

Appendix J

Energy Modeling Calculations

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Near-term: Project 1 - Relocation of the Glideslope Building - San Diego County APCD Air District, Annual

**Near-term: Project 1 - Relocation of the Glideslope Building
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	0.36	1000sqft	0.01	360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project Schedule

Trips and VMT - added 5 daily trips for building construction and 1 for painting, reduced paving to 10, based on actual worker estimates.

Architectural Coating - SDAPCD Rule 67.1 Architectural Coating VOC Limits applied to indoor and exterior building paints, not to paving

Area Coating - SDAPCD Rule 67.1 Architectural Coating VOC Limits applied to indoor and exterior building paints, not to paving

Energy Use -

Water And Wastewater - Reduced indoor water use 20% to comply with Title 24 Part 11

Solid Waste - Reduced solid waste to correct for ongoing diversion efforts by CalRecycle

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	30.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	3/20/2019	12/14/2018
tblConstructionPhase	PhaseEndDate	3/6/2019	12/7/2018
tblConstructionPhase	PhaseEndDate	10/17/2018	10/26/2018
tblConstructionPhase	PhaseEndDate	3/13/2019	12/14/2018
tblConstructionPhase	PhaseEndDate	10/15/2018	10/19/2018
tblConstructionPhase	PhaseStartDate	3/14/2019	12/10/2018
tblConstructionPhase	PhaseStartDate	10/18/2018	10/29/2018
tblConstructionPhase	PhaseStartDate	10/16/2018	10/22/2018
tblConstructionPhase	PhaseStartDate	3/7/2019	12/10/2018
tblGrading	AcresOfGrading	2.50	0.50
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblSolidWaste	SolidWasteGenerationRate	0.45	0.34
tblTripsAndVMT	WorkerTripNumber	0.00	5.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00
tblWater	IndoorWaterUseRate	83,250.00	66,600.00

2.0 Emissions Summary

2.1 Overall Construction Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0271	0.2408	0.1736	2.7000e-004	3.2700e-003	0.0149	0.0182	1.3600e-003	0.0138	0.0152	0.0000	24.6284	24.6284	6.8400e-003	0.0000	24.7995
Maximum	0.0271	0.2408	0.1736	2.7000e-004	3.2700e-003	0.0149	0.0182	1.3600e-003	0.0138	0.0152	0.0000	24.6284	24.6284	6.8400e-003	0.0000	24.7995

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					
2018	9.2600e-003	0.1348	0.1803	2.7000e-004	2.0900e-003	8.3600e-003	0.0105	7.8000e-004	8.3600e-003	9.1400e-003	0.0000	24.6283	24.6283	6.8400e-003	0.0000	24.7995
Maximum	9.2600e-003	0.1348	0.1803	2.7000e-004	2.0900e-003	8.3600e-003	0.0105	7.8000e-004	8.3600e-003	9.1400e-003	0.0000	24.6283	24.6283	6.8400e-003	0.0000	24.7995

	ROG	NOx	CO	SO2	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	65.77	44.02	-3.88	0.00	36.09	43.85	42.46	42.65	39.38	39.71	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)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/13/2018	10/19/2018	5	5	
2	Grading	Grading	10/22/2018	10/26/2018	5	5	
3	Building Construction	Building Construction	10/29/2018	12/7/2018	5	30	
4	Paving	Paving	12/10/2018	12/14/2018	5	5	
5	Architectural Coating	Architectural Coating	12/10/2018	12/14/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540; Non-Residential Outdoor: 180; Striped Parking Area: 0

OffRoad Equipment

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

Trips and VMT

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

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0244	0.0106	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	2.2288	2.2288	6.9000e-004	0.0000	2.2461
Total	1.9600e-003	0.0244	0.0106	2.0000e-005	2.7000e-004	1.0500e-003	1.3200e-003	3.0000e-005	9.6000e-004	9.9000e-004	0.0000	2.2288	2.2288	6.9000e-004	0.0000	2.2461

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
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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
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	5.0000e-005	4.0000e-005	4.1000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0965	0.0965	0.0000	0.0000	0.0966
Total	5.0000e-005	4.0000e-005	4.1000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0965	0.0965	0.0000	0.0000	0.0966

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0000e-004	0.0122	0.0146	2.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.0000	2.2288	2.2288	6.9000e-004	0.0000	2.2461
Total	6.0000e-004	0.0122	0.0146	2.0000e-005	1.2000e-004	6.0000e-004	7.2000e-004	1.0000e-005	6.0000e-004	6.1000e-004	0.0000	2.2288	2.2288	6.9000e-004	0.0000	2.2461

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	5.0000e-005	4.0000e-005	4.1000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0965	0.0965	0.0000	0.0000	0.0966
Total	5.0000e-005	4.0000e-005	4.1000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0965	0.0965	0.0000	0.0000	0.0966

3.3 Grading - 2018

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					1.8800e-003	0.0000	1.8800e-003	1.0300e-003	0.0000	1.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0236	0.0194	3.0000e-005		1.5600e-003	1.5600e-003		1.4900e-003	1.4900e-003	0.0000	2.6520	2.6520	5.1000e-004	0.0000	2.6648
Total	2.6600e-003	0.0236	0.0194	3.0000e-005	1.8800e-003	1.5600e-003	3.4400e-003	1.0300e-003	1.4900e-003	2.5200e-003	0.0000	2.6520	2.6520	5.1000e-004	0.0000	2.6648

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931
Total	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931

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					8.5000e-004	0.0000	8.5000e-004	4.7000e-004	0.0000	4.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	0.0149	0.0199	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.6520	2.6520	5.1000e-004	0.0000	2.6648
Total	6.6000e-004	0.0149	0.0199	3.0000e-005	8.5000e-004	1.0000e-003	1.8500e-003	4.7000e-004	1.0000e-003	1.4700e-003	0.0000	2.6520	2.6520	5.1000e-004	0.0000	2.6648

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931
Total	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931

3.4 Building Construction - 2018

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
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Category	tons/yr										MT/yr					
	Off-Road	0.0163	0.1655	0.1163	1.7000e-004		0.0106	0.0106		9.7800e-003	9.7800e-003	0.0000	15.6018	15.6018	4.8600e-003	0.0000
Total	0.0163	0.1655	0.1163	1.7000e-004		0.0106	0.0106		9.7800e-003	9.7800e-003	0.0000	15.6018	15.6018	4.8600e-003	0.0000	15.7232

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5788	0.5788	2.0000e-005	0.0000	0.5793
Total	3.2000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5788	0.5788	2.0000e-005	0.0000	0.5793

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1900e-003	0.0919	0.1194	1.7000e-004		5.7800e-003	5.7800e-003		5.7800e-003	5.7800e-003	0.0000	15.6017	15.6017	4.8600e-003	0.0000	15.7232
Total	4.1900e-003	0.0919	0.1194	1.7000e-004		5.7800e-003	5.7800e-003		5.7800e-003	5.7800e-003	0.0000	15.6017	15.6017	4.8600e-003	0.0000	15.7232

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5788	0.5788	2.0000e-005	0.0000	0.5793
Total	3.2000e-004	2.5000e-004	2.4300e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5788	0.5788	2.0000e-005	0.0000	0.5793

3.5 Paving - 2018

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	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931
Total	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6000e-004	0.0119	0.0173	3.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.6000e-004	0.0119	0.0173	3.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931
Total	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1931

3.6 Architectural Coating - 2018

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	2.5000e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
Total	3.2500e-003	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193

Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193
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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	2.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	3.3900e-003	4.5800e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
Total	2.6500e-003	3.3900e-003	4.5800e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193

Near-term: Project 2 - Relocation of the Segmented Circle and Windssock Equipment - San Diego County APCD Air District, Annual

**Near-term: Project 2 - Relocation of the Segmented Circle and Windssock Equipment
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	6.90	1000sqft	0.16	6,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project Scedule

Grading -

Demolition -

Trips and VMT - Reduced paving worker trips by 8

Architectural Coating -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	16.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	PhaseEndDate	4/22/2018	5/14/2018
tblConstructionPhase	PhaseEndDate	4/22/2018	4/24/2018
tblConstructionPhase	PhaseEndDate	4/22/2018	4/24/2018
tblConstructionPhase	PhaseEndDate	4/22/2018	4/23/2018
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	18.00	10.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0127	0.1376	0.0908	2.3000e-004	0.0301	6.4800e-003	0.0365	5.1800e-003	6.1600e-003	0.0114	0.0000	21.1720	21.1720	3.1300e-003	0.0000	21.2502
Maximum	0.0127	0.1376	0.0908	2.3000e-004	0.0301	6.4800e-003	0.0365	5.1800e-003	6.1600e-003	0.0114	0.0000	21.1720	21.1720	3.1300e-003	0.0000	21.2502

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					
2018	4.4800e-003	0.1000	0.0927	2.3000e-004	0.0151	4.1800e-003	0.0193	2.7600e-003	4.1800e-003	6.9400e-003	0.0000	21.1720	21.1720	3.1300e-003	0.0000	21.2502
Maximum	4.4800e-003	0.1000	0.0927	2.3000e-004	0.0151	4.1800e-003	0.0193	2.7600e-003	4.1800e-003	6.9400e-003	0.0000	21.1720	21.1720	3.1300e-003	0.0000	21.2502

	ROG	NOx	CO	SO2	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	64.58	27.33	-2.14	0.00	49.75	35.49	47.22	46.72	32.14	38.85	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	4-23-2018	7-22-2018	0.1399	0.0980

		Highest	0.1399	0.0980
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/23/2018	5/14/2018	5	16	
2	Site Preparation	Site Preparation	4/23/2018	4/23/2018	5	1	
3	Grading	Grading	4/23/2018	4/24/2018	5	2	
4	Paving	Paving	4/23/2018	4/24/2018	5	2	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	239.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2018

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					0.0262	0.0000	0.0262	3.9600e-003	0.0000	3.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5100e-003	0.0754	0.0622	1.0000e-004		4.9800e-003	4.9800e-003		4.7500e-003	4.7500e-003	0.0000	8.4865	8.4865	1.6400e-003	0.0000	8.5274
Total	8.5100e-003	0.0754	0.0622	1.0000e-004	0.0262	4.9800e-003	0.0311	3.9600e-003	4.7500e-003	8.7100e-003	0.0000	8.4865	8.4865	1.6400e-003	0.0000	8.5274

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	1.1100e-003	0.0388	8.0900e-003	1.0000e-004	2.0400e-003	1.5000e-004	2.2000e-003	5.6000e-004	1.4000e-004	7.1000e-004	0.0000	9.4170	9.4170	8.5000e-004	0.0000	9.4382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.7000e-004	2.6000e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.6174	0.6174	2.0000e-005	0.0000	0.6180
Total	1.4500e-003	0.0391	0.0107	1.1000e-004	2.6800e-003	1.5000e-004	2.8500e-003	7.3000e-004	1.4000e-004	8.8000e-004	0.0000	10.0344	10.0344	8.7000e-004	0.0000	10.0562

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					0.0118	0.0000	0.0118	1.7800e-003	0.0000	1.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1200e-003	0.0477	0.0635	1.0000e-004		3.2100e-003	3.2100e-003		3.2100e-003	3.2100e-003	0.0000	8.4865	8.4865	1.6400e-003	0.0000	8.5274
Total	2.1200e-003	0.0477	0.0635	1.0000e-004	0.0118	3.2100e-003	0.0150	1.7800e-003	3.2100e-003	4.9900e-003	0.0000	8.4865	8.4865	1.6400e-003	0.0000	8.5274

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	1.1100e-003	0.0388	8.0900e-003	1.0000e-004	2.0400e-003	1.5000e-004	2.2000e-003	5.6000e-004	1.4000e-004	7.1000e-004	0.0000	9.4170	9.4170	8.5000e-004	0.0000	9.4382

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.7000e-004	2.6000e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.6174	0.6174	2.0000e-005	0.0000	0.6180
Total	1.4500e-003	0.0391	0.0107	1.1000e-004	2.6800e-003	1.5000e-004	2.8500e-003	7.3000e-004	1.4000e-004	8.8000e-004	0.0000	10.0344	10.0344	8.7000e-004	0.0000	10.0562

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-004	4.8800e-003	2.1300e-003	0.0000		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total	3.9000e-004	4.8800e-003	2.1300e-003	0.0000	2.7000e-004	2.1000e-004	4.8000e-004	3.0000e-005	1.9000e-004	2.2000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-004	2.4400e-003	2.9300e-003	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total	1.2000e-004	2.4400e-003	2.9300e-003	0.0000	1.2000e-004	1.2000e-004	2.4000e-004	1.0000e-005	1.2000e-004	1.3000e-004	0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0193	0.0193	0.0000	0.0000	0.0193

3.4 Grading - 2018

Unmitigated Construction On-Site

Off-Road	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005	3.4000e-004	4.0000e-004	7.4000e-004	1.9000e-004	4.0000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0772	0.0772	0.0000	0.0000	0.0772
Total	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0772	0.0772	0.0000	0.0000	0.0772

3.5 Paving - 2018

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	9.2000e-004	8.7400e-003	7.2200e-003	1.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	0.9708	0.9708	2.7000e-004	0.0000	0.9777
Paving	2.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	8.7400e-003	7.2200e-003	1.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	0.9708	0.9708	2.7000e-004	0.0000	0.9777

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0772	0.0772	0.0000	0.0000	0.0772
Total	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0772	0.0772	0.0000	0.0000	0.0772

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	2.2000e-004	4.7600e-003	6.9000e-003	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.9708	0.9708	2.7000e-004	0.0000	0.9777
Paving	2.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.3000e-004	4.7600e-003	6.9000e-003	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.9708	0.9708	2.7000e-004	0.0000	0.9777

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
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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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0772	0.0772	0.0000	0.0000	0.0772
Total	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0772	0.0772	0.0000	0.0000	0.0772

Near-term: Project 3 - Relocation of ARFF Facility - San Diego County APCD Air District, Annual

**Near-term: Project 3 - Relocation of ARFF Facility
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	4.70	1000sqft	0.11	4,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project schedule

Trips and VMT - Added 1 daily trips for painting. paving is corrected per CalEEMod Manual, that states workers are determined by multiplying number of pieces of equipment times 1.25. There are 7 pieces of which = 8.75 workers

Architectural Coating - SDAPCD Rule 67.1 Architectural Coating VOC Limits applied to indoor and exterior building paints, not to paving

Area Coating - SDAPCD Rule 67.1 Architectural Coating VOC Limits applied to indoor and exterior building paints, not to paving

Energy Use - no operations

Water And Wastewater - no operations

Solid Waste - no operations

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading
 Off-road Equipment - Project requirements

Grading -

Vehicle Trips - no operations

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	25.00

tblConstructionPhase	NumDays	100.00	110.00
tblConstructionPhase	NumDays	5.00	33.00
tblConstructionPhase	NumDays	1.00	10.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.97	0.00
tblEnergyUse	NT24NG	4.20	0.00
tblEnergyUse	T24E	4.66	0.00
tblEnergyUse	T24NG	15.99	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblSolidWaste	SolidWasteGenerationRate	5.83	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblWater	IndoorWaterUseRate	1,086,875.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1113	0.7791	0.6243	9.9000e-004	6.4800e-003	0.0464	0.0529	1.3100e-003	0.0429	0.0442	0.0000	88.3521	88.3521	0.0255	0.0000	88.9887
Maximum	0.1113	0.7791	0.6243	9.9000e-004	6.4800e-003	0.0464	0.0529	1.3100e-003	0.0429	0.0442	0.0000	88.3521	88.3521	0.0255	0.0000	88.9887

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					
2019	0.0567	0.4902	0.6523	9.9000e-004	5.0200e-003	0.0302	0.0352	1.1500e-003	0.0302	0.0314	0.0000	88.3520	88.3520	0.0255	0.0000	88.9886
Maximum	0.0567	0.4902	0.6523	9.9000e-004	5.0200e-003	0.0302	0.0352	1.1500e-003	0.0302	0.0314	0.0000	88.3520	88.3520	0.0255	0.0000	88.9886

	ROG	NOx	CO	SO2	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	49.03	37.08	-4.49	0.00	22.53	34.83	33.32	12.21	29.50	28.96	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	1-7-2019	4-6-2019	0.3480	0.2071
2	4-7-2019	7-6-2019	0.3549	0.2129
3	7-7-2019	9-30-2019	0.1838	0.1252
		Highest	0.3549	0.2129

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/7/2019	1/18/2019	5	10	
2	Building Construction	Building Construction	3/7/2019	8/7/2019	5	110	Assumed approx 5 months for construction

3	Paving	Paving	1/19/2019	3/6/2019	5	33	Concrete Curing 28 days, assumed 5 days to pour
4	Architectural Coating	Architectural Coating	8/8/2019	9/11/2019	5	25	Assumed 1 month for coatings

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,050; Non-Residential Outdoor: 2,350; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-003	0.0446	0.0207	5.0000e-005		1.8400e-003	1.8400e-003		1.6900e-003	1.6900e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126
Total	3.6000e-003	0.0446	0.0207	5.0000e-005	2.6500e-003	1.8400e-003	4.4900e-003	2.9000e-004	1.6900e-003	1.9800e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	7.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1871	0.1871	1.0000e-005	0.0000	0.1873
Total	1.0000e-004	8.0000e-005	7.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1871	0.1871	1.0000e-005	0.0000	0.1873

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1900e-003	0.0000	1.1900e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1900e-003	0.0244	0.0293	5.0000e-005		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126
Total	1.1900e-003	0.0244	0.0293	5.0000e-005	1.1900e-003	1.2000e-003	2.3900e-003	1.3000e-004	1.2000e-003	1.3300e-003	0.0000	4.3779	4.3779	1.3900e-003	0.0000	4.4126

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	7.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1871	0.1871	1.0000e-005	0.0000	0.1873
Total	1.0000e-004	8.0000e-005	7.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1871	0.1871	1.0000e-005	0.0000	0.1873

3.3 Building Construction - 2019

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	0.0527	0.5401	0.4149	6.3000e-004		0.0333	0.0333		0.0306	0.0306	0.0000	56.2653	56.2653	0.0178	0.0000	56.7103
Total	0.0527	0.5401	0.4149	6.3000e-004		0.0333	0.0333		0.0306	0.0306	0.0000	56.2653	56.2653	0.0178	0.0000	56.7103

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	2.6000e-004	6.9000e-003	1.8500e-003	2.0000e-005	3.7000e-004	5.0000e-005	4.1000e-004	1.1000e-004	5.0000e-005	1.5000e-004	0.0000	1.4612	1.4612	1.2000e-004	0.0000	1.4642
Worker	4.3000e-004	3.3000e-004	3.2200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8234	0.8234	3.0000e-005	0.0000	0.8240
Total	6.9000e-004	7.2300e-003	5.0700e-003	3.0000e-005	1.2500e-003	6.0000e-005	1.3000e-003	3.4000e-004	6.0000e-005	3.9000e-004	0.0000	2.2846	2.2846	1.5000e-004	0.0000	2.2882

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	0.0154	0.3371	0.4379	6.3000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	56.2652	56.2652	0.0178	0.0000	56.7102
Total	0.0154	0.3371	0.4379	6.3000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	56.2652	56.2652	0.0178	0.0000	56.7102

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	2.6000e-004	6.9000e-003	1.8500e-003	2.0000e-005	3.7000e-004	5.0000e-005	4.1000e-004	1.1000e-004	5.0000e-005	1.5000e-004	0.0000	1.4612	1.4612	1.2000e-004	0.0000	1.4642
Worker	4.3000e-004	3.3000e-004	3.2200e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8234	0.8234	3.0000e-005	0.0000	0.8240
Total	6.9000e-004	7.2300e-003	5.0700e-003	3.0000e-005	1.2500e-003	6.0000e-005	1.3000e-003	3.4000e-004	6.0000e-005	3.9000e-004	0.0000	2.2846	2.2846	1.5000e-004	0.0000	2.2882

3.4 Paving - 2019

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	0.0171	0.1632	0.1512	2.3000e-004		9.5500e-003	9.5500e-003		8.8500e-003	8.8500e-003	0.0000	19.8226	19.8226	5.7900e-003	0.0000	19.9673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0171	0.1632	0.1512	2.3000e-004		9.5500e-003	9.5500e-003		8.8500e-003	8.8500e-003	0.0000	19.8226	19.8226	5.7900e-003	0.0000	19.9673

Unmitigated Construction Off-Site

Near-term: Project 4 - Construction of EMAS - San Diego County APCD Air District, Annual

**Near-term: Project 4 - Construction of EMAS
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	52.50	1000sqft	1.21	52,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Import and export would be done using 20 cubic yard belly-dump semi-trucks, not 12 yard dumptrucks. 280,000/20=14,000

Grading -

Area Coating -

Energy Use -

Solid Waste -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading

activities requires water active grading sites

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	55.00
tblConstructionPhase	NumDays	4.00	25.00
tblConstructionPhase	NumDays	2.00	130.00
tblGrading	MaterialExported	0.00	190,000.00
tblGrading	MaterialImported	0.00	190,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	HaulingTripNumber	47,500.00	14,000.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-6-2020	4-5-2020	1.6647	1.3024
2	4-6-2020	7-5-2020	1.6185	1.2642
3	7-6-2020	9-30-2020	0.5487	0.3567
		Highest	1.6647	1.3024

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2020	7/3/2020	5	130	Earthwork
2	Grading	Grading	7/6/2020	8/7/2020	5	25	Grading
3	Building Construction	Building Construction	8/10/2020	10/23/2020	5	55	Retaining wall

Acres of Grading (Site Preparation Phase): 65

Acres of Grading (Grading Phase): 9.38

Acres of Paving: 1.21

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	14,000.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	22.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 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					0.4037	0.0000	0.4037	0.1960	0.0000	0.1960	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1059	1.1925	0.5011	1.1200e-003		0.0534	0.0534		0.0491	0.0491	0.0000	98.3223	98.3223	0.0318	0.0000	99.1173
Total	0.1059	1.1925	0.5011	1.1200e-003	0.4037	0.0534	0.4570	0.1960	0.0491	0.2451	0.0000	98.3223	98.3223	0.0318	0.0000	99.1173

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	0.0560	1.9912	0.4561	5.4400e-003	0.1198	6.2900e-003	0.1261	0.0329	6.0100e-003	0.0389	0.0000	539.8742	539.8742	0.0486	0.0000	541.0896
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9200e-003	1.4200e-003	0.0139	4.0000e-005	4.1700e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7694	3.7694	1.1000e-004	0.0000	3.7722
Total	0.0579	1.9926	0.4700	5.4800e-003	0.1240	6.3200e-003	0.1303	0.0340	6.0400e-003	0.0401	0.0000	543.6436	543.6436	0.0487	0.0000	544.8618

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					0.1817	0.0000	0.1817	0.0882	0.0000	0.0882	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0274	0.5466	0.6384	1.1200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	98.3222	98.3222	0.0318	0.0000	99.1172
Total	0.0274	0.5466	0.6384	1.1200e-003	0.1817	0.0244	0.2060	0.0882	0.0244	0.1126	0.0000	98.3222	98.3222	0.0318	0.0000	99.1172

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	0.0560	1.9912	0.4561	5.4400e-003	0.1198	6.2900e-003	0.1261	0.0329	6.0100e-003	0.0389	0.0000	539.8742	539.8742	0.0486	0.0000	541.0896

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9200e-003	1.4200e-003	0.0139	4.0000e-005	4.1700e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7694	3.7694	1.1000e-004	0.0000	3.7722
Total	0.0579	1.9926	0.4700	5.4800e-003	0.1240	6.3200e-003	0.1303	0.0340	6.0400e-003	0.0401	0.0000	543.6436	543.6436	0.0487	0.0000	544.8618

3.3 Grading - 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					0.0614	0.0000	0.0614	0.0316	0.0000	0.0316	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1886	0.0807	1.8000e-004		8.5500e-003	8.5500e-003		7.8700e-003	7.8700e-003	0.0000	15.4870	15.4870	5.0100e-003	0.0000	15.6122
Total	0.0169	0.1886	0.0807	1.8000e-004	0.0614	8.5500e-003	0.0700	0.0316	7.8700e-003	0.0394	0.0000	15.4870	15.4870	5.0100e-003	0.0000	15.6122

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	2.6800e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7249	0.7249	2.0000e-005	0.0000	0.7254
Total	3.7000e-004	2.7000e-004	2.6800e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7249	0.7249	2.0000e-005	0.0000	0.7254

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					0.0276	0.0000	0.0276	0.0142	0.0000	0.0142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3100e-003	0.0863	0.1011	1.8000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	15.4870	15.4870	5.0100e-003	0.0000	15.6122
Total	4.3100e-003	0.0863	0.1011	1.8000e-004	0.0276	3.8800e-003	0.0315	0.0142	3.8800e-003	0.0181	0.0000	15.4870	15.4870	5.0100e-003	0.0000	15.6122

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	2.6800e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7249	0.7249	2.0000e-005	0.0000	0.7254
Total	3.7000e-004	2.7000e-004	2.6800e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7249	0.7249	2.0000e-005	0.0000	0.7254

3.4 Building Construction - 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					
Off-Road	0.0588	0.4334	0.3870	6.4000e-004		0.0239	0.0239		0.0230	0.0230	0.0000	52.6939	52.6939	0.0102	0.0000	52.9479
Total	0.0588	0.4334	0.3870	6.4000e-004		0.0239	0.0239		0.0230	0.0230	0.0000	52.6939	52.6939	0.0102	0.0000	52.9479

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	9.4000e-004	0.0282	7.5000e-003	7.0000e-005	1.6400e-003	1.4000e-004	1.7800e-003	4.7000e-004	1.3000e-004	6.1000e-004	0.0000	6.5306	6.5306	5.0000e-004	0.0000	6.5431
Worker	2.2300e-003	1.6500e-003	0.0162	5.0000e-005	4.8500e-003	3.0000e-005	4.8900e-003	1.2900e-003	3.0000e-005	1.3200e-003	0.0000	4.3855	4.3855	1.3000e-004	0.0000	4.3888
Total	3.1700e-003	0.0299	0.0237	1.2000e-004	6.4900e-003	1.7000e-004	6.6700e-003	1.7600e-003	1.6000e-004	1.9300e-003	0.0000	10.9161	10.9161	6.3000e-004	0.0000	10.9319

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	0.0184	0.3499	0.3946	6.4000e-004		0.0214	0.0214		0.0214	0.0214	0.0000	52.6938	52.6938	0.0102	0.0000	52.9479

Total	0.0184	0.3499	0.3946	6.4000e-004		0.0214	0.0214		0.0214	0.0214	0.0000	52.6938	52.6938	0.0102	0.0000	52.9479
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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	9.4000e-004	0.0282	7.5000e-003	7.0000e-005	1.6400e-003	1.4000e-004	1.7800e-003	4.7000e-004	1.3000e-004	6.1000e-004	0.0000	6.5306	6.5306	5.0000e-004	0.0000	6.5431
Worker	2.2300e-003	1.6500e-003	0.0162	5.0000e-005	4.8500e-003	3.0000e-005	4.8900e-003	1.2900e-003	3.0000e-005	1.3200e-003	0.0000	4.3855	4.3855	1.3000e-004	0.0000	4.3888
Total	3.1700e-003	0.0299	0.0237	1.2000e-004	6.4900e-003	1.7000e-004	6.6700e-003	1.7600e-003	1.6000e-004	1.9300e-003	0.0000	10.9161	10.9161	6.3000e-004	0.0000	10.9319

613.36	0.04	24.5344	3189.472
691.6	0.04	27.664	3596.32
287.12	0.04	11.4848	1493.024
460.02	0.04	18.4008	460.02
592.8	0.04	23.712	592.8
251.23	0.04	10.0492	251.23
401.94	0.04	16.0776	884.268
213.6	0.04	8.544	469.92
497.28	0.04	19.8912	1094.016

215.34	0.04	8.6136	473.748
496.8	0.04	19.872	1092.96
			13597.78

172.8	0	280000	3818.88	6188000
172.8	0	0	3818.88	0
475.2	131.4	0	10501.92	2903.94
820.8	131.4	280000		

Near-term: Project 5 - Relocation Vehicle Service Road - San Diego County APCD Air District, Annual

**Near-term: Project 5 - Relocation Vehicle Service Road
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	54.00	1000sqft	1.24	54,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project schedule

Demolition -

Trips and VMT -

Area Coating - SDAPCD Rule 67.1 Architectural Coating VOC Limits applied to indoor and exterior building paints, not to paving

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading equipment requires water active grading sites

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	10.00

tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	PhaseEndDate	4/18/2022	7/23/2021
tblConstructionPhase	PhaseEndDate	7/2/2021	6/25/2021
tblConstructionPhase	PhaseEndDate	7/12/2021	7/9/2021
tblConstructionPhase	PhaseEndDate	5/2/2022	7/30/2021
tblConstructionPhase	PhaseEndDate	7/6/2021	7/2/2021
tblConstructionPhase	PhaseStartDate	7/13/2021	7/12/2021
tblConstructionPhase	PhaseStartDate	7/7/2021	7/5/2021
tblConstructionPhase	PhaseStartDate	4/19/2022	7/26/2021
tblConstructionPhase	PhaseStartDate	7/3/2021	6/28/2021
tblGrading	AcresOfGrading	1.88	1.50
tblGrading	AcresOfGrading	2.50	1.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

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					
2021	0.0382	0.4013	0.2585	6.8000e-004	0.1020	0.0161	0.1180	0.0261	0.0150	0.0411	0.0000	61.5951	61.5951	0.0111	0.0000	61.8727

Maximum	0.0382	0.4013	0.2585	6.8000e-004	0.1020	0.0161	0.1180	0.0261	0.0150	0.0411	0.0000	61.5951	61.5951	0.0111	0.0000	61.8727
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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					
2021	0.0152	0.2927	0.2808	6.8000e-004	0.0502	0.0120	0.0622	0.0129	0.0120	0.0249	0.0000	61.5951	61.5951	0.0111	0.0000	61.8727
Maximum	0.0152	0.2927	0.2808	6.8000e-004	0.0502	0.0120	0.0622	0.0129	0.0120	0.0249	0.0000	61.5951	61.5951	0.0111	0.0000	61.8727

	ROG	NOx	CO	SO2	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	60.08	27.06	-8.64	0.00	50.73	25.30	47.26	50.46	20.29	39.42	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	6-7-2021	9-6-2021	0.3713	0.2625
		Highest	0.3713	0.2625

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/7/2021	6/25/2021	5	15	6000 SY full depth demolition
2	Site Preparation	Site Preparation	6/28/2021	7/2/2021	5	5	
3	Grading	Grading	7/5/2021	7/9/2021	5	5	
4	Building Construction	Building Construction	7/12/2021	7/23/2021	5	10	Retaining wall

5	Paving	Paving	7/26/2021	7/30/2021	5	5 6000 SY pavement
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Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.24

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	623.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 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					0.0683	0.0000	0.0683	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1477	0.1087	1.8000e-004		7.8100e-003	7.8100e-003		7.2900e-003	7.2900e-003	0.0000	15.8035	15.8035	4.0400e-003	0.0000	15.9045
Total	0.0150	0.1477	0.1087	1.8000e-004	0.0683	7.8100e-003	0.0761	0.0103	7.2900e-003	0.0176	0.0000	15.8035	15.8035	4.0400e-003	0.0000	15.9045

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
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Worker	3.4000e-004	2.4000e-004	2.4400e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.6830	0.6830	2.0000e-005	0.0000	0.6835
Total	2.6800e-003	0.0816	0.0225	2.5000e-004	6.1100e-003	2.6000e-004	6.3700e-003	1.6700e-003	2.5000e-004	1.9100e-003	0.0000	24.4075	24.4075	2.1600e-003	0.0000	24.4615

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0137	0.0000	0.0137	7.3000e-003	0.0000	7.3000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0436	0.0189	4.0000e-005		1.9100e-003	1.9100e-003		1.7600e-003	1.7600e-003	0.0000	3.7796	3.7796	1.2200e-003	0.0000	3.8102
Total	3.8900e-003	0.0436	0.0189	4.0000e-005	0.0137	1.9100e-003	0.0156	7.3000e-003	1.7600e-003	9.0600e-003	0.0000	3.7796	3.7796	1.2200e-003	0.0000	3.8102

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402
Total	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402

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					6.1700e-003	0.0000	6.1700e-003	3.2800e-003	0.0000	3.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e-003	0.0210	0.0246	4.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	3.7796	3.7796	1.2200e-003	0.0000	3.8102
Total	1.0500e-003	0.0210	0.0246	4.0000e-005	6.1700e-003	9.4000e-004	7.1100e-003	3.2800e-003	9.4000e-004	4.2200e-003	0.0000	3.7796	3.7796	1.2200e-003	0.0000	3.8102

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402
Total	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402

3.4 Grading - 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
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Category	tons/yr										MT/yr					
Fugitive Dust					0.0121	0.0000	0.0121	6.2900e-003	0.0000	6.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2200e-003	0.0358	0.0158	4.0000e-005		1.5900e-003	1.5900e-003		1.4700e-003	1.4700e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1210
Total	3.2200e-003	0.0358	0.0158	4.0000e-005	0.0121	1.5900e-003	0.0137	6.2900e-003	1.4700e-003	7.7600e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1210

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402
Total	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.4400e-003	0.0000	5.4400e-003	2.8300e-003	0.0000	2.8300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	0.0173	0.0202	4.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1209

Total	8.6000e-004	0.0173	0.0202	4.0000e-005	5.4400e-003	7.8000e-004	6.2200e-003	2.8300e-003	7.8000e-004	3.6100e-003	0.0000	3.0959	3.0959	1.0000e-003	0.0000	3.1209
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402
Total	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1401	0.1401	0.0000	0.0000	0.1402

3.5 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	9.0600e-003	0.0682	0.0645	1.1000e-004		3.4200e-003	3.4200e-003		3.3000e-003	3.3000e-003	0.0000	9.0774	9.0774	1.6200e-003	0.0000	9.1179
Total	9.0600e-003	0.0682	0.0645	1.1000e-004		3.4200e-003	3.4200e-003		3.3000e-003	3.3000e-003	0.0000	9.0774	9.0774	1.6200e-003	0.0000	9.1179

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.6200e-003	1.2300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.1765	1.1765	9.0000e-005	0.0000	1.1787
Worker	4.0000e-004	2.9000e-004	2.8700e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.8056	0.8056	2.0000e-005	0.0000	0.8062
Total	5.4000e-004	4.9100e-003	4.1000e-003	2.0000e-005	1.2200e-003	2.0000e-005	1.2400e-003	3.4000e-004	2.0000e-005	3.5000e-004	0.0000	1.9821	1.9821	1.1000e-004	0.0000	1.9848

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	3.2000e-003	0.0604	0.0674	1.1000e-004		3.6600e-003	3.6600e-003		3.6600e-003	3.6600e-003	0.0000	9.0774	9.0774	1.6200e-003	0.0000	9.1179
Total	3.2000e-003	0.0604	0.0674	1.1000e-004		3.6600e-003	3.6600e-003		3.6600e-003	3.6600e-003	0.0000	9.0774	9.0774	1.6200e-003	0.0000	9.1179

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.6200e-003	1.2300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.1765	1.1765	9.0000e-005	0.0000	1.1787
Worker	4.0000e-004	2.9000e-004	2.8700e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.8056	0.8056	2.0000e-005	0.0000	0.8062
Total	5.4000e-004	4.9100e-003	4.1000e-003	2.0000e-005	1.2200e-003	2.0000e-005	1.2400e-003	3.4000e-004	2.0000e-005	3.5000e-004	0.0000	1.9821	1.9821	1.1000e-004	0.0000	1.9848

3.6 Paving - 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	1.9300e-003	0.0194	0.0221	3.0000e-005		1.0400e-003	1.0400e-003		9.6000e-004	9.6000e-004	0.0000	2.9412	2.9412	9.3000e-004	0.0000	2.9646
Paving	1.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.5500e-003	0.0194	0.0221	3.0000e-005		1.0400e-003	1.0400e-003		9.6000e-004	9.6000e-004	0.0000	2.9412	2.9412	9.3000e-004	0.0000	2.9646

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2277	0.2277	1.0000e-005	0.0000	0.2278

Total	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2277	0.2277	1.0000e-005	0.0000	0.2278
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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	8.0000e-004	0.0166	0.0246	3.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	2.9412	2.9412	9.3000e-004	0.0000	2.9646
Paving	1.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4200e-003	0.0166	0.0246	3.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	2.9412	2.9412	9.3000e-004	0.0000	2.9646

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2277	0.2277	1.0000e-005	0.0000	0.2278
Total	1.1000e-004	8.0000e-005	8.1000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2277	0.2277	1.0000e-005	0.0000	0.2278

Near-term: Project 6 - Relocation of Lighting Vault - San Diego County APCD Air District, Annual

**Near-term: Project 6 - Relocation of Lighting Vault
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	0.10	1000sqft	0.00	100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project Schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Required equipmnet not loaded in on trenching

Trips and VMT - Added 1.25 times the pieces of equipment for the building phase, then time 2 for total worker trips/day.

Energy Use - no operations

Water And Wastewater - no operations

Solid Waste - no operations

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading

Vehicle Trips - no operations

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	0.00	35.00
tblConstructionPhase	NumDays	0.00	10.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.97	0.00
tblEnergyUse	NT24NG	4.20	0.00
tblEnergyUse	T24E	4.66	0.00
tblEnergyUse	T24NG	15.99	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

tblSolidWaste	SolidWasteGenerationRate	0.12	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	14.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblWater	IndoorWaterUseRate	23,125.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0225	0.2251	0.2101	3.8000e-004	6.5300e-003	0.0108	0.0173	2.8000e-003	9.9900e-003	0.0128	0.0000	33.6112	33.6112	9.4600e-003	0.0000	33.8477
Maximum	0.0225	0.2251	0.2101	3.8000e-004	6.5300e-003	0.0108	0.0173	2.8000e-003	9.9900e-003	0.0128	0.0000	33.6112	33.6112	9.4600e-003	0.0000	33.8477

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0107	0.1860	0.2445	3.8000e-004	4.4600e-003	0.0109	0.0153	1.6700e-003	0.0108	0.0124	0.0000	33.6112	33.6112	9.4600e-003	0.0000	33.8477

Maximum	0.0107	0.1860	0.2445	3.8000e-004	4.4600e-003	0.0109	0.0153	1.6700e-003	0.0108	0.0124	0.0000	33.6112	33.6112	9.4600e-003	0.0000	33.8477
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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
Percent Reduction	52.60	17.39	-16.37	0.00	31.70	-0.56	11.61	40.36	-7.81	2.74	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	1-3-2022	4-2-2022	0.2317	0.1840
		Highest	0.2317	0.1840

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	1/3/2022	1/28/2022	5	20	Airfield electrical re-routing
2	Grading	Grading	1/31/2022	2/11/2022	5	10	Mobilization/staking - 2 weeks
3	Building Construction	Building Construction	2/14/2022	4/1/2022	5	35	Construct new facility, 100 SF

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Graders	1	8.00	187	0.41
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73

Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8000e-003	0.0693	0.0396	1.0000e-004		2.5700e-003	2.5700e-003		2.3700e-003	2.3700e-003	0.0000	8.5504	8.5504	2.7700e-003	0.0000	8.6195
Total	5.8000e-003	0.0693	0.0396	1.0000e-004		2.5700e-003	2.5700e-003		2.3700e-003	2.3700e-003	0.0000	8.5504	8.5504	2.7700e-003	0.0000	8.6195

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377
Total	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377

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	2.5600e-003	0.0486	0.0584	1.0000e-004		2.3400e-003	2.3400e-003		2.3300e-003	2.3300e-003	0.0000	8.5504	8.5504	2.7700e-003	0.0000	8.6195
Total	2.5600e-003	0.0486	0.0584	1.0000e-004		2.3400e-003	2.3400e-003		2.3300e-003	2.3300e-003	0.0000	8.5504	8.5504	2.7700e-003	0.0000	8.6195

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
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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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377
Total	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7600e-003	0.0000	3.7600e-003	2.0700e-003	0.0000	2.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0321	0.0374	6.0000e-005		1.6900e-003	1.6900e-003		1.6100e-003	1.6100e-003	0.0000	5.2068	5.2068	9.6000e-004	0.0000	5.2308
Total	3.5500e-003	0.0321	0.0374	6.0000e-005	3.7600e-003	1.6900e-003	5.4500e-003	2.0700e-003	1.6100e-003	3.6800e-003	0.0000	5.2068	5.2068	9.6000e-004	0.0000	5.2308

Unmitigated Construction Off-Site

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

Worker	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377
Total	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6900e-003	0.0000	1.6900e-003	9.3000e-004	0.0000	9.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4600e-003	0.0297	0.0395	6.0000e-005		1.9600e-003	1.9600e-003		1.9500e-003	1.9500e-003	0.0000	5.2068	5.2068	9.6000e-004	0.0000	5.2308
Total	1.4600e-003	0.0297	0.0395	6.0000e-005	1.6900e-003	1.9600e-003	3.6500e-003	9.3000e-004	1.9500e-003	2.8800e-003	0.0000	5.2068	5.2068	9.6000e-004	0.0000	5.2308

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377
Total	1.6000e-004	1.1000e-004	1.1600e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3374	0.3374	1.0000e-005	0.0000	0.3377

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	0.0120	0.1230	0.1252	2.0000e-004		6.5100e-003	6.5100e-003		5.9900e-003	5.9900e-003	0.0000	17.5259	17.5259	5.6700e-003	0.0000	17.6676
Total	0.0120	0.1230	0.1252	2.0000e-004		6.5100e-003	6.5100e-003		5.9900e-003	5.9900e-003	0.0000	17.5259	17.5259	5.6700e-003	0.0000	17.6676

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	8.1000e-004	5.5000e-004	5.6800e-003	2.0000e-005	1.9600e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.6534	1.6534	5.0000e-005	0.0000	1.6545
Total	8.1000e-004	5.5000e-004	5.6800e-003	2.0000e-005	1.9600e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.6534	1.6534	5.0000e-005	0.0000	1.6545

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
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Category	tons/yr										MT/yr					
Off-Road	5.5100e-003	0.1069	0.1386	2.0000e-004		6.5300e-003	6.5300e-003		6.4800e-003	6.4800e-003	0.0000	17.5258	17.5258	5.6700e-003	0.0000	17.6675
Total	5.5100e-003	0.1069	0.1386	2.0000e-004		6.5300e-003	6.5300e-003		6.4800e-003	6.4800e-003	0.0000	17.5258	17.5258	5.6700e-003	0.0000	17.6675

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	8.1000e-004	5.5000e-004	5.6800e-003	2.0000e-005	1.9600e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.6534	1.6534	5.0000e-005	0.0000	1.6545
Total	8.1000e-004	5.5000e-004	5.6800e-003	2.0000e-005	1.9600e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.6534	1.6534	5.0000e-005	0.0000	1.6545

613.36	0.04	24.5344	490.688
287.12	0.04	11.4848	229.696
473.04	0.04	18.9216	189.216

98.8	0.04	3.952	39.52
430.68	0.04	17.2272	172.272
267.96	0.04	10.7184	375.144
213.6	0.04	8.544	299.04
574.24	0.04	22.9696	803.936

2599.512

108	0	0	2386.8	0
216	0	0	4773.6	0
302.4	0	0	6683.04	0
626.4	0	0	13843.44	

Near-term: Project 7 - 200' Extension of Runway 06-24 and Taxiway A - San Diego County APCD Air District, Annual

**Near-term: Project 7 - 200' Extension of Runway 06-24 and Taxiway A
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	27.00	1000sqft	0.62	27,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project Schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	3.00
tblConstructionPhase	NumDays	1.00	40.00
tblConstructionPhase	PhaseEndDate	4/17/2024	7/5/2024
tblConstructionPhase	PhaseEndDate	9/11/2024	7/10/2024
tblConstructionPhase	PhaseEndDate	4/15/2024	5/24/2024
tblConstructionPhase	PhaseStartDate	4/16/2024	5/27/2024
tblConstructionPhase	PhaseStartDate	9/5/2024	7/8/2024
tblConstructionPhase	PhaseStartDate	4/13/2024	4/1/2024
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2024	6-30-2024	0.2772	0.3622
2	7-1-2024	9-30-2024	0.0179	0.0172
		Highest	0.2772	0.3622

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2024	5/24/2024	5	40	Drilled displacement columns
2	Grading	Grading	5/27/2024	7/5/2024	5	30	New construction grading and RSA adjustments
3	Paving	Paving	7/8/2024	7/10/2024	5	3	3000 CY new pavement

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.62

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	2	8.00	221	0.50
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 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					
Fugitive Dust					0.0106	0.0000	0.0106	1.1500e-003	0.0000	1.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0184	0.1885	0.1598	5.8000e-004		6.5400e-003	6.5400e-003		6.0200e-003	6.0200e-003	0.0000	50.5515	50.5515	0.0164	0.0000	50.9602
Total	0.0184	0.1885	0.1598	5.8000e-004	0.0106	6.5400e-003	0.0172	1.1500e-003	6.0200e-003	7.1700e-003	0.0000	50.5515	50.5515	0.0164	0.0000	50.9602

Unmitigated Construction Off-Site

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	4.0200e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2470	1.2470	3.0000e-005	0.0000	1.2478
Total	5.9000e-004	3.8000e-004	4.0200e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2470	1.2470	3.0000e-005	0.0000	1.2478

3.3 Grading - 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					
Fugitive Dust					0.0113	0.0000	0.0113	6.2100e-003	0.0000	6.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2300e-003	0.0822	0.1109	1.8000e-004		3.7600e-003	3.7600e-003		3.5900e-003	3.5900e-003	0.0000	15.6311	15.6311	2.8300e-003	0.0000	15.7018
Total	9.2300e-003	0.0822	0.1109	1.8000e-004	0.0113	3.7600e-003	0.0151	6.2100e-003	3.5900e-003	9.8000e-003	0.0000	15.6311	15.6311	2.8300e-003	0.0000	15.7018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.8000e-004	3.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9353	0.9353	2.0000e-005	0.0000	0.9359
Total	4.4000e-004	2.8000e-004	3.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9353	0.9353	2.0000e-005	0.0000	0.9359

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0800e-003	0.0000	5.0800e-003	2.7900e-003	0.0000	2.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0895	0.1191	1.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003	0.0000	15.6311	15.6311	2.8300e-003	0.0000	15.7018
Total	3.9800e-003	0.0895	0.1191	1.8000e-004	5.0800e-003	6.0300e-003	0.0111	2.7900e-003	6.0300e-003	8.8200e-003	0.0000	15.6311	15.6311	2.8300e-003	0.0000	15.7018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.8000e-004	3.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9353	0.9353	2.0000e-005	0.0000	0.9359
Total	4.4000e-004	2.8000e-004	3.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9353	0.9353	2.0000e-005	0.0000	0.9359

3.4 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	8.9000e-004	7.8400e-003	0.0106	2.0000e-005		3.6000e-004	3.6000e-004		3.4000e-004	3.4000e-004	0.0000	1.4101	1.4101	4.1000e-004	0.0000	1.4204
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7000e-003	7.8400e-003	0.0106	2.0000e-005		3.6000e-004	3.6000e-004		3.4000e-004	3.4000e-004	0.0000	1.4101	1.4101	4.1000e-004	0.0000	1.4204

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	8.0000e-005	5.0000e-005	5.4000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1684	0.1684	0.0000	0.0000	0.1685
Total	8.0000e-005	5.0000e-005	5.4000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1684	0.1684	0.0000	0.0000	0.1685

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	3.4000e-004	7.1400e-003	0.0104	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.4101	1.4101	4.1000e-004	0.0000	1.4204

Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1500e-003	7.1400e-003	0.0104	2.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.4101	1.4101	4.1000e-004	0.0000	1.4204

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	8.0000e-005	5.0000e-005	5.4000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1684	0.1684	0.0000	0.0000	0.1685
Total	8.0000e-005	5.0000e-005	5.4000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1684	0.1684	0.0000	0.0000	0.1685

Intermediate: Project 8 - Removal of Fuel Tank on North Apron - San Diego County APCD Air District, Annual

**Intermediate: Project 8 - Removal of Fuel Tank on North Apron
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	0.40	1000sqft	0.01	400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase -

Demolition -

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading equipment requires water active grading sites

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

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					
2029	2.9900e-003	0.0256	0.0376	6.0000e-005	5.3000e-004	1.0500e-003	1.5800e-003	1.3000e-004	1.0100e-003	1.1300e-003	0.0000	5.5100	5.5100	9.4000e-004	0.0000	5.5336
Maximum	2.9900e-003	0.0256	0.0376	6.0000e-005	5.3000e-004	1.0500e-003	1.5800e-003	1.3000e-004	1.0100e-003	1.1300e-003	0.0000	5.5100	5.5100	9.4000e-004	0.0000	5.5336

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					

2029	1.4500e-003	0.0300	0.0405	6.0000e-005	4.6000e-004	2.0100e-003	2.4700e-003	1.2000e-004	2.0100e-003	2.1300e-003	0.0000	5.5100	5.5100	9.4000e-004	0.0000	5.5336
Maximum	1.4500e-003	0.0300	0.0405	6.0000e-005	4.6000e-004	2.0100e-003	2.4700e-003	1.2000e-004	2.0100e-003	2.1300e-003	0.0000	5.5100	5.5100	9.4000e-004	0.0000	5.5336

	ROG	NOx	CO	SO2	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	51.51	-16.85	-7.63	0.00	13.21	-91.43	-56.33	7.69	-99.01	-88.50	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	4-23-2029	7-22-2029	0.0245	0.0269
		Highest	0.0245	0.0269

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/23/2029	5/4/2029	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	1.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2029

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					1.2000e-004	0.0000	1.2000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0255	0.0368	6.0000e-005		1.0500e-003	1.0500e-003		1.0000e-003	1.0000e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	2.8700e-003	0.0255	0.0368	6.0000e-005	1.2000e-004	1.0500e-003	1.1700e-003	2.0000e-005	1.0000e-003	1.0200e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357

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	7.0000e-005	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0351	0.0351	0.0000	0.0000	0.0351

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	7.5000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2626	0.2626	1.0000e-005	0.0000	0.2628
Total	1.2000e-004	1.4000e-004	7.8000e-004	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2977	0.2977	1.0000e-005	0.0000	0.2979

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	0.0298	0.0397	6.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	1.3300e-003	0.0298	0.0397	6.0000e-005	5.0000e-005	2.0100e-003	2.0600e-003	1.0000e-005	2.0100e-003	2.0200e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357

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	7.0000e-005	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0351	0.0351	0.0000	0.0000	0.0351
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	7.5000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2626	0.2626	1.0000e-005	0.0000	0.2628
Total	1.2000e-004	1.4000e-004	7.8000e-004	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2977	0.2977	1.0000e-005	0.0000	0.2979

Near-term: Project 9 - Removal of North Apron and TWY N - San Diego County APCD Air District, Annual

**Near-term: Project 9 - Removal of North Apron and TWY N
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	8.88	Acre	8.88	386,812.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase -

Trips and VMT - Hauling would be conducted by 20 CY trucks. 60,501 tons, 1 CY = 2 tons, = 30,251 CY / 20 CY Trucks = 1512.5 ~ 1513 truck trips.

Demolition -

Energy Use -

Land Use Change -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading

Off-road Equipment - BAsed on Project Requirements

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	HaulingTripNumber	5,982.00	1,513.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.1318	1.2712	1.2283	2.9300e-003	0.6756	0.0514	0.7270	0.1047	0.0478	0.1525	0.0000	263.5609	263.5609	0.0621	0.0000	265.1122
Maximum	0.1318	1.2712	1.2283	2.9300e-003	0.6756	0.0514	0.7270	0.1047	0.0478	0.1525	0.0000	263.5609	263.5609	0.0621	0.0000	265.1122

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										M1/yr					
2025	0.1206	1.2627	1.2788	2.9300e-003	0.3151	0.0515	0.3666	0.0501	0.0485	0.0986	0.0000	263.5607	263.5607	0.0621	0.0000	265.1119
Maximum	0.1206	1.2627	1.2788	2.9300e-003	0.3151	0.0515	0.3666	0.0501	0.0485	0.0986	0.0000	263.5607	263.5607	0.0621	0.0000	265.1119

	ROG	NOx	CO	SO2	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	8.51	0.67	-4.11	0.00	53.36	-0.19	49.57	52.12	-1.42	35.35	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)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/7/2025	5/2/2025	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.88

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	6	8.00	81	0.73
Demolition	Excavators	18	8.00	156	0.38
Demolition	Rubber Tired Dozers	12	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	36	90.00	0.00	1,513.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6554	0.0000	0.6554	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1256	1.1518	1.1651	2.3300e-003		0.0512	0.0512		0.0475	0.0475	0.0000	203.9859	203.9859	0.0570	0.0000	205.4099
Total	0.1256	1.1518	1.1651	2.3300e-003	0.6554	0.0512	0.7066	0.0993	0.0475	0.1468	0.0000	203.9859	203.9859	0.0570	0.0000	205.4099

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.7000e-003	0.1178	0.0463	5.4000e-004	0.0129	2.2000e-004	0.0132	3.5600e-003	2.1000e-004	3.7600e-003	0.0000	54.1903	54.1903	4.9600e-003	0.0000	54.3143
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5500e-003	1.5700e-003	0.0169	6.0000e-005	7.2200e-003	5.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3848	5.3848	1.3000e-004	0.0000	5.3880
Total	6.2500e-003	0.1194	0.0632	6.0000e-004	0.0202	2.7000e-004	0.0204	5.4800e-003	2.5000e-004	5.7200e-003	0.0000	59.5750	59.5750	5.0900e-003	0.0000	59.7023

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					0.2949	0.0000	0.2949	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1143	1.1433	1.2156	2.3300e-003		0.0513	0.0513		0.0482	0.0482	0.0000	203.9857	203.9857	0.0570	0.0000	205.4096
Total	0.1143	1.1433	1.2156	2.3300e-003	0.2949	0.0513	0.3462	0.0447	0.0482	0.0929	0.0000	203.9857	203.9857	0.0570	0.0000	205.4096

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	3.7000e-003	0.1178	0.0463	5.4000e-004	0.0129	2.2000e-004	0.0132	3.5600e-003	2.1000e-004	3.7600e-003	0.0000	54.1903	54.1903	4.9600e-003	0.0000	54.3143

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5500e-003	1.5700e-003	0.0169	6.0000e-005	7.2200e-003	5.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.3848	5.3848	1.3000e-004	0.0000	5.3880
Total	6.2500e-003	0.1194	0.0632	6.0000e-004	0.0202	2.7000e-004	0.0204	5.4800e-003	2.5000e-004	5.7200e-003	0.0000	59.5750	59.5750	5.0900e-003	0.0000	59.7023

Intermediate: Project 11 - Auto Parking Improvements - San Diego County APCD Air District, Annual

**Intermediate: Project 11 - Auto Parking Improvements
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	7.20	1000sqft	0.17	7,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2018 43%

Land Use -

Construction Phase - Project Schedule

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading equipment requires water active grading sites

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

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					
2026	2.5800e-003	0.0199	0.0279	5.0000e-005	1.4800e-003	8.4000e-004	2.3200e-003	5.6000e-004	7.9000e-004	1.3600e-003	0.0000	4.1515	4.1515	1.0200e-003	0.0000	4.1770
Maximum	2.5800e-003	0.0199	0.0279	5.0000e-005	1.4800e-003	8.4000e-004	2.3200e-003	5.6000e-004	7.9000e-004	1.3600e-003	0.0000	4.1515	4.1515	1.0200e-003	0.0000	4.1770

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					
2026	1.3200e-003	0.0204	0.0291	5.0000e-005	9.2000e-004	1.2500e-003	2.1700e-003	3.2000e-004	1.2500e-003	1.5700e-003	0.0000	4.1515	4.1515	1.0200e-003	0.0000	4.1770
Maximum	1.3200e-003	0.0204	0.0291	5.0000e-005	9.2000e-004	1.2500e-003	2.1700e-003	3.2000e-004	1.2500e-003	1.5700e-003	0.0000	4.1515	4.1515	1.0200e-003	0.0000	4.1770

	ROG	NOx	CO	SO2	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	48.84	-2.51	-4.63	0.00	37.84	-48.81	6.47	42.86	-58.23	-15.44	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	1-5-2026	4-4-2026	0.0201	0.0192
		Highest	0.0201	0.0192

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/5/2026	1/5/2026	5	1	
2	Grading	Grading	1/6/2026	1/7/2026	5	2	
3	Paving	Paving	1/8/2026	1/14/2026	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2026

Unmitigated Construction On-Site

Off-Road	1.2000e-004	2.4400e-003	2.9300e-003	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	1.2000e-004	2.4400e-003	2.9300e-003	0.0000	1.2000e-004	1.2000e-004	2.4000e-004	1.0000e-005	1.2000e-004	1.3000e-004	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0144	0.0144	0.0000	0.0000	0.0144
Total	1.0000e-005	0.0000	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0144	0.0144	0.0000	0.0000	0.0144

3.3 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	5.1000e-003	7.3600e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.0000e-004	2.0000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471
Total	5.7000e-004	5.1000e-003	7.3600e-003	1.0000e-005	7.5000e-004	2.1000e-004	9.6000e-004	4.1000e-004	2.0000e-004	6.1000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0576	0.0576	0.0000	0.0000	0.0577
Total	3.0000e-005	2.0000e-005	1.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0576	0.0576	0.0000	0.0000	0.0577

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4000e-004	0.0000	3.4000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471
Total	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005	3.4000e-004	4.0000e-004	7.4000e-004	1.9000e-004	4.0000e-004	5.9000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471

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
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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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0576	0.0576	0.0000	0.0000	0.0577
Total	3.0000e-005	2.0000e-005	1.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0576	0.0576	0.0000	0.0000	0.0577

3.4 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	2.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6300e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673

Unmitigated Construction Off-Site

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

Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2594	0.2594	1.0000e-005	0.0000	0.2595
Total	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2594	0.2594	1.0000e-005	0.0000	0.2595

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6000e-004	0.0119	0.0173	3.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	2.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.8000e-004	0.0119	0.0173	3.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2594	0.2594	1.0000e-005	0.0000	0.2595
Total	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2594	0.2594	1.0000e-005	0.0000	0.2595

Long-term: Project 12 - Relocation/Extension RW 6-24 - San Diego County APCD Air District, Annual

**Long-term: Project 12 - Relocation/Extension RW 6-24
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	738.00	1000sqft	16.94	738,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	401.16	CH4 Intensity (lb/MW hr)	0.016	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2030 50%

Land Use -

Construction Phase - Project Schedule

Trips and VMT - 57,687 CY / 20 CY Trucks = 2885 trips

Demolition - 115,374 tons = 57,687 CY

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading equipment requires water active grading sites

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	195.00
tblConstructionPhase	NumDays	20.00	16.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	720.49	401.16
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	HaulingTripNumber	11,408.00	2,885.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2028	0.2443	2.1524	2.1262	5.0700e-003	1.2872	0.0870	1.3742	0.1994	0.0807	0.2802	0.0000	457.6717	457.6717	0.1075	0.0000	460.3585

Maximum	0.2443	2.1524	2.1262	5.0700e-003	1.2872	0.0870	1.3742	0.1994	0.0807	0.2802	0.0000	457.6717	457.6717	0.1075	0.0000	460.3585
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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					
2028	0.1275	2.0879	2.6603	5.0700e-003	0.5998	0.0895	0.6893	0.0953	0.0894	0.1848	0.0000	457.6713	457.6713	0.1075	0.0000	460.3581
Maximum	0.1275	2.0879	2.6603	5.0700e-003	0.5998	0.0895	0.6893	0.0953	0.0894	0.1848	0.0000	457.6713	457.6713	0.1075	0.0000	460.3581

	ROG	NOx	CO	SO2	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	47.79	2.99	-25.12	0.00	53.40	-2.88	49.84	52.20	-10.78	34.06	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)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2028	9/29/2028	5	195	82000SY full depth removal
2	Paving	Paving	10/2/2028	10/23/2028	5	16	16 shifts

Acres of Grading (Site Preparation Phase): 0

Category	tons/yr										MT/yr					
Fugitive Dust					1.2499	0.0000	1.2499	0.1893	0.0000	0.1893	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2040	1.8717	1.8933	3.7900e-003		0.0831	0.0831		0.0772	0.0772	0.0000	331.4771	331.4771	0.0926	0.0000	333.7911
Total	0.2040	1.8717	1.8933	3.7900e-003	1.2499	0.0831	1.3330	0.1893	0.0772	0.2665	0.0000	331.4771	331.4771	0.0926	0.0000	333.7911

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	6.8000e-003	0.2098	0.0914	1.0000e-003	0.0247	3.9000e-004	0.0251	6.7800e-003	3.7000e-004	7.1500e-003	0.0000	101.6314	101.6314	9.5500e-003	0.0000	101.8701
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6200e-003	2.0800e-003	0.0230	9.0000e-005	0.0117	7.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1800e-003	0.0000	7.8996	7.8996	1.7000e-004	0.0000	7.9039
Total	0.0104	0.2119	0.1144	1.0900e-003	0.0364	4.6000e-004	0.0369	9.9000e-003	4.3000e-004	0.0103	0.0000	109.5310	109.5310	9.7200e-003	0.0000	109.7740

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					0.5624	0.0000	0.5624	0.0852	0.0000	0.0852	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0902	1.7855	2.4057	3.7900e-003		0.0841	0.0841		0.0841	0.0841	0.0000	331.4767	331.4767	0.0926	0.0000	333.7907

Total	0.0902	1.7855	2.4057	3.7900e-003	0.5624	0.0841	0.6465	0.0852	0.0841	0.1693	0.0000	331.4767	331.4767	0.0926	0.0000	333.7907
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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	6.8000e-003	0.2098	0.0914	1.0000e-003	0.0247	3.9000e-004	0.0251	6.7800e-003	3.7000e-004	7.1500e-003	0.0000	101.6314	101.6314	9.5500e-003	0.0000	101.8701
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6200e-003	2.0800e-003	0.0230	9.0000e-005	0.0117	7.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1800e-003	0.0000	7.8996	7.8996	1.7000e-004	0.0000	7.9039
Total	0.0104	0.2119	0.1144	1.0900e-003	0.0364	4.6000e-004	0.0369	9.9000e-003	4.3000e-004	0.0103	0.0000	109.5310	109.5310	9.7200e-003	0.0000	109.7740

3.3 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3200e-003	0.0687	0.1166	1.8000e-004		3.3500e-003	3.3500e-003		3.0800e-003	3.0800e-003	0.0000	16.0154	16.0154	5.1800e-003	0.0000	16.1449
Paving	0.0222					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0295	0.0687	0.1166	1.8000e-004		3.3500e-003	3.3500e-003		3.0800e-003	3.0800e-003	0.0000	16.0154	16.0154	5.1800e-003	0.0000	16.1449

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	1.7000e-004	1.8900e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.6482	0.6482	1.0000e-005	0.0000	0.6485
Total	3.0000e-004	1.7000e-004	1.8900e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.6482	0.6482	1.0000e-005	0.0000	0.6485

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4900e-003	0.0904	0.1384	1.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	16.0154	16.0154	5.1800e-003	0.0000	16.1449
Paving	0.0222					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0267	0.0904	0.1384	1.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	16.0154	16.0154	5.1800e-003	0.0000	16.1449

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	1.7000e-004	1.8900e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.6482	0.6482	1.0000e-005	0.0000	0.6485
Total	3.0000e-004	1.7000e-004	1.8900e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.6482	0.6482	1.0000e-005	0.0000	0.6485

Long-term: Project 13 - Removal/Reconstruction Connector TWYs - San Diego County APCD Air District, Annual

**Long-term: Project 13 - Removal/Reconstruction Connector TWYs
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	16.20	1000sqft	0.37	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2030 50%

Land Use -

Construction Phase - Project Schedule

Trips and VMT - Demolition would be hauled away in 20 CY (40 ton) belly dump tractor trailers.

Demolition -

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading equipment requires water active grading sites

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	5.00	2.00
tblConstructionPhase	NumDays	1.00	5.00
tblGrading	AcresOfGrading	2.50	0.50
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	HaulingTripNumber	556.00	141.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Year	tons/yr										MT/yr					
2028	8.5600e-003	0.0784	0.0968	2.1000e-004	0.0673	2.7600e-003	0.0700	0.0119	2.6200e-003	0.0146	0.0000	19.1738	19.1738	3.3200e-003	0.0000	19.2567
Maximum	8.5600e-003	0.0784	0.0968	2.1000e-004	0.0673	2.7600e-003	0.0700	0.0119	2.6200e-003	0.0146	0.0000	19.1738	19.1738	3.3200e-003	0.0000	19.2567

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					
2028	4.6100e-003	0.0870	0.1075	2.1000e-004	0.0315	4.9300e-003	0.0364	5.7100e-003	4.9300e-003	0.0106	0.0000	19.1738	19.1738	3.3200e-003	0.0000	19.2567
Maximum	4.6100e-003	0.0870	0.1075	2.1000e-004	0.0315	4.9300e-003	0.0364	5.7100e-003	4.9300e-003	0.0106	0.0000	19.1738	19.1738	3.3200e-003	0.0000	19.2567

	ROG	NOx	CO	SO2	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	46.14	-11.07	-11.06	0.00	53.16	-78.62	47.95	52.18	-88.17	26.92	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	6-5-2028	9-4-2028	0.0751	0.0800
		Highest	0.0751	0.0800

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
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1	Demolition	Demolition	6/5/2028	6/16/2028	5	10	4000 SY full depth removal
2	Site Preparation	Site Preparation	6/17/2028	6/23/2028	5	5	
3	Grading	Grading	6/20/2028	7/3/2028	5	10	
4	Paving	Paving	11/9/2028	11/10/2028	5	2	1800 CY new pavement

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	141.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2028

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					0.0610	0.0000	0.0610	9.2300e-003	0.0000	9.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0255	0.0368	6.0000e-005		1.0500e-003	1.0500e-003		1.0000e-003	1.0000e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	2.8700e-003	0.0255	0.0368	6.0000e-005	0.0610	1.0500e-003	0.0620	9.2300e-003	1.0000e-003	0.0102	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0103	4.4600e-003	5.0000e-005	1.2100e-003	2.0000e-005	1.2300e-003	3.3000e-004	2.0000e-005	3.5000e-004	0.0000	4.9671	4.9671	4.7000e-004	0.0000	4.9788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2701	0.2701	1.0000e-005	0.0000	0.2702

Total	4.5000e-004	0.0103	5.2500e-003	5.0000e-005	1.6100e-003	2.0000e-005	1.6300e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	5.2372	5.2372	4.8000e-004	0.0000	5.2490
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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					0.0274	0.0000	0.0274	4.1500e-003	0.0000	4.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	0.0298	0.0397	6.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	1.3300e-003	0.0298	0.0397	6.0000e-005	0.0274	2.0100e-003	0.0295	4.1500e-003	2.0100e-003	6.1600e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357

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	3.3000e-004	0.0103	4.4600e-003	5.0000e-005	1.2100e-003	2.0000e-005	1.2300e-003	3.3000e-004	2.0000e-005	3.5000e-004	0.0000	4.9671	4.9671	4.7000e-004	0.0000	4.9788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2701	0.2701	1.0000e-005	0.0000	0.2702
Total	4.5000e-004	0.0103	5.2500e-003	5.0000e-005	1.6100e-003	2.0000e-005	1.6300e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	5.2372	5.2372	4.8000e-004	0.0000	5.2490

3.3 Site Preparation - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1100e-003	0.0120	9.5600e-003	2.0000e-005		4.1000e-004	4.1000e-004		3.8000e-004	3.8000e-004	0.0000	2.1371	2.1371	6.9000e-004	0.0000	2.1544
Total	1.1100e-003	0.0120	9.5600e-003	2.0000e-005	2.7000e-004	4.1000e-004	6.8000e-004	3.0000e-005	3.8000e-004	4.1000e-004	0.0000	2.1371	2.1371	6.9000e-004	0.0000	2.1544

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.0000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0675	0.0675	0.0000	0.0000	0.0676
Total	3.0000e-005	2.0000e-005	2.0000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0675	0.0675	0.0000	0.0000	0.0676

Mitigated Construction On-Site

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

Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0000e-004	0.0122	0.0146	2.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.0000	2.1371	2.1371	6.9000e-004	0.0000	2.1544
Total	6.0000e-004	0.0122	0.0146	2.0000e-005	1.2000e-004	6.0000e-004	7.2000e-004	1.0000e-005	6.0000e-004	6.1000e-004	0.0000	2.1371	2.1371	6.9000e-004	0.0000	2.1544

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.0000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0675	0.0675	0.0000	0.0000	0.0676
Total	3.0000e-005	2.0000e-005	2.0000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0675	0.0675	0.0000	0.0000	0.0676

3.4 Grading - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7600e-003	0.0000	3.7600e-003	2.0700e-003	0.0000	2.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0255	0.0368	6.0000e-005		1.0500e-003	1.0500e-003		1.0000e-003	1.0000e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	2.8700e-003	0.0255	0.0368	6.0000e-005	3.7600e-003	1.0500e-003	4.8100e-003	2.0700e-003	1.0000e-003	3.0700e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2701	0.2701	1.0000e-005	0.0000	0.2702
Total	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2701	0.2701	1.0000e-005	0.0000	0.2702

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6900e-003	0.0000	1.6900e-003	9.3000e-004	0.0000	9.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	0.0298	0.0397	6.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	1.3300e-003	0.0298	0.0397	6.0000e-005	1.6900e-003	2.0100e-003	3.7000e-003	9.3000e-004	2.0100e-003	2.9400e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357

Mitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0972	0.0972	0.0000	0.0000	0.0973
Total	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0972	0.0972	0.0000	0.0000	0.0973

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	2.2000e-004	4.7600e-003	6.9000e-003	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.9401	0.9401	2.7000e-004	0.0000	0.9469
Paving	4.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0000e-004	4.7600e-003	6.9000e-003	1.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.9401	0.9401	2.7000e-004	0.0000	0.9469

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0972	0.0972	0.0000	0.0000	0.0973
Total	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0972	0.0972	0.0000	0.0000	0.0973

Long-term: Project 14 - Removal/Reconstruction TWY A - San Diego County APCD Air District, Annual

**Long-term: Project 14 - Removal/Reconstruction TWY A
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	351.00	1000sqft	8.06	351,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2030 50%

Land Use -

Construction Phase - Projecy Schedule

Demolition -

Trips and VMT - 20 CY (40 Tone) Tractor trailer belly dumps would be used for hauling.

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regualtions require fleet average of Tier III Equipment, County grading requires water active grading sites

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	93.00
tblConstructionPhase	NumDays	20.00	8.00
tblConstructionPhase	PhaseEndDate	5/26/2028	9/6/2028
tblConstructionPhase	PhaseEndDate	7/7/2028	10/18/2028
tblConstructionPhase	PhaseEndDate	6/22/2029	10/30/2028
tblConstructionPhase	PhaseEndDate	6/9/2028	9/20/2028
tblConstructionPhase	PhaseStartDate	6/10/2028	9/21/2028
tblConstructionPhase	PhaseStartDate	5/26/2029	10/19/2028
tblConstructionPhase	PhaseStartDate	5/27/2028	9/7/2028
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	HaulingTripNumber	5,426.00	1,372.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2028	0.1448	1.3075	1.2554	2.9200e-003	0.7700	0.0532	0.8233	0.1787	0.0493	0.2280	0.0000	262.6202	262.6202	0.0652	0.0000	264.2510
Maximum	0.1448	1.3075	1.2554	2.9200e-003	0.7700	0.0532	0.8233	0.1787	0.0493	0.2280	0.0000	262.6202	262.6202	0.0652	0.0000	264.2510

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					
2028	0.0734	1.2416	1.5804	2.9200e-003	0.3574	0.0551	0.4124	0.0834	0.0551	0.1384	0.0000	262.6200	262.6200	0.0652	0.0000	264.2508
Maximum	0.0734	1.2416	1.5804	2.9200e-003	0.3574	0.0551	0.4124	0.0834	0.0551	0.1384	0.0000	262.6200	262.6200	0.0652	0.0000	264.2508

	ROG	NOx	CO	SO2	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	49.31	5.03	-25.89	0.00	53.59	-3.46	49.90	53.35	-11.64	39.30	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	5-1-2028	7-31-2028	0.7732	0.7058
2	8-1-2028	9-30-2028	0.5102	0.4400
		Highest	0.7732	0.7058

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2028	9/6/2028	5	93	39000 SY pavement demo
2	Site Preparation	Site Preparation	9/7/2028	9/20/2028	5	10	
3	Grading	Grading	9/21/2028	10/18/2028	5	20	
4	Paving	Paving	10/19/2028	10/30/2028	5	8	15000 CY new pavement

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,372.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2028

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					0.5944	0.0000	0.5944	0.0900	0.0000	0.0900	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0973	0.8926	0.9030	1.8100e-003		0.0397	0.0397		0.0368	0.0368	0.0000	158.0891	158.0891	0.0441	0.0000	159.1927
Total	0.0973	0.8926	0.9030	1.8100e-003	0.5944	0.0397	0.6341	0.0900	0.0368	0.1269	0.0000	158.0891	158.0891	0.0441	0.0000	159.1927

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2300e-003	0.0998	0.0434	4.8000e-004	0.0117	1.8000e-004	0.0119	3.2200e-003	1.8000e-004	3.4000e-003	0.0000	48.3322	48.3322	4.5400e-003	0.0000	48.4457
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7300e-003	9.9000e-004	0.0110	4.0000e-005	5.5900e-003	3.0000e-005	5.6200e-003	1.4900e-003	3.0000e-005	1.5100e-003	0.0000	3.7675	3.7675	8.0000e-005	0.0000	3.7695
Total	4.9600e-003	0.1008	0.0544	5.2000e-004	0.0173	2.1000e-004	0.0175	4.7100e-003	2.1000e-004	4.9100e-003	0.0000	52.0997	52.0997	4.6200e-003	0.0000	52.2152

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					0.2675	0.0000	0.2675	0.0405	0.0000	0.0405	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0430	0.8516	1.1473	1.8100e-003		0.0401	0.0401		0.0401	0.0401	0.0000	158.0889	158.0889	0.0441	0.0000	159.1925
Total	0.0430	0.8516	1.1473	1.8100e-003	0.2675	0.0401	0.3076	0.0405	0.0401	0.0806	0.0000	158.0889	158.0889	0.0441	0.0000	159.1925

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	3.2300e-003	0.0998	0.0434	4.8000e-004	0.0117	1.8000e-004	0.0119	3.2200e-003	1.8000e-004	3.4000e-003	0.0000	48.3322	48.3322	4.5400e-003	0.0000	48.4457
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7300e-003	9.9000e-004	0.0110	4.0000e-005	5.5900e-003	3.0000e-005	5.6200e-003	1.4900e-003	3.0000e-005	1.5100e-003	0.0000	3.7675	3.7675	8.0000e-005	0.0000	3.7695
Total	4.9600e-003	0.1008	0.0544	5.2000e-004	0.0173	2.1000e-004	0.0175	4.7100e-003	2.1000e-004	4.9100e-003	0.0000	52.0997	52.0997	4.6200e-003	0.0000	52.2152

3.3 Site Preparation - 2028

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0903	5.4300e-003	0.0958	0.0497	5.0000e-003	0.0547	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.4200e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.4861	0.4861	1.0000e-005	0.0000	0.4864

Total	2.2000e-004	1.3000e-004	1.4200e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.4861	0.4861	1.0000e-005	0.0000	0.4864
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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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	4.6600e-003	0.0953	0.1148	1.9000e-004	0.0407	4.7300e-003	0.0454	0.0223	4.7300e-003	0.0271	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.4200e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.4861	0.4861	1.0000e-005	0.0000	0.4864
Total	2.2000e-004	1.3000e-004	1.4200e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.4861	0.4861	1.0000e-005	0.0000	0.4864

3.4 Grading - 2028

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1532	0.1454	3.0000e-004		6.2400e-003	6.2400e-003		5.7400e-003	5.7400e-003	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806
Total	0.0152	0.1532	0.1454	3.0000e-004	0.0655	6.2400e-003	0.0718	0.0337	5.7400e-003	0.0394	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.1000e-004	2.3600e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8102	0.8102	2.0000e-005	0.0000	0.8107
Total	3.7000e-004	2.1000e-004	2.3600e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8102	0.8102	2.0000e-005	0.0000	0.8107

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					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2600e-003	0.1484	0.1899	3.0000e-004		7.5600e-003	7.5600e-003		7.5600e-003	7.5600e-003	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806
Total	7.2600e-003	0.1484	0.1899	3.0000e-004	0.0295	7.5600e-003	0.0371	0.0152	7.5600e-003	0.0227	0.0000	26.0698	26.0698	8.4300e-003	0.0000	26.2806

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.1000e-004	2.3600e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8102	0.8102	2.0000e-005	0.0000	0.8107
Total	3.7000e-004	2.1000e-004	2.3600e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8102	0.8102	2.0000e-005	0.0000	0.8107

3.5 Paving - 2028

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	3.6600e-003	0.0343	0.0583	9.0000e-005		1.6700e-003	1.6700e-003		1.5400e-003	1.5400e-003	0.0000	8.0077	8.0077	2.5900e-003	0.0000	8.0725
Paving	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0142	0.0343	0.0583	9.0000e-005		1.6700e-003	1.6700e-003		1.5400e-003	1.5400e-003	0.0000	8.0077	8.0077	2.5900e-003	0.0000	8.0725

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	9.0000e-005	9.4000e-004	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3241	0.3241	1.0000e-005	0.0000	0.3243
Total	1.5000e-004	9.0000e-005	9.4000e-004	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3241	0.3241	1.0000e-005	0.0000	0.3243

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	2.2400e-003	0.0452	0.0692	9.0000e-005		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	8.0077	8.0077	2.5900e-003	0.0000	8.0724
Paving	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0128	0.0452	0.0692	9.0000e-005		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	8.0077	8.0077	2.5900e-003	0.0000	8.0724

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	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	0.0000
Worker	1.5000e-004	9.0000e-005	9.4000e-004	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3241	0.3241	1.0000e-005	0.0000	0.3243	
Total	1.5000e-004	9.0000e-005	9.4000e-004	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3241	0.3241	1.0000e-005	0.0000	0.3243	

Long-term: Project 15 - Construction of EMAS System on RW24 - San Diego County APCD Air District, Annual

**Long-term: Project 15 - Construction of EMAS System on RW24
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	53.00	1000sqft	1.22	53,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2030 50%

Land Use -

Construction Phase - Project schedule

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading ordinance requires water active grading sites

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

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					
2029	5.7500e-003	0.0548	0.0625	1.2000e-004	0.0163	2.3500e-003	0.0187	8.1900e-003	2.1700e-003	0.0104	0.0000	10.3416	10.3416	3.1700e-003	0.0000	10.4207
Maximum	5.7500e-003	0.0548	0.0625	1.2000e-004	0.0163	2.3500e-003	0.0187	8.1900e-003	2.1700e-003	0.0104	0.0000	10.3416	10.3416	3.1700e-003	0.0000	10.4207

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					
2029	2.9200e-003	0.0555	0.0766	1.2000e-004	7.7500e-003	2.9300e-003	0.0107	3.7900e-003	2.9300e-003	6.7200e-003	0.0000	10.3416	10.3416	3.1700e-003	0.0000	10.4207
Maximum	2.9200e-003	0.0555	0.0766	1.2000e-004	7.7500e-003	2.9300e-003	0.0107	3.7900e-003	2.9300e-003	6.7200e-003	0.0000	10.3416	10.3416	3.1700e-003	0.0000	10.4207

	ROG	NOx	CO	SO2	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	49.22	-1.31	-22.43	0.00	52.57	-24.68	42.86	53.72	-35.02	35.14	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	1-1-2029	3-31-2029	0.0586	0.0570
		Highest	0.0586	0.0570

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2029	1/2/2029	5	2	
2	Grading	Grading	1/3/2029	1/8/2029	5	4	
3	Paving	Paving	1/9/2029	1/22/2029	5	10	Construct EMAS Block 5900 SY

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0100e-003	0.0106	6.4500e-003	2.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	1.0100e-003	0.0106	6.4500e-003	2.0000e-005	5.8000e-003	4.2000e-004	6.2200e-003	2.9500e-003	3.9000e-004	3.3400e-003	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0420	0.0420	0.0000	0.0000	0.0420
Total	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0420	0.0420	0.0000	0.0000	0.0420

Mitigated Construction On-Site

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

Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005	2.6100e-003	3.7000e-004	2.9800e-003	1.3300e-003	3.7000e-004	1.7000e-003	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0420	0.0420	0.0000	0.0000	0.0420
Total	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0420	0.0420	0.0000	0.0000	0.0420

3.3 Grading - 2029

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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6700e-003	0.0175	0.0108	3.0000e-005		7.0000e-004	7.0000e-004		6.4000e-004	6.4000e-004	0.0000	2.4761	2.4761	8.0000e-004	0.0000	2.4961
Total	1.6700e-003	0.0175	0.0108	3.0000e-005	9.8300e-003	7.0000e-004	0.0105	5.0500e-003	6.4000e-004	5.6900e-003	0.0000	2.4761	2.4761	8.0000e-004	0.0000	2.4961

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.4000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0840	0.0840	0.0000	0.0000	0.0841
Total	4.0000e-005	2.0000e-005	2.4000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0840	0.0840	0.0000	0.0000	0.0841

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					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-004	0.0138	0.0162	3.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	2.4761	2.4761	8.0000e-004	0.0000	2.4961
Total	6.9000e-004	0.0138	0.0162	3.0000e-005	4.4200e-003	6.2000e-004	5.0400e-003	2.2700e-003	6.2000e-004	2.8900e-003	0.0000	2.4761	2.4761	8.0000e-004	0.0000	2.4961

Mitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	9.0000e-005	9.7000e-004	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3414	0.3414	1.0000e-005	0.0000	0.3416
Total	1.5000e-004	9.0000e-005	9.7000e-004	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3414	0.3414	1.0000e-005	0.0000	0.3416

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6000e-003	0.0332	0.0493	7.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	5.8868	5.8868	1.8700e-003	0.0000	5.9334
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.6000e-003	0.0332	0.0493	7.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	5.8868	5.8868	1.8700e-003	0.0000	5.9334

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	9.0000e-005	9.7000e-004	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3414	0.3414	1.0000e-005	0.0000	0.3416
Total	1.5000e-004	9.0000e-005	9.7000e-004	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3414	0.3414	1.0000e-005	0.0000	0.3416

Long-term: Project 16 - - San Diego County APCD Air District, Annual

**Long-term: Project 16 -
San Diego County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	53.00	1000sqft	1.22	53,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	457.33	CH4 Intensity (lb/MW hr)	0.018	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SDG&E RPS Progress as of 2030 50%

Land Use -

Construction Phase - Project schedule

Energy Use -

Construction Off-road Equipment Mitigation - CARB In-use Off-road Equipment Regulations require fleet average of Tier III Equipment, County grading ordinance requires water active grading sites

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	PhaseEndDate	11/26/2030	12/24/2030
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	457.33
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

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					
2030	0.0153	0.0788	0.1608	3.2000e-004	0.0174	3.0200e-003	0.0204	8.4700e-003	3.0200e-003	0.0115	0.0000	27.0008	27.0008	1.2300e-003	0.0000	27.0314
Maximum	0.0153	0.0788	0.1608	3.2000e-004	0.0174	3.0200e-003	0.0204	8.4700e-003	3.0200e-003	0.0115	0.0000	27.0008	27.0008	1.2300e-003	0.0000	27.0314

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					
2030	6.3800e-003	0.1221	0.1769	3.2000e-004	8.7900e-003	6.8000e-003	0.0156	4.0700e-003	6.8000e-003	0.0109	0.0000	27.0008	27.0008	1.2300e-003	0.0000	27.0314
Maximum	6.3800e-003	0.1221	0.1769	3.2000e-004	8.7900e-003	6.8000e-003	0.0156	4.0700e-003	6.8000e-003	0.0109	0.0000	27.0008	27.0008	1.2300e-003	0.0000	27.0314

	ROG	NOx	CO	SO2	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	58.33	-54.86	-10.02	0.00	49.42	-125.17	23.58	51.95	-125.17	5.40	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	1-1-2030	3-31-2030	0.0144	0.0219
		Highest	0.0144	0.0219

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2030	1/30/2030	5	2	
2	Grading	Grading	1/31/2030	2/5/2030	5	4	
3	Paving	Paving	11/13/2030	12/24/2030	5	30	Construct EMAS Block 5900 SY

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-004	4.7400e-003	5.9100e-003	2.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	1.8096	1.8096	8.0000e-005	0.0000	1.8115
Total	9.8000e-004	4.7400e-003	5.9100e-003	2.0000e-005	5.8000e-003	1.6000e-004	5.9600e-003	2.9500e-003	1.6000e-004	3.1100e-003	0.0000	1.8096	1.8096	8.0000e-005	0.0000	1.8115

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0410	0.0410	0.0000	0.0000	0.0410
Total	2.0000e-005	1.0000e-005	1.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0410	0.0410	0.0000	0.0000	0.0410

Mitigated Construction On-Site

Off-Road	1.6200e-003	7.9600e-003	9.8900e-003	3.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	2.9644	2.9644	1.3000e-004	0.0000	2.9676
Total	1.6200e-003	7.9600e-003	9.8900e-003	3.0000e-005	9.8300e-003	2.6000e-004	0.0101	5.0500e-003	2.6000e-004	5.3100e-003	0.0000	2.9644	2.9644	1.3000e-004	0.0000	2.9676

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0819	0.0819	0.0000	0.0000	0.0820
Total	4.0000e-005	2.0000e-005	2.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0819	0.0819	0.0000	0.0000	0.0820

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					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-004	0.0138	0.0162	3.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	2.9644	2.9644	1.3000e-004	0.0000	2.9676
Total	6.9000e-004	0.0138	0.0162	3.0000e-005	4.4200e-003	6.2000e-004	5.0400e-003	2.2700e-003	6.2000e-004	2.8900e-003	0.0000	2.9644	2.9644	1.3000e-004	0.0000	2.9676

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0819	0.0819	0.0000	0.0000	0.0820
Total	4.0000e-005	2.0000e-005	2.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0819	0.0819	0.0000	0.0000	0.0820

3.4 Paving - 2030

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	0.0122	0.0659	0.1419	2.5000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	21.1053	21.1053	9.9000e-004	0.0000	21.1301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0122	0.0659	0.1419	2.5000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	21.1053	21.1053	9.9000e-004	0.0000	21.1301

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
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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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.4000e-004	2.7600e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.2000e-004	0.0000	0.9987	0.9987	2.0000e-005	0.0000	0.9992
Total	4.3000e-004	2.4000e-004	2.7600e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.2000e-004	0.0000	0.9987	0.9987	2.0000e-005	0.0000	0.9992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7900e-003	0.0996	0.1478	2.5000e-004		5.8000e-003	5.8000e-003		5.8000e-003	5.8000e-003	0.0000	21.1052	21.1052	9.9000e-004	0.0000	21.1301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.7900e-003	0.0996	0.1478	2.5000e-004		5.8000e-003	5.8000e-003		5.8000e-003	5.8000e-003	0.0000	21.1052	21.1052	9.9000e-004	0.0000	21.1301

Mitigated Construction Off-Site

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

Worker	4.3000e-004	2.4000e-004	2.7600e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.2000e-004	0.0000	0.9987	0.9987	2.0000e-005	0.0000	0.9992
Total	4.3000e-004	2.4000e-004	2.7600e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.2000e-004	0.0000	0.9987	0.9987	2.0000e-005	0.0000	0.9992

Construction Energy Conversion

On-road

Gasoline	523 gallons
Diesel	18,898 gallons
kWh/Gallon Gasoline	33.4 kWh/gallon
kWh/Gallon Diesel	38.1 kWh/gallon
Gasoline	17,484 kWh
Diesel	720,001 kWh
Total kWh	737,485 kWh
Annual kWh	36,874 kWh

Off-road

Diesel	98,881 gallons
kWh/Gallon Diesel	38.1 kWh/gallon
Total kWh	3,767,277 kWh
Annual kWh	188,364 kWh
Total Construction kWh	4,504,761 kWh

Water Use in CCF Units

	Indoor 08506300-00	Indoor 08507700-02	Indoor 08507730-00	Indoor 08310280-00	Outdoor 09683280-00	Outdoor 09683282-00	Indoor 09730100-01	Indoor 08506600-01
17-Apr			4	19	34	92	65	7
17-May			3	8	34	104	106	5
17-Jun			3	6	33	124	143	4
17-Jul			3	8	37	139	117	6
17-Aug			3	8	36	102	224	5
17-Sep			4	7	37	133	126	6
17-Oct			4	10	37	155	172	7
17-Nov			4	13	34	110	135	7
17-Dec		1	4	15	38	167	368	6
18-Jan			3	15	30	164	303	8
18-Feb			3	14	39	112	105	15
18-Mar			3	10	29	217	253	8
Total CCF			41	133	418	1619	2117	62
Gallons		28,424	92,004	290,972	1,048,696	1,394,272	40,392	86,768
Total Gallo	2,981,528							
indoor	538,560							
outdoor	2,442,968							
CCF = 748 Gallons								
12.59 kWh/Gallon								
Indoor	42,777							