1125.00	0.00	0.0	Winter	0-360	10011001
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0
304.0 2.0						

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.37948E-01	1150.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.36869E-01	1175.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.35845E-01	1200.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.34870E-01	1225.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.33943E-01	1250.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.33060E-01	1275.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.32217E-01	1300.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.31413E-01	1325.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.30644E-01	1350.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.29900E-01	1375.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.29187E-01	1400.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.28506E-01	1425.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.27853E-01	1450.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.27227E-01	1475.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.26626E-01	1500.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.26050E-01	1525.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.25497E-01	1550.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.24965E-01	1575.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.24453E-01	1600.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.23958E-01	1625.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.23480E-01	1650.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.23021E-01	1675.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.22579E-01	1700.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.22153E-01	1725.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.21742E-01	1750.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.21346E-01	1775.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.20964E-01	1800.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.20594E-01	1825.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.20234E-01	1850.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.19886E-01	1875.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.19550E-01	1900.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.19226E-01	1925.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.18913E-01	1950.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.18610E-01	1975.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.18317E-01	2000.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.18036E-01	2025.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.17762E-01	2050.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.17498E-01	2075.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.17241E-01	2100.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.16992E-01	2125.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.16751E-01	2150.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.16518E-01	2175.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.16292E-01	2200.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.16073E-01	2225.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.15862E-01	2250.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.15656E-01	2275.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.15457E-01	2300.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.15264E-01	2325.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										

DGS_Richards_Mitigated_Tier4_max_conc_distance												
0.15076E-01	2350.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.14894E-01	2375.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.14718E-01	2400.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.14546E-01	2425.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.14380E-01	2450.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.14217E-01	2475.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.14059E-01	2500.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13905E-01	2525.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13756E-01	2550.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13610E-01	2575.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13469E-01	2600.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13331E-01	2625.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13197E-01	2650.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.13067E-01	2675.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12939E-01	2700.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12815E-01	2725.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance												
0.12693E-01	2750.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12575E-01	2775.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12460E-01	2800.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12348E-01	2825.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12238E-01	2850.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12131E-01	2875.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.12027E-01	2900.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11926E-01	2925.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11827E-01	2950.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11730E-01	2975.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11636E-01	3000.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11544E-01	3025.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11454E-01	3050.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11366E-01	3075.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11280E-01	3100.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.11196E-01	3125.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.11113E-01	3150.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.11033E-01	3175.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10954E-01	3200.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10877E-01	3225.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10802E-01	3250.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10728E-01	3275.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10656E-01	3300.00	0.00	10.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10585E-01	3325.00	0.00	10.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10516E-01	3350.00	0.00	10.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10448E-01	3375.00	0.00	10.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10381E-01	3400.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10316E-01	3425.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10252E-01	3450.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10189E-01	3475.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10127E-01	3500.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.10067E-01	3525.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.10007E-01	3550.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.99491E-02	3575.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.98919E-02	3600.00	0.00	5.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.99258E-02	3625.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.98692E-02	3650.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.98137E-02	3675.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.97590E-02	3700.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.97053E-02	3725.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.96525E-02	3750.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.96006E-02	3775.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.95495E-02	3800.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.94992E-02	3825.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.94497E-02	3850.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.94010E-02	3875.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.93531E-02	3900.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											
0.93058E-02	3925.00	0.00	0.0	Winter	0-360	10011001					
-1.28 0.043 -9.000	0.020 -999.	21.	6.0 1.000 1.50	0.35	0.50	10.0					
304.0 2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance												
0.92593E-02	3950.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.92135E-02	3975.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.91684E-02	4000.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.91239E-02	4025.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.90800E-02	4050.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.90368E-02	4075.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.89942E-02	4100.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.89522E-02	4125.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.89107E-02	4150.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.88699E-02	4175.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.88295E-02	4200.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.87897E-02	4225.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.87504E-02	4250.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.87117E-02	4275.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.86734E-02	4300.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.86356E-02	4325.00	0.00	5.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance												
0.85983E-02	4350.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.85615E-02	4375.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.85251E-02	4400.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.84891E-02	4425.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.84536E-02	4450.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.84185E-02	4475.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.83838E-02	4500.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.83495E-02	4525.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.83156E-02	4550.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.82821E-02	4575.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.82489E-02	4600.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.82162E-02	4625.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.81837E-02	4650.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.81517E-02	4675.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.81200E-02	4700.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											
0.80886E-02	4725.00	0.00	0.0	Winter	0-360	10011001						
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	
304.0	2.0											

DGS_Richards_Mitigated_Tier4_max_conc_distance											
0.80576E-02	4750.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.80269E-02	4775.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.79965E-02	4800.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.79664E-02	4825.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.79366E-02	4850.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.79072E-02	4875.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.78780E-02	4900.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.78491E-02	4925.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.78205E-02	4950.00	0.00	5.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.77922E-02	4975.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										
0.77641E-02	5000.00	0.00	0.0	Winter	0-360	10011001					
-1.28	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0
304.0	2.0										

DGS Richards_HARP2_UnmitigatedOutput
HARP2 - HRACalc (dated 17023) 1/4/2019 4:10:54 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 5

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 3
2<16 Years Bin: 0
16<30 Years Bin: 0
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: LongTerm24HR

DGS Richards_HARP2_UnmitigatedOutput

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: ON

16 years to 70 years: OFF

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|DBRs changed|FAH changed|

Calculating cancer risk

Cancer risk saved to: C:\Users\sda\Desktop\1_PROJECTS\EIRs\DGS Richards\HRA\DGS Richards_HARP2_UnmitigatedCancerRisk.csv

HRA ran successfully

*HARP - HRACalc v17023 1/4/2019 4:10:54 PM - Cancer Risk - Input File: C:\Users\sda\Desktop\1_PROJECTS\VEIRs\DGS Richards\HRA\DGS Richards_HARP2_UnmitigatedHRAInput.hra

INDEX	GRP1	GRP2	POUID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_F	MMILK_RI	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_F	EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_I	FISH_CONC	WATER_CONC
1			9901	DieselExp	0.11255	4.22E-05	5YrCancer	*	4.22E-05	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	0.00E+00	0.00E+00	INHALATION		0.00E+00	0.00E+00	0.00E+00

DGS Richards_HARP2_Mitigation_MM-3.2-2bOutput
HARP2 - HRACalc (dated 17023) 1/4/2019 5:08:07 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 5

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 3
2<16 Years Bin: 0
16<30 Years Bin: 0
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: LongTerm24HR

DGS Richards_HARP2_Mitigation_MM-3.2-2bOutput

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: ON

16 years to 70 years: OFF

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|DBRs changed|FAH changed|

Calculating cancer risk

Cancer risk saved to: C:\Users\sda\Desktop\1_PROJECTS\EIRs\DGS Richards\HRA\DGS Richards_HARP2_Mitigation_MM-xxCancerRisk.csv

HRA ran successfully

*HARP - HRACalc v17023 1/4/2019 5:08:07 PM - Cancer Risk - Input File: C:\Users\sda\Desktop\1_PROJECTS\VEIRs\DGS Richards\HRA\DGS Richards_HARP2_Mitigation_MM-xxHRAInput.hra

INDEX	GRP1	GRP2	POUID	POLABBR	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_F	MMILK_RI	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_F	EGG_RISK	1ST_DRIVE	2ND_DRIVE	PASTURE_I	FISH_CONC	WATER_CONC
1			9901	DieselExp	0.062	2.32E-05	5YrCancer	*	2.32E-05	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	0.00E+00	0.00E+00	INHALATION				

DGS Richards_HARP2_MitigatedOutput
HARP2 - HRACalc (dated 17023) 1/4/2019 4:13:47 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 5

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 3
2<16 Years Bin: 0
16<30 Years Bin: 0
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: LongTerm24HR

DGS_Richards_HARP2_MitigatedOutput

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: ON

16 years to 70 years: OFF

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|DBRs changed|FAH changed|

Calculating cancer risk

Cancer risk saved to: C:\Users\sda\Desktop\1_PROJECTS\EIRs\DGS_Richards\HRA\DGS_Richards_HARP2_MitigatedCancerRisk.csv

HRA ran successfully

*HARP - HRACalc v17023 1/4/2019 4:13:47 PM - Cancer Risk - Input File: C:\Users\sda\Desktop\1_PROJECTS\VEIRs\DGS Richards\HRA\DGS Richards_HARP2_MitigatedHRAInput.hra

INDEX	GRP1	GRP2	POUID	POLABBR	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_F	MMILK_RI	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_F	EGG_RISK	1ST_DRIVE	2ND_DRIV	PASTURE_I	FISH_CONC	WATER_CONC
1			9901	DieselExp	0.013	4.87E-06	5YrCancer	*	4.87E-06	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	0.00E+00	0.00E+00	NA	NA	0.00E+00	0.00E+00	0.00E+00

Off-Road DPM Emissions per Phase (tons)

Year	Phase	Off-road		
		Unmitigated	Mitigation - MM-3.2-2(b) ¹	Mitigated - Tier 4 Engines ²
2020	GeoTech	0.0538	0.02959	0.00205
2021	Excavated Foundations	0.0597	0.032835	0.00294
2021	Building Construction	0.3256	0.17908	0.034
2022	Building Construction	0.3319	0.182545	0.0402
2023	Building Construction	0.2915	0.160325	0.0402
2024	Building Construction	0.0286	0.01573	0.00448
2024	Paving	0.00492	0.002706	0.00039
2024	Architectural Coating	0.0003	0.000165	0.00005

Notes:

1. Mitigation consisted of the implementation of MM-xx, which require PM exhaust emission to be reduce by 45 percent.

2. Mitigation consists of all off-road construction equipment being equiped with Tier 4 Interim engines. Details can be found in the CalEEMod run.

Annual Off-Road DPM Emissions (tons)

Construction Year	Unmitigated	Mitigation - MM-3.2-2(b)	Mitigated - Tier 4 Engines
2020	5.38E-02	2.96E-02	2.05E-03
2021	3.85E-01	2.12E-01	3.69E-02
2022	3.32E-01	1.83E-01	4.02E-02
2023	2.92E-01	1.60E-01	4.02E-02
2024	3.38E-02	1.86E-02	4.92E-03
All Construction	1.10E+00	6.03E-01	1.24E-01

Time Values for Emission Rates

Total Calendar Days - 2020	281
Total Calendar Days - 2021	366
Total Calendar Days - 2022	365
Total Calendar Days - 2023	366
Total Calendar Days - 2024	83
Total Calendar Days - All construction	1461
Hours per day	24
Pounds to grams	454
Tons to Pounds	2000

Emission Rates - Scaling Factors (g/s)

Year	Unmitigated	Mitigation - MM-3.2-2(b)	Mitigated - Tier 4 Engines
2020	2.01E-03	1.11E-03	7.66E-05
2021	1.11E-02	6.08E-03	1.06E-03
2022	9.55E-03	5.25E-03	1.16E-03
2023	8.36E-03	4.60E-03	1.15E-03
2024	4.28E-03	2.35E-03	6.22E-04
Average	7.05E-03	3.88E-03	8.14E-04

DPM Concentrations (ug/m3)

Category	Unmitigated	Mitigation - MM-3.2-2(b)	Mitigated - Tier 4 Engines
Max Single-Hour Concentration	1.13E+00	6.20E-01	1.30E-01
Annualized Average Concentration	1.13E-01	6.20E-02	1.30E-02

Distance from center project site to nearest residence is 450 meters. Max single-hour concentrations were multiplied by 10 percent to get the annualized average concentration.

Summarize AERSCREEN Concentration Output

Distance (m)	Unmitigated Concentration (ug/m³)	Mitigated Concentration - 3.2-2(b) (ug/m³)	Mitigated Concentration - Tier 4 (ug/m³)
1	2.93E+00	1.61E+00	3.38E-01
25	3.08E+00	1.70E+00	3.56E-01
50	3.22E+00	1.77E+00	3.72E-01
75	3.35E+00	1.84E+00	3.87E-01
100	3.46E+00	1.91E+00	4.00E-01
125	3.57E+00	1.96E+00	4.12E-01
150	3.66E+00	2.02E+00	4.23E-01
175	3.75E+00	2.07E+00	4.33E-01
200	3.81E+00	2.10E+00	4.40E-01
201	3.81E+00	2.10E+00	4.40E-01
225	3.20E+00	1.76E+00	3.69E-01
250	2.48E+00	1.37E+00	2.86E-01
275.01	2.12E+00	1.17E+00	2.45E-01
300	1.87E+00	1.03E+00	2.16E-01
325	1.70E+00	9.33E-01	1.96E-01
350	1.55E+00	8.51E-01	1.79E-01
375	1.42E+00	7.81E-01	1.64E-01
400	1.31E+00	7.20E-01	1.51E-01
425	1.21E+00	6.67E-01	1.40E-01
450	1.13E+00	6.20E-01	1.30E-01
475	1.05E+00	5.78E-01	1.21E-01
500	9.83E-01	5.41E-01	1.14E-01
525	9.23E-01	5.08E-01	1.07E-01
550	8.69E-01	4.78E-01	1.00E-01
575	8.20E-01	4.52E-01	9.47E-02
600	7.76E-01	4.27E-01	8.96E-02

Note: See AERSCREEN Outputs for modeling details.

Summarize HARP2 Health Risk Outputs (one in a Million)

Year	Unmitigated	Mitigation - MM-3.2-2(b)	Mitigated - Tier 4 Engines
All Construction	42.19	23.24	4.87
SMAQMD Threshold	10	10	10
Exceed Threshold (Yes or No)?	Yes	Yes	No

Note: See HARP2 Outputs for details.

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: Sacramento

Calendar Year: 2024

Season: Winter

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

NOx_RUNEX 0.200 g/mile

Region	CalYr	VehClass	MdYr	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLEX	NOx_STREX
Sacramentu	2024	HHDT	Aggregatec	Aggregatec	GAS	78.28161	9250.314	1566.258	3.357623	0	3.928713
Sacramentu	2024	HHDT	Aggregatec	Aggregatec	DSL	10066.78	932983.9	0	2.225097	44.34448	0
Sacramentu	2024	LDA	Aggregatec	Aggregatec	GAS	573542.9	20475544	3615337	0.05054	0	0.070993
Sacramentu	2024	LDA	Aggregatec	Aggregatec	DSL	6552.677	243333.9	41068.4	0.061877	0	0
Sacramentu	2024	LDA	Aggregatec	Aggregatec	ELEC	31601.4	1469835	205344.6	0	0	0
Sacramentu	2024	LDT1	Aggregatec	Aggregatec	GAS	42724.96	1452148	257955	0.116081	0	0.169853
Sacramentu	2024	LDT1	Aggregatec	Aggregatec	DSL	134.3675	2686.345	671.2809	0.97517	0	0
Sacramentu	2024	LDT1	Aggregatec	Aggregatec	ELEC	43.35203	1184.044	253.4961	0	0	0
Sacramentu	2024	LDT2	Aggregatec	Aggregatec	GAS	216977.2	8146084	1362953	0.077711	0	0.13064
Sacramentu	2024	LDT2	Aggregatec	Aggregatec	DSL	394.3375	16086.28	2516.13	0.046184	0	0
Sacramentu	2024	LHDT1	Aggregatec	Aggregatec	GAS	10754.53	302442.5	160226.5	0.410158	0.028648	1.95109
Sacramentu	2024	LHDT1	Aggregatec	Aggregatec	DSL	11060.54	352698.2	139127.6	2.949757	2.264406	0
Sacramentu	2024	LHDT2	Aggregatec	Aggregatec	GAS	1652.349	59554.44	24617.54	0.188842	0.027071	1.399863
Sacramentu	2024	LHDT2	Aggregatec	Aggregatec	DSL	3549.696	134670.5	44650.72	1.406993	2.002064	0
Sacramentu	2024	MCY	Aggregatec	Aggregatec	GAS	33728.07	225729.3	67449.4	1.264064	0	0.348859
Sacramentu	2024	MDV	Aggregatec	Aggregatec	GAS	133927.9	4352275	822282.6	0.143117	0	0.28206
Sacramentu	2024	MDV	Aggregatec	Aggregatec	DSL	2385.677	94154.96	15154.01	0.03514	0	0
Sacramentu	2024	MH	Aggregatec	Aggregatec	GAS	2868.948	23854.15	287.0095	0.544381	0	1.166106
Sacramentu	2024	MH	Aggregatec	Aggregatec	DSL	762.5743	6569.372	76.25743	4.941306	0	0
Sacramentu	2024	MHDT	Aggregatec	Aggregatec	GAS	1756.199	80743.66	35138.02	0.473098	0.062682	1.770441
Sacramentu	2024	MHDT	Aggregatec	Aggregatec	DSL	15569.73	643001.3	0	1.454036	2.444641	0
Sacramentu	2024	OBUS	Aggregatec	Aggregatec	GAS	707.1453	36569.11	14148.56	0.320338	0.049111	1.215114
Sacramentu	2024	OBUS	Aggregatec	Aggregatec	DSL	529.5835	40977.62	0	1.734606	7.38198	0
Sacramentu	2024	SBUS	Aggregatec	Aggregatec	GAS	162.8642	7863.945	651.4567	0.324722	0.701599	1.292249
Sacramentu	2024	SBUS	Aggregatec	Aggregatec	DSL	433.1583	16343.27	0	5.383292	34.55	0
Sacramentu	2024	UBUS	Aggregatec	Aggregatec	GAS	233.6409	33531.06	934.5638	1.252956	0	4.547249
Sacramentu	2024	UBUS	Aggregatec	Aggregatec	DSL	281.2328	40284.85	1124.931	9.406469	0	0

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: Sacramento

Calendar Year: 2036

Season: Winter

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

NOx_RUNEX 0.106 g/mile

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLEX	NOx_STREX
Sacramento	2036	HHDT	Aggregator	Aggregator	GAS	78.47299	9344.15	1570.088	3.342914	0	3.578028
Sacramento	2036	HHDT	Aggregator	Aggregator	DSL	12577.03	1167735	0	1.475988	29.862	0
Sacramento	2036	LDA	Aggregator	Aggregator	GAS	659784.1	21782806	4157303	0.026823	0	0.023351
Sacramento	2036	LDA	Aggregator	Aggregator	DSL	8872.656	298487.6	56294.66	0.011035	0	0
Sacramento	2036	LDA	Aggregator	Aggregator	ELEC	105729.1	3720412	676297.8	0	0	0
Sacramento	2036	LDT1	Aggregator	Aggregator	GAS	44312.88	1509805	274159.2	0.034214	0	0.039747
Sacramento	2036	LDT1	Aggregator	Aggregator	DSL	38.78393	1021.672	212.3906	0.293695	0	0
Sacramento	2036	LDT1	Aggregator	Aggregator	ELEC	24.80728	749.2541	145.3795	0	0	0
Sacramento	2036	LDT2	Aggregator	Aggregator	GAS	274465.5	9471111	1719640	0.035588	0	0.039424
Sacramento	2036	LDT2	Aggregator	Aggregator	DSL	586.2352	20612.03	3707.569	0.03116	0	0
Sacramento	2036	LHDT1	Aggregator	Aggregator	GAS	6003.125	175144.6	89437.61	0.146954	0.024837	1.359035
Sacramento	2036	LHDT1	Aggregator	Aggregator	DSL	9057.954	289479	113937.7	0.792636	1.397688	0
Sacramento	2036	LHDT2	Aggregator	Aggregator	GAS	1517.63	55601.08	22610.42	0.053405	0.020512	0.682269
Sacramento	2036	LHDT2	Aggregator	Aggregator	DSL	3706.015	136618.2	46617.01	0.179482	1.031838	0
Sacramento	2036	MCY	Aggregator	Aggregator	GAS	39534.96	239927.7	79062.01	1.241886	0	0.344124
Sacramento	2036	MDV	Aggregator	Aggregator	GAS	145271.8	4526867	883945.9	0.056119	0	0.092921
Sacramento	2036	MDV	Aggregator	Aggregator	DSL	3717.704	124283.3	23394.38	0.012118	0	0
Sacramento	2036	MH	Aggregator	Aggregator	GAS	2276.979	19475.4	227.789	0.175996	0	0.824498
Sacramento	2036	MH	Aggregator	Aggregator	DSL	643.1399	5495.428	64.31399	3.004741	0	0
Sacramento	2036	MHDT	Aggregator	Aggregator	GAS	1510.083	71241.97	30213.74	0.132051	0.068588	1.001801
Sacramento	2036	MHDT	Aggregator	Aggregator	DSL	19517.86	763854.9	0	1.173662	1.786943	0
Sacramento	2036	OBUS	Aggregator	Aggregator	GAS	755.6866	37732.42	15119.78	0.125243	0.052751	0.841953
Sacramento	2036	OBUS	Aggregator	Aggregator	DSL	641.4504	44754.99	0	1.477199	7.684005	0
Sacramento	2036	SBUS	Aggregator	Aggregator	GAS	231.586	10400.96	926.3441	0.106427	0.741362	0.96458
Sacramento	2036	SBUS	Aggregator	Aggregator	DSL	440.5753	16140.61	0	1.658329	11.37781	0
Sacramento	2036	UBUS	Aggregator	Aggregator	GAS	220.2617	29381.05	881.0468	0.72928	0	3.549862
Sacramento	2036	UBUS	Aggregator	Aggregator	DSL	229.5186	30602.16	918.0743	3.040889	0	0

Appendix D2

Air Quality Management Plan

Draft

RICHARDS BOULEVARD OFFICE COMPLEX

Air Quality Management Plan

For submittal to
Sacramento Metropolitan Air Quality Management District

February 2019



Draft

RICHARDS BOULEVARD OFFICE COMPLEX

Air Quality Management Plan

Prepared for
Sacramento Metropolitan Air Quality Management District

February 2019

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Bend	Oakland	San Diego
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Introduction

The Sacramento Metropolitan Air Quality Management District (SMAQMD) has developed guidance to mitigate operational emissions for projects subject to the California Environmental Quality Act (CEQA).¹ SMAQMD's guidance recommends that project applicants prepare an Air Quality Mitigation Plan (AQMP) for all projects that exceed SMAQMD's operational significance thresholds of 65 pounds per day for oxides of nitrogen (NO_x), 65 pounds per day for reactive organic gases (ROG), 80 pounds per day for particulate matter less than or equal to 10 microns (PM₁₀), and 82 pounds per day for PM_{2.5}.

Operational emissions of NO_x and PM₁₀ from the Richards Boulevard Office Complex (project) are greater than the applicable SMAQMD significance thresholds identified above. Therefore, an AQMP has been prepared for the project.

Methodology

Total daily emissions of ozone precursors (ROG and NO_x) from the project's mobile sources were estimated, using CalEEMod default settings.

A reduction target is calculated based on the project's consistency with the current State Implementation Plan (SIP). For projects included in the current SIP, the SMAQMD recommends a 15 percent reduction of NO_x and ROG mobile source emissions. For projects not considered in the SIP, the SMAQMD recommends a 35 percent reduction NO_x and ROG mobile source emissions. The Richards Boulevard Office Complex is in the SIP; therefore, a 15 percent reduction applies. The SMAQMD has determined that this reduction in emissions will satisfy the "all feasible measures" mitigation requirement under CEQA. The reduction target is in tons per year.

An AQMP is considered to meet the reduction target when both of the following equations are true:

$$NO_x \text{ Reduction Target} \leq \text{Unmitigated Project } NO_x - \text{Mitigated Project } NO_x$$

$$ROG \text{ Reduction Target} \leq \text{Unmitigated Project } ROG - \text{Mitigated Project } ROG$$

The SMAQMD guidance recognizes that site-specific traffic information is more relevant than information generated from a statewide model (identified as prerequisite *TS: Traffic Study* in the SMAQMD guidance). Traffic studies typically include calculation of internal trip capture, mix of uses, distance to job centers, and sometimes walking and cycling information. Rather than use CalEEMod to estimate the impact of these features on a project, the information within the traffic study is used to create a mitigated project run. The quantity of mitigated emissions is compared to the reduction target, as described above.

¹ Sacramento Metropolitan Air Quality Management District (SMAQMD), 2017. Recommended Guidance for Land Use Emission Reductions, Version 4 (for Operational Emissions). Accessed February 2019.

Reduction Target

Although the proposed project would be operationally significant for PM₁₀, no specific reduction standards have been determined at this time to be considered feasible mitigation. Therefore, this AQMP will implement all feasible mitigation for the project to reduce PM₁₀ emissions.

The unmitigated project was modeled using CalEEMod 2016.3.2, and NO_x and ROG emissions are calculated. The unmitigated emissions have been estimated using CalEEMod default values. A reduction goal of 15 percent below an unmitigated scenario was used. This reduction target is then applied to the NO_x and ROG emissions to determine the reduction target in tons per year. The unmitigated project emissions, target reduction percentage, and reduction target is presented in Table 1.

TABLE 1.
DETERMINATION OF REDUCTION TARGET

Source	Pollutant	Unmitigated Emissions, tons/year	Target Reduction Percentage	Reduction Target, tons/year
Mobile sources	NO _x	57.9	15%	8.7
	ROG	15.1	15%	2.3

Mitigation

The prerequisite *TS: Traffic Study* (as identified in the SMAQMD guidance) was applied to the proposed project. The CalEEMod default estimate of total VMT was revised to be consistent with the project-specific VMT estimates. Within CalEEMod, VMT estimates for each land use type are the product of trip generation rates times trip lengths. CalEEMod's default trip lengths were adjusted so that its VMT matched the project specific estimates.

The VMT estimates for the proposed project were modeled using the Sacramento Area Council of Government's (SACOG) SACMET travel demand model. SACMET accounts for several factors that reduce project VMT. These include:

- job accessibility (within a 30-minute drive or transit travel time);
- proximity to transit (distance to nearest light rail or bus station, in miles);
- availability of Class 1 and 2 bike lanes within and adjacent to the project;
- parameters that effect walking, including sidewalks and pedestrian paths and distances to transit, commercial, and related destinations;
- job and housing density (dwelling units and jobs per acre); and
- jobs and housing mix.

Air Quality Mitigation Plan Effectiveness

As shown in Table 2, the proposed project would result in a reduction of 48 tons per year of NO_x and 12.9 tons per year of ROG emissions after mitigation. As calculated above, the reduction target is 8.7 tons per year of NO_x and 2.3 tons per year of ROG. Therefore, the proposed project's operational emissions would achieve the recommended 15 percent emission reduction guideline for ROG and would achieve the recommended 15 percent emission reduction guideline for NO_x established by the SMAQMD and would be consistent with the SIP.

TABLE 2.
AIR QUALITY MITIGATION PLAN EFFECTIVENESS

Condition	ROG, tons/year	NO _x , tons/year
Unmitigated	15.1	57.9
Mitigated	2.2	9.9
Reduction, Unmitigated minus Mitigated	12.9	48.0
Reduction Target	2.3	8.7
Meet Reduction Target?	Yes	Yes

