

March 5, 2018

Mr. Ross Geller
Applied Planning
11762 De Palma Road, 1-C 310
Corona, CA 92883

SUBJECT: TORRANCE TECHNOLOGY PARK AIR QUALITY & GREENHOUSE GAS MEMORANDUM UPDATE

Dear Mr. Ross Geller:

This Memorandum updates and refines analyses and conclusions presented in the attached *Torrance Technology Park Air Quality & Greenhouse Gas Memorandum* (Urban Crossroads, Inc.) February 2, 2018 (AQ/GHG Analysis, Analysis). Notably, subsequent to preparation of the AQ/GHG Analysis, the Applicant in consultation with the Lead Agency has defined the Modified Project as a proposed Industrial Park use, rather than the General Light Industrial use reflected in the attached Analysis. As summarized below, this change in the designated Modified Project land use does not substantively affect the Analysis findings or conclusions. In no instance would the Modified Project result in any potentially significant air quality or GHG emissions impacts; nor would the Modified Project result in any potentially significant air quality or GHG emissions impacts not previously considered and addressed in the *Toyota South Campus Plan Mitigated Negative Declaration* (City of Torrance) October 17, 2000 (2000 MND).

CRITERIA POLLUTANTS

Potential criteria pollutant air quality impacts are substantiated in detail in the Attached Analysis reflect emissions that would be generated by the General Light Industrial uses that were initially contemplated for the Modified Project. Subsequent air quality modeling conducted for the currently proposed Industrial Park uses indicate that, in comparison to the Modified Project's initially considered General Light Industrial uses, and the Original Project General Office uses, regional NOx emissions would increase. However, under all scenarios, NOx emissions would not exceed applicable South Coast Air Quality Management District (SCAQMD) thresholds and would be less-than-significant. Other air pollutant emissions generated by the current Industrial Park development scenario would be comparable to or would be reduced from those resulting from the initially considered General Light Industrial uses, and the Original Project General Office uses. Please refer to the following Tables A, B.

Table A: Maximum Daily Operational-Source Air Pollutant Emissions Summary Without Mitigation (pounds per day)

<i>Initially Considered General Light Industrial Uses</i>						
Land Use/Emissions Source	Pollutants					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
<i>Summer Scenario</i>						
Total Maximum Daily Emissions	15.00	30.66	85.76	0.27	19.62	5.58
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
<i>Winter Scenario</i>						
Total Maximum Daily Emissions	14.78	31.57	79.82	0.26	19.62	5.58
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
<i>Currently Proposed Industrial Park Uses</i>						
Land Use/Emissions Source	Pollutants					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
<i>Summer Scenario</i>						
Total Maximum Daily Emissions	12.75	48.16	55.58	0.26	18.16	5.10
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
<i>Winter Scenario</i>						
Total Maximum Daily Emissions	12.63	48.98	51.43	0.25	18.16	5.11
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Torrance Technology Park Air Quality & Greenhouse Gas Memorandum (Urban Crossroads, Inc.) February 2, 2018; Subsequent CalEEMod Industrial Park modeling (Urban Crossroads, Inc.) February 26, 2018.

Table B: Comparison of Maximum Daily Operational-Source Emissions

Summer Scenario	Maximum Daily Emissions (pounds per day)					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Modified Project-Initially Considered General Light Industrial Uses	15.00	30.66	85.76	0.27	19.62	5.58
Modified Project-Currently Proposed Industrial Park Uses	12.75	48.16	55.58	0.26	18.16	5.10
Original Project General Office Uses	16.07	39.52	107.98	0.32	23.88	6.69
Winter Scenario	Maximum Emissions (pounds per day)					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Modified Project-Initially Considered General Light Industrial Uses	14.78	31.57	79.82	0.26	19.62	5.58
Modified Project-Currently Proposed Industrial Park Uses	12.63	48.98	51.43	0.25	18.16	5.11
Original Project General Office Uses	15.73	40.54	101.63	0.31	23.88	6.69

Source: *Torrance Technology Park Air Quality & Greenhouse Gas Memorandum* (Urban Crossroads, Inc.) February 2, 2018. Subsequent CalEEMod Industrial Park modeling (Urban Crossroads, Inc.) February 26, 2018.

Notes: Maximum for each criteria pollutant is indicated in **bold**.

Emissions modeling for the initially considered General Light Industrial uses is presented at Appendix A of this Analysis. Emissions modeling for the currently proposed Industrial Park uses is presented at Appendix B to this Analysis.

In no instance would the currently proposed Industrial Park uses result in new significant air quality impacts, or air quality impacts not otherwise already considered and addressed in the 2000 MND. Unless otherwise noted, references to, or conclusions regarding the Modified Project General Light Industrial uses comprehensively consider and address air quality impacts that would result from the currently proposed Industrial Park uses.

HEALTH RISK ASSESSMENT

When compared to the initially considered General Light Industrial uses, total traffic would be reduced under the currently proposed Industrial Park uses, globally reducing mobile-source emissions. With specific regard to DPM emissions, approximately 5 percent or 102 of the 2,034 total daily trips generated by the General Light Industrial uses would comprise potential sources of DPM emissions (medium heavy duty [MHD] and heavy-heavy duty [HHD] truck traffic). Approximately 12 percent or 166 of the total 1,382 total daily trips generated by the Industrial Park uses would comprise potential sources of DPM emissions (medium heavy duty [MHD] and heavy-heavy duty [HHD] truck traffic). The approximately 60 percent increase (in medium heavy duty (MHD) and heavy-heavy duty (HHD) truck traffic (64 additional daily trips) assumed to result from the proposed Industrial Park development scenario may nominally increase cancer risks. However, this increase in truck traffic and associated DPM emissions would not be sufficient to more than double the MEIR exposure rate (3.53/million) identified in the Modified Project HRA, thereby resulting in exceedance the SCAQMD cancer risk threshold (10.0/million). Similarly, nominal increased MHD/HDD traffic and associated DPM emissions under the Industrial Park development scenario would not be sufficient to increase the HRA estimate of non-cancer risks (0.001) by more than 1,000-fold, thereby resulting in exceedance of the SCAQMD non-cancer risk threshold (1.0).

GHG EMISSIONS

GHG emissions impacts considered in the attached Analysis reflect emissions that would be generated by the General Light Industrial uses that were initially contemplated for the Modified Project. Subsequent GHG emissions modeling conducted for the currently proposed Industrial Park uses indicate that, in comparison to the Modified Project's initially considered General Light Industrial uses, and the Original Project General Office uses, GHG emissions in total would be reduced. As summarized below, under all scenarios, GHG emissions would not exceed applicable South Coast Air Quality Management District (SCAQMD) thresholds and would be less-than-significant.

- The initially considered Modified Project General Light Industrial uses would generate an estimated 6,112.09 metric tons of carbon dioxide equivalent/year (MTCO_{2e}/year) (AQ/GHG Analysis, p. 3). GHG emissions generated under a General Light Industrial uses development scenario would not exceed the applicable SCAQMD screening level threshold of 10,000 MTCO_{2e}/year and would therefore be less-than-significant.
- The currently proposed Industrial Park uses would generate an estimated 6,513.09 metric tons of carbon dioxide equivalent/year (MTCO_{2e}/year) (AQ/GHG Analysis Appendix B, Annual Modeling, p. 4). GHG emissions generated by the currently proposed Industrial Park uses would not exceed the applicable SCAQMD screening level threshold of 10,000 MTCO_{2e}/year and would therefore be less-than-significant.
- The Original Project General Office uses would generate an estimated 6,260.01 metric tons of carbon dioxide equivalent/year (MTCO_{2e}/year) (AQ/GHG Analysis, p. 4). GHG emissions generated by the Original Project General Office uses would not exceed the applicable SCAQMD screening level threshold of 10,000 MTCO_{2e}/year and would therefore be less-than-significant.

Mr. Ross Geller
Applied Planning
March 5, 2018
Page 5 of 5

GHG emissions modeling for the initially considered Modified Project General Light Industrial uses is presented at Appendix A of this Analysis. GHG emissions modeling for the currently proposed Industrial Park uses is presented at Appendix B to this Analysis.

If you have any questions, please contact me directly at (949) 336-5987.

Respectfully submitted,

URBAN CROSSROADS, INC.



Haseeb Qureshi,
Senior Associate

APPENDIX A

INITIALLY CONSIDERED GENERAL LIGHT INDUSTRIAL EMISSIONS

Torrance Technology Park - South Coast AQMD Air District, Annual

Torrance Technology Park
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Annual

Project Characteristics -

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Trips and VMT - Operation Only

Vehicle Trips - Source: ITE Trip Generation 10th Edition 2017

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/30/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/30/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	67.00	0.00
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	WD_TR	6.97	4.96

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-31-2018	4-29-2018	0.0001	0.0001
		Highest	0.0001	0.0001

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	1,561.1384	1,561.1384	0.0543	0.0178	1,567.8049
Mobile	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.6644	3,759.6644	0.2047	0.0000	3,764.7816
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.5950	5.3884	13.5711	0.0434	3.1332	0.0813	3.2145	0.8398	0.0785	0.9182	133.2802	5,714.1682	5,847.4484	9.4638	0.0941	6,112.0900

Torrance Technology Park - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	1,561.1384	1,561.1384	0.0543	0.0178	1,567.8049
Mobile	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.6644	3,759.6644	0.2047	0.0000	3,764.7816
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.5950	5.3884	13.5711	0.0434	3.1332	0.0813	3.2145	0.8398	0.0785	0.9182	133.2802	5,714.1682	5,847.4484	9.4638	0.0941	6,112.0900

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

3.0 Construction Detail

Construction Phase

Torrance Technology Park - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/30/2018	5	0	
3	Grading	Grading	1/31/2018	1/30/2018	5	20	
4	Building Construction	Building Construction	1/31/2018	1/30/2018	5	230	
5	Paving	Paving	1/31/2019	1/30/2018	5	0	
6	Architectural Coating	Architectural Coating	1/31/2019	1/30/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 615,000; Non-Residential Outdoor: 205,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48
Demolition	Excavators	3	0.00	158	0.38
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Excavators	1	0.00	158	0.38
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Paving	Pavers	2	0.00	130	0.42
Paving	Rollers	2	0.00	80	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Grading	Graders	1	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Paving	Paving Equipment	2	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Building Construction	Welders	1	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Annual

3.5 Building Construction - 2018

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.664 4	3,759.664 4	0.2047	0.0000	3,764.781 6
Unmitigated	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.664 4	3,759.664 4	0.2047	0.0000	3,764.781 6

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2,033.60	815.90	2050.00	8,245,389	8,245,389
Total	2,033.60	815.90	2,050.00	8,245,389	8,245,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,103.8639	1,103.8639	0.0456	9.4300e-003	1,107.8130
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,103.8639	1,103.8639	0.0456	9.4300e-003	1,107.8130
NaturalGas Mitigated	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918
NaturalGas Unmitigated	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	8.569e+006	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918
Total		0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918

Torrance Technology Park - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	8.569e+006	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918
Total		0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	3.4645e+006	1,103.8639	0.0456	9.4300e-003	1,107.8130
Total		1,103.8639	0.0456	9.4300e-003	1,107.8130

Torrance Technology Park - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	3.4645e+006	1,103.8639	0.0456	9.4300e-003	1,107.8130
Total		1,103.8639	0.0456	9.4300e-003	1,107.8130

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Unmitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

Torrance Technology Park - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	423.4349	3.1057	0.0763	523.8176
Unmitigated	423.4349	3.1057	0.0763	523.8176

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

Torrance Technology Park - South Coast AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	103.2006	6.0990	0.0000	255.6751
Unmitigated	103.2006	6.0990	0.0000	255.6751

Torrance Technology Park - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

9.0 Operational Offroad

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

Torrance Technology Park - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Winter

Torrance Technology Park
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Trips and VMT - Operation Only

Vehicle Trips - Source: ITE Trip Generation 10th Edition 2017

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/30/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/30/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	67.00	0.00
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	WD_TR	6.97	4.96

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.8820	24,525.8820	1.3565		24,559.7939
Total	14.7767	31.5712	79.8218	0.2556	19.1493	0.4726	19.6219	5.1247	0.4555	5.5802		27,287.9378	27,287.9378	1.4097	0.0506	27,338.2690

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.8820	24,525.8820	1.3565		24,559.7939
Total	14.7767	31.5712	79.8218	0.2556	19.1493	0.4726	19.6219	5.1247	0.4555	5.5802		27,287.9378	27,287.9378	1.4097	0.0506	27,338.2690

Torrance Technology Park - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/30/2018	5	0	
3	Grading	Grading	1/31/2018	1/30/2018	5	20	
4	Building Construction	Building Construction	1/31/2018	1/30/2018	5	230	
5	Paving	Paving	1/31/2019	1/30/2018	5	0	
6	Architectural Coating	Architectural Coating	1/31/2019	1/30/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 615,000; Non-Residential Outdoor: 205,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48
Demolition	Excavators	3	0.00	158	0.38
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Excavators	1	0.00	158	0.38
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Paving	Pavers	2	0.00	130	0.42
Paving	Rollers	2	0.00	80	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Grading	Graders	1	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Paving	Paving Equipment	2	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Building Construction	Welders	1	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	172.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.5 Building Construction - 2018

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.88 20	24,525.88 20	1.3565		24,559.79 39
Unmitigated	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.88 20	24,525.88 20	1.3565		24,559.79 39

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2,033.60	815.90	2050.00	8,245,389	8,245,389
Total	2,033.60	815.90	2,050.00	8,245,389	8,245,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
NaturalGas Unmitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23476.7	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

Torrance Technology Park - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23.4767	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Summer

Torrance Technology Park
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Trips and VMT - Operation Only

Vehicle Trips - Source: ITE Trip Generation 10th Edition 2017

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/30/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/30/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	67.00	0.00
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	WD_TR	6.97	4.96

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.9543	25,903.9543	1.3728		25,938.2747
Total	15.0035	30.6624	85.7559	0.2694	19.1493	0.4710	19.6202	5.1247	0.4539	5.5786		28,666.0102	28,666.0102	1.4260	0.0506	28,716.7498

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.9543	25,903.9543	1.3728		25,938.2747
Total	15.0035	30.6624	85.7559	0.2694	19.1493	0.4710	19.6202	5.1247	0.4539	5.5786		28,666.0102	28,666.0102	1.4260	0.0506	28,716.7498

Torrance Technology Park - South Coast AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/30/2018	5	0	
3	Grading	Grading	1/31/2018	1/30/2018	5	20	
4	Building Construction	Building Construction	1/31/2018	1/30/2018	5	230	
5	Paving	Paving	1/31/2019	1/30/2018	5	0	
6	Architectural Coating	Architectural Coating	1/31/2019	1/30/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 615,000; Non-Residential Outdoor: 205,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48
Demolition	Excavators	3	0.00	158	0.38
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Excavators	1	0.00	158	0.38
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Paving	Pavers	2	0.00	130	0.42
Paving	Rollers	2	0.00	80	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Grading	Graders	1	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Paving	Paving Equipment	2	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Building Construction	Welders	1	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	172.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.5 Building Construction - 2018

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.95 43	25,903.95 43	1.3728		25,938.27 47
Unmitigated	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.95 43	25,903.95 43	1.3728		25,938.27 47

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2,033.60	815.90	2050.00	8,245,389	8,245,389
Total	2,033.60	815.90	2,050.00	8,245,389	8,245,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1
NaturalGas Unmitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23476.7	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1

Torrance Technology Park - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23.4767	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

APPENDIX B

CURRENTLY PROPOSED INDUSTRIAL PARK EMISSIONS

Torrance Technology Park - South Coast AQMD Air District, Winter

Torrance Technology Park
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates provided by Michael Baker International.

Fleet Mix - Fleet Mix provided by Michael Baker International.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

Torrance Technology Park - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblFleetMix	HHD	0.03	0.11
tblFleetMix	LDA	0.54	0.87
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.01
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	2.00	0.00
tblVehicleTrips	PR_TP	79.00	100.00
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	WD_TR	6.83	3.37

Torrance Technology Park - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407
Total	12.6272	48.9757	51.4329	0.2507	17.7803	0.3800	18.1603	4.7438	0.3635	5.1073		26,450.4297	26,450.4297	1.2140	0.0221	26,487.3789

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407
Total	12.6272	48.9757	51.4329	0.2507	17.7803	0.3800	18.1603	4.7438	0.3635	5.1073		26,450.4297	26,450.4297	1.2140	0.0221	26,487.3789

Torrance Technology Park - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	

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 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Torrance Technology Park - South Coast AQMD Air District, Winter

3.1 Mitigation Measures Construction

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	lb/day										lb/day						
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Unmitigated Construction Off-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.2 Demolition - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Torrance Technology Park - South Coast AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407
Unmitigated	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,381.70	1,041.40	508.40	7,301,205	7,301,205
Total	1,381.70	1,041.40	508.40	7,301,205	7,301,205

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.870000	0.000000	0.000000	0.000000	0.010000	0.000000	0.010000	0.110000	0.000000	0.000000	0.000000	0.000000	0.000000

Torrance Technology Park - South Coast AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
NaturalGas Unmitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Torrance Technology Park - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10266.8	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10.2668	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

6.0 Area Detail

6.1 Mitigation Measures Area

Torrance Technology Park - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Torrance Technology Park - South Coast AQMD Air District, Winter

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Summer

Torrance Technology Park
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates provided by Michael Baker International.

Fleet Mix - Fleet Mix provided by Michael Baker International.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

Torrance Technology Park - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblFleetMix	HHD	0.03	0.11
tblFleetMix	LDA	0.54	0.87
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.01
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	2.00	0.00
tblVehicleTrips	PR_TP	79.00	100.00
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	WD_TR	6.83	3.37

Torrance Technology Park - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.8741	26,435.8741	1.1749		26,465.2466
Total	12.7465	48.1646	55.5759	0.2626	17.7803	0.3764	18.1567	4.7438	0.3600	5.1039		27,643.8285	27,643.8285	1.1983	0.0221	27,680.3848

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.8741	26,435.8741	1.1749		26,465.2466
Total	12.7465	48.1646	55.5759	0.2626	17.7803	0.3764	18.1567	4.7438	0.3600	5.1039		27,643.8285	27,643.8285	1.1983	0.0221	27,680.3848

Torrance Technology Park - South Coast AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	

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 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Torrance Technology Park - South Coast AQMD Air District, Summer

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.2 Demolition - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Torrance Technology Park - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.87 41	26,435.87 41	1.1749		26,465.24 66
Unmitigated	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.87 41	26,435.87 41	1.1749		26,465.24 66

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,381.70	1,041.40	508.40	7,301,205	7,301,205
Total	1,381.70	1,041.40	508.40	7,301,205	7,301,205

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.870000	0.000000	0.000000	0.000000	0.010000	0.000000	0.010000	0.110000	0.000000	0.000000	0.000000	0.000000	0.000000

Torrance Technology Park - South Coast AQMD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
NaturalGas Unmitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Torrance Technology Park - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10266.8	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10.2668	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

6.0 Area Detail

6.1 Mitigation Measures Area

Torrance Technology Park - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Torrance Technology Park - South Coast AQMD Air District, Summer

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Annual

Torrance Technology Park
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates provided by Michael Baker International.

Fleet Mix - Fleet Mix provided by Michael Baker International.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

Torrance Technology Park - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblFleetMix	HHD	0.03	0.11
tblFleetMix	LDA	0.54	0.87
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.01
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	2.00	0.00
tblVehicleTrips	PR_TP	79.00	100.00
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	WD_TR	6.83	3.37

Torrance Technology Park - South Coast AQMD Air District, Annual

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	2,027.5562	2,027.5562	0.0793	0.0193	2,035.2827
Mobile	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.2173	7.9556	8.3292	0.0406	2.7787	0.0619	2.8406	0.7425	0.0593	0.8017	133.2802	6,114.9932	6,248.2734	9.4533	0.0956	6,513.0901

Torrance Technology Park - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	2,027.5562	2,027.5562	0.0793	0.0193	2,035.2827
Mobile	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.2173	7.9556	8.3292	0.0406	2.7787	0.0619	2.8406	0.7425	0.0593	0.8017	133.2802	6,114.9932	6,248.2734	9.4533	0.0956	6,513.0901

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Torrance Technology Park - South Coast AQMD Air District, Annual

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 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Torrance Technology Park - South Coast AQMD Air District, Annual

3.2 Demolition - 2018

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Torrance Technology Park - South Coast AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038
Unmitigated	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,381.70	1,041.40	508.40	7,301,205	7,301,205
Total	1,381.70	1,041.40	508.40	7,301,205	7,301,205

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.870000	0.000000	0.000000	0.000000	0.010000	0.000000	0.010000	0.110000	0.000000	0.000000	0.000000	0.000000	0.000000

Torrance Technology Park - South Coast AQMD Air District, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,827.5806	1,827.5806	0.0755	0.0156	1,834.1189
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,827.5806	1,827.5806	0.0755	0.0156	1,834.1189
NaturalGas Mitigated	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639
NaturalGas Unmitigated	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639

Torrance Technology Park - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	3.7474e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639
Total		0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	3.7474e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639
Total		0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639

Torrance Technology Park - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	5.7359e+006	1,827.5806	0.0755	0.0156	1,834.1189
Total		1,827.5806	0.0755	0.0156	1,834.1189

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	5.7359e+006	1,827.5806	0.0755	0.0156	1,834.1189
Total		1,827.5806	0.0755	0.0156	1,834.1189

6.0 Area Detail

6.1 Mitigation Measures Area

Torrance Technology Park - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Unmitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

Torrance Technology Park - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

7.0 Water Detail

7.1 Mitigation Measures Water

Torrance Technology Park - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	423.4349	3.1057	0.0763	523.8176
Unmitigated	423.4349	3.1057	0.0763	523.8176

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

Torrance Technology Park - South Coast AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	103.2006	6.0990	0.0000	255.6751
Unmitigated	103.2006	6.0990	0.0000	255.6751

Torrance Technology Park - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

9.0 Operational Offroad

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

Torrance Technology Park - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

February 2, 2018

Mr. Ross Geller
Applied Planning
11762 De Palma Road, 1-C 310
Corona, CA 92883

SUBJECT: TORRANCE TECHNOLOGY PARK AIR QUALITY & GREENHOUSE GAS MEMORANDUM

Dear Mr. Ross Geller:

Urban Crossroads, Inc. is pleased to provide the following Air Quality & Greenhouse Gas Memorandum for the Torrance Technology Park Project (“Modified Project”), which is located south of 195th Street/Toyota Way and east of Van Ness Avenue in the City of Torrance, as shown on Exhibit A. This Air Quality & Greenhouse Gas Memorandum evaluates potential Modified Project air quality and Greenhouse Gas impacts in the context of applicable City of Torrance AQMP standards and significance criteria based on guidance provided by Appendix G of the California Environmental Quality Act (CEQA). In addition, this letter outlines the local regulatory setting and provides air quality and greenhouse gas analyses related to the proposed Modified Project.

The Torrance Technology Park, including all facilities and supporting improvements, and associated discretionary actions comprise the “Modified Project” considered in this Air Quality & Greenhouse Gas Memorandum. The Modified Project would implement up to 410,000 square feet of General Light Industrial uses within the westerly portion of the approximately 56-acre site entitled for development under the *Toyota South Campus Plan* (“Original Project”) *Mitigation Negative Declaration* (MND), approved by the City of Torrance in 2000. The Modified Project 410,000 square feet of General Light Industrial uses would replace entitlements for approximately 351,360 square feet of General Office uses approved as part of the Original Project. The Modified Project would not otherwise substantively affect the Original Project as approved by the City. The Modified Project site plan is presented on Exhibit B.

PREVIOUS FINDINGS OF THE 2000 TOYOTA SOUTH CAMPUS PLAN MND

The 2000 *Toyota South Campus Plan Mitigation Negative Declaration* (2000 MND, MND) includes a discussion of impacts related to the Original Project. Specifically, the MND states:

The long-term cumulative impacts in the City pursuant to the Torrance General Plan were assessed in the General Plan Update Final EIR, 1992. The impacts on air quality were significant and unable to be mitigated, as such a statement of overriding consideration was adopted concerning air quality. As the project is consistent with the General Plan EIR, cumulative impacts related to this project are considered to be previously assessed.

MODIFIED PROJECT AIR QUALITY IMPACT ANALYSIS

Construction-Source Air Quality Impacts

It is assumed that mass grading and construction activities for General Light Industrial facilities that would be implemented under the Modified Project would parallel the time frames and the scope of construction activities reflected and evaluated in the 2000 MND analysis for the Original Project General Office uses. with comparable peak construction-source emissions impacts. It is considered more likely, however, that contemporary construction techniques and current construction equipment emissions controls required of the Modified Project would result in comparative reductions in peak construction-source emissions.

Operational-Source Air Quality Impacts

Operational-source air quality impacts were modeled employing the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. Detailed modeling results are presented at Appendix A to this Memorandum.

Maximum daily operational-source criteria pollutant emissions generated by operations of the Modified Project General Light Industrial uses are summarized on Table 1. As indicated, air pollutant emissions generated by operations of the Modified Project General Light Industrial uses would not exceed regional thresholds of significance established by the South Coast Air Quality Management District (SCAQMD) for any criteria emissions.

TABLE 1: MODIFIED PROJECT PEAK OPERATIONAL EMISSIONS

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NOx	CO	SO2	PM10	PM2.5
Area	9.16	0.00	0.04	0.00	0.00	0.00
Energy Source	0.25	2.30	1.93	0.01	0.17	0.17
Mobile	5.59	28.36	83.78	0.26	19.45	5.40
Total Maximum Daily Emissions	15.00	30.66	85.76	0.27	19.62	5.58
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NOx	CO	SO2	PM10	PM2.5
Area	9.16	0.00	0.04	0.00	0.00	0.00
Energy Source	0.25	2.30	1.93	0.01	0.17	0.17
Mobile	5.36	29.27	77.85	0.24	19.45	5.41
Total Maximum Daily Emissions	14.78	31.57	79.82	0.26	19.62	5.58
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

MODIFIED PROJECT GREENHOUSE GAS ANALYSIS

Greenhouse Gas (GHG) emissions impacts were modeled employing the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. Detailed modeling results are presented at Appendix A to this Memorandum.

As shown on Table 2, the Modified Project General Light Industrial uses would generate a total of approximately 6,112.09 MTCO2e per year. As such, the Modified Project General Light Industrial Uses would not exceed the SCAQMD’s numeric thresholds of 10,000 MTCO2e for industrial land uses.

TABLE 2: MODIFIED PROJECT GREENHOUSE GAS EMISSIONS

Emission Source	Currently Proposed Project Greenhouse Gas Emissions (Annual)			
	CO2	CH4	N2O	Total CO2E
Area	0.01	0.00	0.00	0.01
Energy	1,564.14	0.05	0.02	1,567.80
Mobile	3,759.66	0.20	0.00	3,764.78
Waste	0.00	6.10	0.00	255.68
Water Usage	393.36	3.11	0.00	523.82
Total CO2E (All Sources)	6,112.09			
Screening Threshold (CO2E)	10,000			
Threshold Exceeded?	NO			

AIR QUALITY EMISSIONS COMPARISON

Table 3 compares peak operational-source criteria pollutant emissions generated by the Modified Project General Light Industrial uses with peak operational-source criteria pollutant emissions generated by the Original Project General Office uses.

As indicated at Table 3, the Modified Project General Light Industrial uses would result in a net decrease in peak operational-source criteria pollutant emissions when compared to peak operational-source criteria pollutant emissions the Original Project General Office uses.

The Modified Project would therefore not result in new or substantively different or substantively increased operational-source air quality impacts than would occur under the Original Project.

TABLE 3: SUMMARY OF PEAK OPERATIONAL EMISSIONS COMPARISON

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NOx	CO	SO2	PM10	PM2.5
General Light Industrial Total Maximum Daily Emissions	15.00	30.66	85.76	0.27	19.62	5.58
General Office Total Maximum Daily Emissions	16.07	39.52	107.98	0.32	23.88	6.69
Variance	-1.07	-8.86	-22.22	-0.05	-4.26	-1.11
Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NOx	CO	SO2	PM10	PM2.5
General Light Industrial Total Maximum Daily Emissions	14.78	31.57	79.82	0.26	19.62	5.58
General Office Total Maximum Daily Emissions	15.73	40.54	101.63	0.31	23.88	6.69
Variance	-0.95	-8.97	-21.80	-0.05	-4.26	-1.11

GREENHOUSE GAS EMISSIONS COMPARISON

Table 4 compares GHG emissions of the Modified Project General Light Industrial uses with GHG emissions of the Original Project General Office uses. As indicated at Table 4, the Modified Project General Light Industrial uses would result in a net decrease in GHG emissions when compared to GHG emissions generated by the Original Project General Office uses.

The Modified Project would therefore not result in new or substantively different or substantively increased GHG emissions impacts than would occur under the Original Project.

TABLE 4: GREENHOUSE GAS COMPARISON

Emission Source	Emissions (Annual)
General Light Industrial Total CO2E (All Sources)	6,112.09
General Office Total CO2E (All Sources)	6,260.01
Variance	-147.92

MODIFIED PROJECT HEALTH RISK ASSESSMENT

This analysis also evaluates the potential mobile source health risk impacts to receptors (residents or workers) associated with the development of the proposed Modified Project. Health risk exposures were modeled in accordance with the guidelines in the SCAQMD’s Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. SCAQMD recommends using the Environmental Protection Agency’s (U.S. EPA’s) AERMOD model which has been employed accordingly. Risk calculations were conducted consistent with the Office of Environmental Health Hazards Assessment (OEHHA)’s 2015 Risk Assessment Guidelines. Detailed health risk modeling results are presented at Appendix B to this Memorandum.

More specifically the analysis presented here evaluates potential health risk impacts that could result from exposure to diesel particulate matter (DPM) generated by heavy-duty diesel trucks accessing the

Modified Project. The greatest potential for exposure to these DPM emissions would occur at the industrial buildings abutting the Modified Project Site to the north. At greater distances from the Modified Project uses, DPM emissions concentrations would dissipate, and potential health risks associated with exposure to DPM emissions would be decreased.

At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to the Modified Project DPM emissions is estimated at 3.53 in one million, which is less than the SCAQMD threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.001, which would not exceed the applicable SCAQMD threshold of 1.0. As such, the Modified Project General Light Industrial uses will not cause a significant human health or cancer risk at any potentially affected receptors. The nearest modeled receptors and modeled source configuration are illustrated on Exhibit C. The Modified Project General Light Industrial uses do not otherwise comprise facilities or operations that would generate emissions concentrations that would potentially affect sensitive receptors.

OTHER CONSIDERATIONS

- The Modified Project does not propose or require any change in City of Torrance General Plan Land Use designations, nor any increase in development intensity beyond that currently anticipated for the subject site. Moreover, the Modified Project General Light Industrial uses would not result in any potentially significant air quality impacts. On this basis, the Modified Project General Light Industrial uses would be considered consistent with the applicable Air Quality Management Plan (AQMP).
- The Modified Project does not propose facilities or on-going operations that would create objectionable odors affecting a substantial number of people. Construction-source and operational-source odor impacts are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402 et al. The Project would comply with all SCAQMD Rules regulating and controlling odors and odor sources. The Modified Project would therefore not create objectionable odors affecting a substantial number of people

CONCLUSIONS

Based on the analysis presented here, air pollutant emissions generated by the General Light Industrial uses proposed by the Modified Project would not exceed applicable SCAQMD thresholds. Nor would the Modified Project General Light Industrial uses otherwise generate or result in air pollutant emissions or air pollutant emissions concentrations that would result in potentially adverse impacts.

Moreover, in comparison to the Original Project, air quality impacts in the aggregate would be comparatively diminished under the Modified Project. The City's previous SOC regarding significant air quality impacts resulting from the Original Project would, if anything, likely overstate the significance of air quality impacts attributable to the Modified Project.

Mr. Ross Geller
Applied Planning
February 2, 2018
Page 6 of 9

No changed or new information has been identified to indicate that the potential for the Modified Project to result in impacts that would be substantively greater than or different from those that would result from development evaluated in the 2000 MND.

If you have any questions, please contact me directly at (949) 336-5987.

Respectfully submitted,

URBAN CROSSROADS, INC.



Haseeb Qureshi,
Senior Associate

EXHIBIT A: LOCATION MAP



EXHIBIT B: SITE PLAN

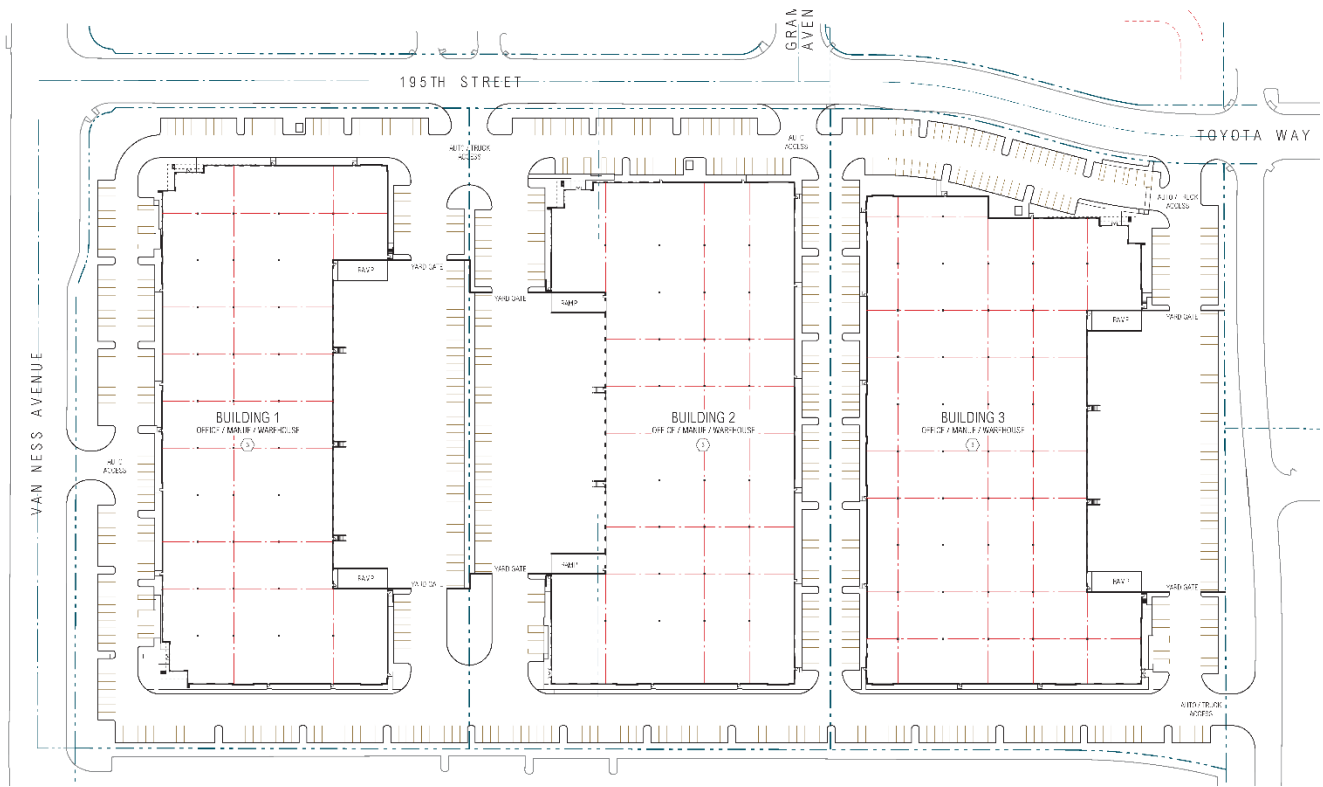
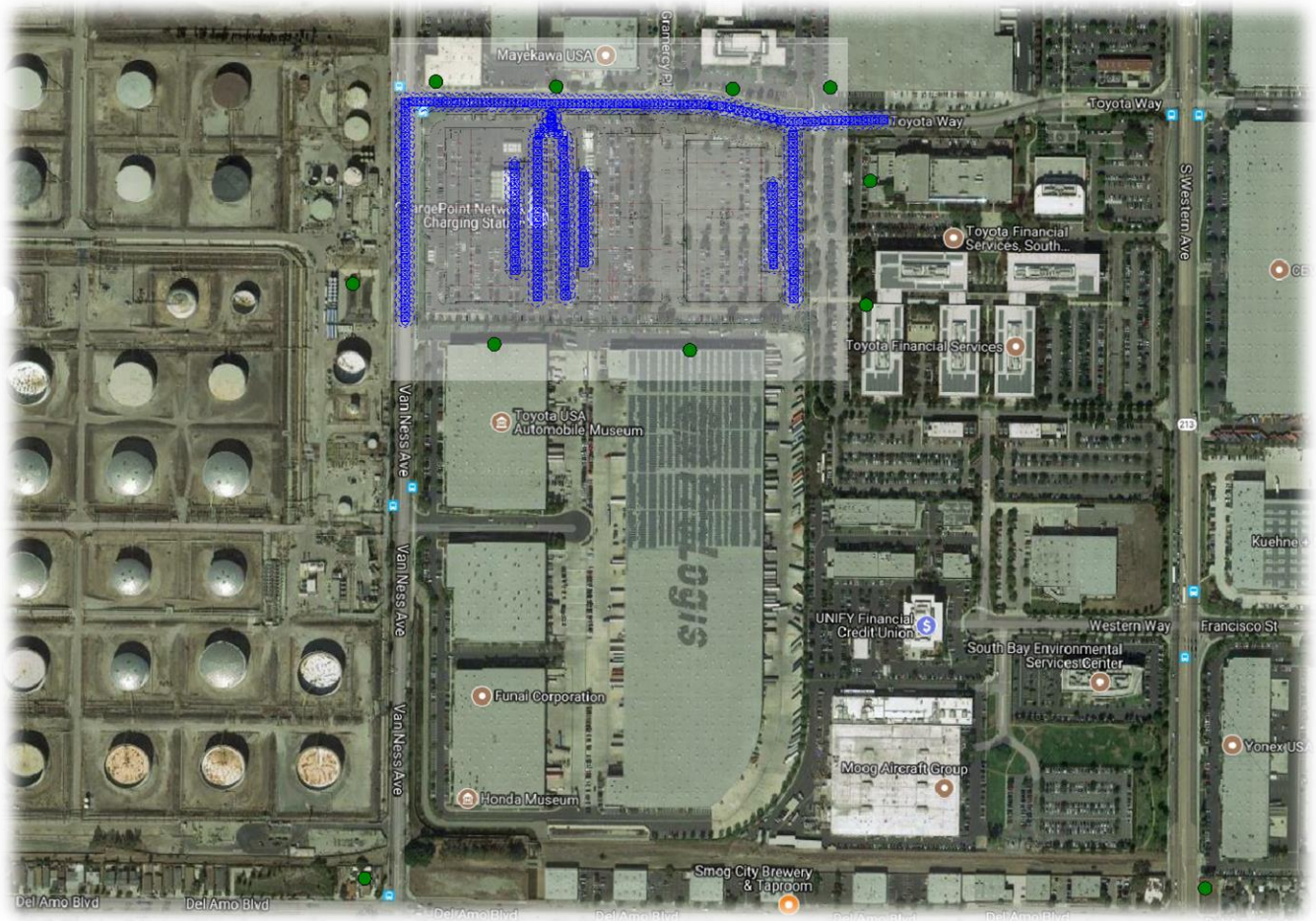


EXHIBIT C: MODELED RECEPTORS AND SOURCES



APPENDIX A

CALEEMOD EMISSIONS MODEL OUTPUTS

Torrance Technology Park - South Coast AQMD Air District, Annual

Torrance Technology Park
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Annual

Project Characteristics -

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Trips and VMT - Operation Only

Vehicle Trips - Source: ITE Trip Generation 10th Edition 2017

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/30/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/30/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	67.00	0.00
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	WD_TR	6.97	4.96

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-31-2018	4-29-2018	0.0001	0.0001
		Highest	0.0001	0.0001

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	1,561.1384	1,561.1384	0.0543	0.0178	1,567.8049
Mobile	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.6644	3,759.6644	0.2047	0.0000	3,764.7816
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.5950	5.3884	13.5711	0.0434	3.1332	0.0813	3.2145	0.8398	0.0785	0.9182	133.2802	5,714.1682	5,847.4484	9.4638	0.0941	6,112.0900

Torrance Technology Park - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	1,561.1384	1,561.1384	0.0543	0.0178	1,567.8049
Mobile	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.6644	3,759.6644	0.2047	0.0000	3,764.7816
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.5950	5.3884	13.5711	0.0434	3.1332	0.0813	3.2145	0.8398	0.0785	0.9182	133.2802	5,714.1682	5,847.4484	9.4638	0.0941	6,112.0900

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

3.0 Construction Detail

Construction Phase

Torrance Technology Park - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/30/2018	5	0	
3	Grading	Grading	1/31/2018	1/30/2018	5	20	
4	Building Construction	Building Construction	1/31/2018	1/30/2018	5	230	
5	Paving	Paving	1/31/2019	1/30/2018	5	0	
6	Architectural Coating	Architectural Coating	1/31/2019	1/30/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 615,000; Non-Residential Outdoor: 205,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48
Demolition	Excavators	3	0.00	158	0.38
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Excavators	1	0.00	158	0.38
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Paving	Pavers	2	0.00	130	0.42
Paving	Rollers	2	0.00	80	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Grading	Graders	1	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Paving	Paving Equipment	2	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Building Construction	Welders	1	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Annual

3.5 Building Construction - 2018

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.664 4	3,759.664 4	0.2047	0.0000	3,764.781 6
Unmitigated	0.8767	4.9683	13.2129	0.0409	3.1332	0.0494	3.1826	0.8398	0.0465	0.8863	0.0000	3,759.664 4	3,759.664 4	0.2047	0.0000	3,764.781 6

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2,033.60	815.90	2050.00	8,245,389	8,245,389
Total	2,033.60	815.90	2,050.00	8,245,389	8,245,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,103.8639	1,103.8639	0.0456	9.4300e-003	1,107.8130
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,103.8639	1,103.8639	0.0456	9.4300e-003	1,107.8130
NaturalGas Mitigated	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918
NaturalGas Unmitigated	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	8.569e+006	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918
Total		0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918

Torrance Technology Park - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	8.569e+006	0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918
Total		0.0462	0.4201	0.3528	2.5200e-003		0.0319	0.0319		0.0319	0.0319	0.0000	457.2745	457.2745	8.7600e-003	8.3800e-003	459.9918

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	3.4645e+006	1,103.8639	0.0456	9.4300e-003	1,107.8130
Total		1,103.8639	0.0456	9.4300e-003	1,107.8130

Torrance Technology Park - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	3.4645e+006	1,103.8639	0.0456	9.4300e-003	1,107.8130
Total		1,103.8639	0.0456	9.4300e-003	1,107.8130

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Unmitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

Torrance Technology Park - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	423.4349	3.1057	0.0763	523.8176
Unmitigated	423.4349	3.1057	0.0763	523.8176

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

Torrance Technology Park - South Coast AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	103.2006	6.0990	0.0000	255.6751
Unmitigated	103.2006	6.0990	0.0000	255.6751

Torrance Technology Park - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

9.0 Operational Offroad

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

Torrance Technology Park - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Winter

Torrance Technology Park
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	351.36	1000sqft	8.07	351,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use -

Construction Phase - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Grading - Operations only

Trips and VMT - Operations only

Vehicle Trips - Source: ITE Trip Generation 10th Edition

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	230.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2018
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00

Torrance Technology Park - South Coast AQMD Air District, Winter

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	58.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	0.00	18.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Energy	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Mobile	7.7811	39.6741	100.8655	0.3004	23.4432	0.3719	23.8151	6.2738	0.3505	6.6243		30,478.1932	30,478.1932	1.7612		30,522.2241
Total	15.7287	40.5371	101.6265	0.3055	23.4432	0.4376	23.8808	6.2738	0.4162	6.6900		31,513.3806	31,513.3806	1.7813	0.0190	31,563.5679

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Energy	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Mobile	7.7811	39.6741	100.8655	0.3004	23.4432	0.3719	23.8151	6.2738	0.3505	6.6243		30,478.1932	30,478.1932	1.7612		30,522.2241
Total	15.7287	40.5371	101.6265	0.3055	23.4432	0.4376	23.8808	6.2738	0.4162	6.6900		31,513.3806	31,513.3806	1.7813	0.0190	31,563.5679

Torrance Technology Park - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/31/2018	5	1	
3	Grading	Grading	1/31/2018	1/31/2018	5	1	
4	Building Construction	Building Construction	1/31/2018	1/31/2018	5	1	
5	Paving	Paving	1/31/2018	1/31/2018	5	1	
6	Architectural Coating	Architectural Coating	1/31/2018	1/31/2018	5	1	

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: 527,040; Non-Residential Outdoor: 175,680; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	0	0.00	158	0.38
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Paving	Pavers	0	0.00	130	0.42
Paving	Rollers	0	0.00	80	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Graders	0	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Paving	Paving Equipment	0	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	112.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	22.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974

3.4 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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

3.5 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
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6562	0.4740	5.0859	0.0128	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,277.5607	1,277.5607	0.0436		1,278.6506
Total	0.6562	0.4740	5.0859	0.0128	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,277.5607	1,277.5607	0.0436		1,278.6506

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6562	0.4740	5.0859	0.0128	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,277.5607	1,277.5607	0.0436		1,278.6506
Total	0.6562	0.4740	5.0859	0.0128	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,277.5607	1,277.5607	0.0436		1,278.6506

3.6 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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

3.7 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	lb/day										lb/day					
Archit. Coating	3,257.1072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3,257.1072	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1289	0.0931	0.9990	2.5200e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		250.9494	250.9494	8.5600e-003		251.1635
Total	0.1289	0.0931	0.9990	2.5200e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		250.9494	250.9494	8.5600e-003		251.1635

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3,257.1072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	3,257.1072	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1289	0.0931	0.9990	2.5200e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		250.9494	250.9494	8.5600e-003		251.1635
Total	0.1289	0.0931	0.9990	2.5200e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		250.9494	250.9494	8.5600e-003		251.1635

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7811	39.6741	100.8655	0.3004	23.4432	0.3719	23.8151	6.2738	0.3505	6.6243		30,478.19 32	30,478.19 32	1.7612		30,522.22 41
Unmitigated	7.7811	39.6741	100.8655	0.3004	23.4432	0.3719	23.8151	6.2738	0.3505	6.6243		30,478.19 32	30,478.19 32	1.7612		30,522.22 41

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,422.25	776.51	245.95	8,345,282	8,345,282
Total	3,422.25	776.51	245.95	8,345,282	8,345,282

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
NaturalGas Unmitigated	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8798.44	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Total		0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617

Torrance Technology Park - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8.79844	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Total		0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Unmitigated	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822

Torrance Technology Park - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4800e-003	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Total	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4800e-003	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Total	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Summer

Torrance Technology Park
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	351.36	1000sqft	8.07	351,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use -

Construction Phase - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Grading - Operations only

Trips and VMT - Operations only

Vehicle Trips - Source: ITE Trip Generation 10th Edition

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	230.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2018
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00

Torrance Technology Park - South Coast AQMD Air District, Summer

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	58.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	0.00	18.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Energy	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Mobile	8.1255	38.6596	107.2162	0.3177	23.4432	0.3692	23.8124	6.2738	0.3479	6.6216		32,210.6577	32,210.6577	1.7697		32,254.8996
Total	16.0731	39.5225	107.9772	0.3228	23.4432	0.4349	23.8780	6.2738	0.4136	6.6873		33,245.8451	33,245.8451	1.7897	0.0190	33,296.2434

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Energy	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Mobile	8.1255	38.6596	107.2162	0.3177	23.4432	0.3692	23.8124	6.2738	0.3479	6.6216		32,210.6577	32,210.6577	1.7697		32,254.8996
Total	16.0731	39.5225	107.9772	0.3228	23.4432	0.4349	23.8780	6.2738	0.4136	6.6873		33,245.8451	33,245.8451	1.7897	0.0190	33,296.2434

Torrance Technology Park - South Coast AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/31/2018	5	1	
3	Grading	Grading	1/31/2018	1/31/2018	5	1	
4	Building Construction	Building Construction	1/31/2018	1/31/2018	5	1	
5	Paving	Paving	1/31/2018	1/31/2018	5	1	
6	Architectural Coating	Architectural Coating	1/31/2018	1/31/2018	5	1	

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: 527,040; Non-Residential Outdoor: 175,680; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	0	0.00	158	0.38
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Paving	Pavers	0	0.00	130	0.42
Paving	Rollers	0	0.00	80	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Graders	0	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Paving	Paving Equipment	0	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	112.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	22.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0970	0.0695	0.9032	2.2100e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		219.4833	219.4833	7.4800e-003		219.6704
Total	0.0970	0.0695	0.9032	2.2100e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		219.4833	219.4833	7.4800e-003		219.6704

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0970	0.0695	0.9032	2.2100e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		219.4833	219.4833	7.4800e-003		219.6704
Total	0.0970	0.0695	0.9032	2.2100e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		219.4833	219.4833	7.4800e-003		219.6704

3.4 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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

3.5 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
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.6035	0.4327	5.6197	0.0137	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,365.6739	1,365.6739	0.0466			1,366.8380
Total	0.6035	0.4327	5.6197	0.0137	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,365.6739	1,365.6739	0.0466			1,366.8380

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6035	0.4327	5.6197	0.0137	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,365.6739	1,365.6739	0.0466		1,366.8380
Total	0.6035	0.4327	5.6197	0.0137	1.2519	9.9800e-003	1.2619	0.3320	9.2000e-003	0.3412		1,365.6739	1,365.6739	0.0466		1,366.8380

3.6 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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

3.7 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	lb/day										lb/day					
Archit. Coating	3,257.1072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3,257.1072	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1185	0.0850	1.1039	2.7000e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		268.2574	268.2574	9.1500e-003		268.4860
Total	0.1185	0.0850	1.1039	2.7000e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		268.2574	268.2574	9.1500e-003		268.4860

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3,257.1072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	3,257.1072	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1185	0.0850	1.1039	2.7000e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		268.2574	268.2574	9.1500e-003		268.4860
Total	0.1185	0.0850	1.1039	2.7000e-003	0.2459	1.9600e-003	0.2479	0.0652	1.8100e-003	0.0670		268.2574	268.2574	9.1500e-003		268.4860

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.1255	38.6596	107.2162	0.3177	23.4432	0.3692	23.8124	6.2738	0.3479	6.6216		32,210.6577	32,210.6577	1.7697		32,254.8996
Unmitigated	8.1255	38.6596	107.2162	0.3177	23.4432	0.3692	23.8124	6.2738	0.3479	6.6216		32,210.6577	32,210.6577	1.7697		32,254.8996

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,422.25	776.51	245.95	8,345,282	8,345,282
Total	3,422.25	776.51	245.95	8,345,282	8,345,282

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
NaturalGas Unmitigated	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8798.44	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Total		0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617

Torrance Technology Park - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8.79844	0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617
Total		0.0949	0.8626	0.7246	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,035.1105	1,035.1105	0.0198	0.0190	1,041.2617

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Unmitigated	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822

Torrance Technology Park - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4800e-003	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Total	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8924					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4800e-003	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822
Total	7.8528	3.4000e-004	0.0364	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0769	0.0769	2.1000e-004		0.0822

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Annual

Torrance Technology Park
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	351.36	1000sqft	8.07	351,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Annual

Project Characteristics -

Land Use -

Construction Phase - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Grading - Operations only

Trips and VMT - Operations only

Vehicle Trips - Source: ITE Trip Generation 10th Edition

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	230.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/31/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2018
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00

Torrance Technology Park - South Coast AQMD Air District, Annual

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	58.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	0.00	18.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-31-2018	4-29-2018	1.1640	1.1640
		Highest	1.1640	1.1640

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4329	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003
Energy	0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	1,737.5662	1,737.5662	0.0679	0.0165	1,744.1877
Mobile	1.0474	5.5669	14.1094	0.0420	3.1712	0.0510	3.2221	0.8500	0.0480	0.8980	0.0000	3,865.0250	3,865.0250	0.2191	0.0000	3,870.5024
Waste						0.0000	0.0000		0.0000	0.0000	66.3293	0.0000	66.3293	3.9200	0.0000	164.3281
Water						0.0000	0.0000		0.0000	0.0000	19.8120	394.5733	414.3853	2.0512	0.0514	480.9874
Total	2.4976	5.7244	14.2461	0.0429	3.1712	0.0629	3.2341	0.8500	0.0600	0.9100	86.1414	5,997.1732	6,083.3145	6.2582	0.0679	6,260.0149

Torrance Technology Park - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4329	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003
Energy	0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	1,737.5662	1,737.5662	0.0679	0.0165	1,744.1877
Mobile	1.0474	5.5669	14.1094	0.0420	3.1712	0.0510	3.2221	0.8500	0.0480	0.8980	0.0000	3,865.0250	3,865.0250	0.2191	0.0000	3,870.5024
Waste						0.0000	0.0000		0.0000	0.0000	66.3293	0.0000	66.3293	3.9200	0.0000	164.3281
Water						0.0000	0.0000		0.0000	0.0000	19.8120	394.5733	414.3853	2.0512	0.0514	480.9874
Total	2.4976	5.7244	14.2461	0.0429	3.1712	0.0629	3.2341	0.8500	0.0600	0.9100	86.1414	5,997.1732	6,083.3145	6.2582	0.0679	6,260.0149

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

3.0 Construction Detail

Construction Phase

Torrance Technology Park - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/31/2018	5	1	
3	Grading	Grading	1/31/2018	1/31/2018	5	1	
4	Building Construction	Building Construction	1/31/2018	1/31/2018	5	1	
5	Paving	Paving	1/31/2018	1/31/2018	5	1	
6	Architectural Coating	Architectural Coating	1/31/2018	1/31/2018	5	1	

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: 527,040; Non-Residential Outdoor: 175,680; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	0	0.00	158	0.38
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Paving	Pavers	0	0.00	130	0.42
Paving	Rollers	0	0.00	80	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Graders	0	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Paving	Paving Equipment	0	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Annual

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1158	0.1158	0.0000	0.0000	0.1159
Total	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1158	0.1158	0.0000	0.0000	0.1159

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0474	5.5669	14.1094	0.0420	3.1712	0.0510	3.2221	0.8500	0.0480	0.8980	0.0000	3,865.0250	3,865.0250	0.2191	0.0000	3,870.5024
Unmitigated	1.0474	5.5669	14.1094	0.0420	3.1712	0.0510	3.2221	0.8500	0.0480	0.8980	0.0000	3,865.0250	3,865.0250	0.2191	0.0000	3,870.5024

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,422.25	776.51	245.95	8,345,282	8,345,282
Total	3,422.25	776.51	245.95	8,345,282	8,345,282

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,566.1920	1,566.1920	0.0647	0.0134	1,571.7951
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,566.1920	1,566.1920	0.0647	0.0134	1,571.7951
NaturalGas Mitigated	0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.3742	171.3742	3.2800e-003	3.1400e-003	172.3926
NaturalGas Unmitigated	0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.3742	171.3742	3.2800e-003	3.1400e-003	172.3926

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	3.21143e+006	0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.3742	171.3742	3.2800e-003	3.1400e-003	172.3926
Total		0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.3742	171.3742	3.2800e-003	3.1400e-003	172.3926

Torrance Technology Park - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	3.21143e+006	0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.3742	171.3742	3.2800e-003	3.1400e-003	172.3926
Total		0.0173	0.1574	0.1322	9.4000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.3742	171.3742	3.2800e-003	3.1400e-003	172.3926

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	4.91553e+006	1,566.1920	0.0647	0.0134	1,571.7951
Total		1,566.1920	0.0647	0.0134	1,571.7951

Torrance Technology Park - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	4.91553e+006	1,566.1920	0.0647	0.0134	1,571.7951
Total		1,566.1920	0.0647	0.0134	1,571.7951

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4329	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003
Unmitigated	1.4329	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003

Torrance Technology Park - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1629					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.3000e-004	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003
Total	1.4329	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1629					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.3000e-004	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003
Total	1.4329	4.0000e-005	4.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.7200e-003	8.7200e-003	2.0000e-005	0.0000	9.3200e-003

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	414.3853	2.0512	0.0514	480.9874
Unmitigated	414.3853	2.0512	0.0514	480.9874

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	62.4485 / 38.2749	414.3853	2.0512	0.0514	480.9874
Total		414.3853	2.0512	0.0514	480.9874

Torrance Technology Park - South Coast AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	62.4485 / 38.2749	414.3853	2.0512	0.0514	480.9874
Total		414.3853	2.0512	0.0514	480.9874

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	66.3293	3.9200	0.0000	164.3281
Unmitigated	66.3293	3.9200	0.0000	164.3281

Torrance Technology Park - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	326.76	66.3293	3.9200	0.0000	164.3281
Total		66.3293	3.9200	0.0000	164.3281

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	326.76	66.3293	3.9200	0.0000	164.3281
Total		66.3293	3.9200	0.0000	164.3281

9.0 Operational Offroad

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

Torrance Technology Park - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Winter

Torrance Technology Park
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Trips and VMT - Operation Only

Vehicle Trips - Source: ITE Trip Generation 10th Edition 2017

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/30/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/30/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	67.00	0.00
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	WD_TR	6.97	4.96

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.8820	24,525.8820	1.3565		24,559.7939
Total	14.7767	31.5712	79.8218	0.2556	19.1493	0.4726	19.6219	5.1247	0.4555	5.5802		27,287.9378	27,287.9378	1.4097	0.0506	27,338.2690

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.8820	24,525.8820	1.3565		24,559.7939
Total	14.7767	31.5712	79.8218	0.2556	19.1493	0.4726	19.6219	5.1247	0.4555	5.5802		27,287.9378	27,287.9378	1.4097	0.0506	27,338.2690

Torrance Technology Park - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/30/2018	5	0	
3	Grading	Grading	1/31/2018	1/30/2018	5	20	
4	Building Construction	Building Construction	1/31/2018	1/30/2018	5	230	
5	Paving	Paving	1/31/2019	1/30/2018	5	0	
6	Architectural Coating	Architectural Coating	1/31/2019	1/30/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 615,000; Non-Residential Outdoor: 205,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48
Demolition	Excavators	3	0.00	158	0.38
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Excavators	1	0.00	158	0.38
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Paving	Pavers	2	0.00	130	0.42
Paving	Rollers	2	0.00	80	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Grading	Graders	1	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Paving	Paving Equipment	2	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Building Construction	Welders	1	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	172.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Winter

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.5 Building Construction - 2018

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.88 20	24,525.88 20	1.3565		24,559.79 39
Unmitigated	5.3601	29.2691	77.8460	0.2417	19.1493	0.2975	19.4468	5.1247	0.2804	5.4051		24,525.88 20	24,525.88 20	1.3565		24,559.79 39

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2,033.60	815.90	2050.00	8,245,389	8,245,389
Total	2,033.60	815.90	2,050.00	8,245,389	8,245,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1
NaturalGas Unmitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23476.7	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.966 2	2,761.966 2	0.0529	0.0506	2,778.379 1

Torrance Technology Park - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23.4767	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Winter

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

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Summer

Torrance Technology Park
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Torrance Technology Park - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Off-road Equipment - Operation Only

Trips and VMT - Operation Only

Vehicle Trips - Source: ITE Trip Generation 10th Edition 2017

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	4/23/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	4/10/2018	1/30/2018
tblConstructionPhase	PhaseEndDate	3/26/2019	1/30/2018
tblConstructionPhase	PhaseEndDate	3/13/2018	1/30/2018
tblConstructionPhase	PhaseStartDate	3/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	4/11/2018	1/31/2018
tblConstructionPhase	PhaseStartDate	3/14/2018	1/31/2018

Torrance Technology Park - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	2/27/2019	1/31/2019
tblConstructionPhase	PhaseStartDate	2/28/2018	1/31/2018
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	VendorTripNumber	67.00	0.00
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	WD_TR	6.97	4.96

2.0 Emissions Summary

Torrance Technology Park - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.9543	25,903.9543	1.3728		25,938.2747
Total	15.0035	30.6624	85.7559	0.2694	19.1493	0.4710	19.6202	5.1247	0.4539	5.5786		28,666.0102	28,666.0102	1.4260	0.0506	28,716.7498

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Mobile	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.9543	25,903.9543	1.3728		25,938.2747
Total	15.0035	30.6624	85.7559	0.2694	19.1493	0.4710	19.6202	5.1247	0.4539	5.5786		28,666.0102	28,666.0102	1.4260	0.0506	28,716.7498

Torrance Technology Park - South Coast AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	
2	Site Preparation	Site Preparation	1/31/2018	1/30/2018	5	0	
3	Grading	Grading	1/31/2018	1/30/2018	5	20	
4	Building Construction	Building Construction	1/31/2018	1/30/2018	5	230	
5	Paving	Paving	1/31/2019	1/30/2018	5	0	
6	Architectural Coating	Architectural Coating	1/31/2019	1/30/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 615,000; Non-Residential Outdoor: 205,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Torrance Technology Park - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48
Demolition	Excavators	3	0.00	158	0.38
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Excavators	1	0.00	158	0.38
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Paving	Pavers	2	0.00	130	0.42
Paving	Rollers	2	0.00	80	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Grading	Graders	1	0.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Paving	Paving Equipment	2	0.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Building Construction	Welders	1	0.00	46	0.45

Trips and VMT

Torrance Technology Park - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	172.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Torrance Technology Park - South Coast AQMD Air District, Summer

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587

Mitigated Construction On-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.5 Building Construction - 2018

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Torrance Technology Park - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.95 43	25,903.95 43	1.3728		25,938.27 47
Unmitigated	5.5870	28.3603	83.7801	0.2555	19.1493	0.2959	19.4452	5.1247	0.2789	5.4035		25,903.95 43	25,903.95 43	1.3728		25,938.27 47

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2,033.60	815.90	2050.00	8,245,389	8,245,389
Total	2,033.60	815.90	2,050.00	8,245,389	8,245,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

Torrance Technology Park - South Coast AQMD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
NaturalGas Unmitigated	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23476.7	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

Torrance Technology Park - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	23.4767	0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791
Total		0.2532	2.3016	1.9334	0.0138		0.1749	0.1749		0.1749	0.1749		2,761.9662	2,761.9662	0.0529	0.0506	2,778.3791

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

Torrance Technology Park - South Coast AQMD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

APPENDIX B

HEALTH RISK ASSESSMENT OUTPUT FILES AND CALCULATIONS

**AVERAGE EMISSION FACTOR
LA County 2018**

Speed	LHD1	MHD	HHD
0	0.823769	0.275201	0.04795
5	0.074882	0.222734	0.06170
25	0.02668	0.089864	0.03114

Speed	Weighted Average Emissions
0	0.35835
5	0.10826
25	0.04512

Emission Rates - Residential Exposure (2018 Emission Factors)

Truck Emission Rates						
Source	Trucks Per Day	VMT ^a (miles/day)	Truck Emission Rate ^b (grams/mile)	Truck Emission Rate ^b (grams/idle-hour)	Daily Truck Emissions ^c (grams/day)	Modeled Emission Rates (g/second)
On-Site Idling Building 1	25			0.3584	2.27	2.627E-05
On-Site Idling Building 2	25			0.3584	2.27	2.627E-05
On-Site Idling Building 3	25			0.3584	2.27	2.627E-05
On-Site Travel Building 1	51	6.14	0.1083		0.66	7.696E-06
On-Site Travel Building 2	51	5.94	0.1083		0.64	7.448E-06
On-Site Travel Building 3	51	5.36	0.1083		0.58	6.714E-06
Off-Site Travel	152	66.23	0.0451		2.99	3.459E-05

Table 1
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
Resident 30-Year Exposure Scenario

Source Number*	Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**										
		(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RID (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)	
		1	Diesel			6.78E-03	6.78E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	3.0E-06	3.5E-06	5.0E+00	1.4E-03	1.4E-03				
TOTAL									3.53E-06 3.53		1.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	

** Key to Toxicological Endpoints

Note: Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	350
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	30
CV/BL	Cardiovascular/Blood System	inhalation rate (L/kg-day)	461
IMMUN	Immune System	inhalation absorption factor	1
KIDN	Kidney	averaging time (years)	70
GI/LV	Gastrointestinal System/Liver	fraction of time at home	1
REPRO	Reproductive System (e.g. teratogenic and developmental effects)	age sensitivity factor (age third trimester to 2 ye:	10
EYES	Eye irritation and/or other effects	age sensitivity factor (ages 2 to 16 years old)	3
		weighted age sensitivity factor	2.6
		breathing rate third trimester	361
		breathing rate 0-2	1090
		breathing rate 2-9	572
		breathing rate 2-16	572
		breathing rate 16-30	261
		weighted breathing rate	461
		SCAQMD	

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.5.0
** Lakes Environmental Software Inc.
** Date: 1/31/2018
** File: C:\Lakes\AERMOD View\11458 HRA\11458 HRA.ADI
**

```

```

*****
**
**
*****

```

```

** AERMOD Control Pathway
*****
**
**

```

```

CO STARTING
TITLEONE C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc
MODELOPT DFAULT CONC
AVERTIME ANNUAL
URBANOPT 9818605
POLLUTID DPM
RUNORNOT RUN
ERRORFIL "11458 HRA.err"

```

CO FINISHED

```

**
*****
** AERMOD Source Pathway
*****
**
**

```

SO STARTING

```

** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

```

```

** Line Source Represented by Adjacent Volume Sources

```

```

** LINE VOLUME Source ID = SLINE1
** DESCRSRC On-Site Idling Building 1
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.00002627
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 378200.016, 3746704.195, 21.00, 3.49, 4.00
** 378201.047, 3746596.427, 21.00, 3.49, 4.00

```

```

** -----
LOCATION L0000363    VOLUME  378200.057 3746699.900 21.00
LOCATION L0000364    VOLUME  378200.140 3746691.310 21.00
LOCATION L0000365    VOLUME  378200.222 3746682.721 21.00
LOCATION L0000366    VOLUME  378200.304 3746674.131 21.00
LOCATION L0000367    VOLUME  378200.386 3746665.541 21.00
LOCATION L0000368    VOLUME  378200.468 3746656.952 21.00
LOCATION L0000369    VOLUME  378200.551 3746648.362 21.00
LOCATION L0000370    VOLUME  378200.633 3746639.773 21.00
LOCATION L0000371    VOLUME  378200.715 3746631.183 21.00
LOCATION L0000372    VOLUME  378200.797 3746622.593 21.00
LOCATION L0000373    VOLUME  378200.879 3746614.004 21.00
LOCATION L0000374    VOLUME  378200.961 3746605.414 21.00
LOCATION L0000375    VOLUME  378201.044 3746596.825 21.00

```

```

** End of LINE VOLUME Source ID = SLINE1

```

```

** Line Source Represented by Adjacent Volume Sources

```

```

** LINE VOLUME Source ID = SLINE2
** DESCRSRC On-Site Idling Building 2

```

```

** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.00002627
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 378269.111, 3746694.398, 21.00, 3.49, 4.00
** 378269.111, 3746601.068, 21.00, 3.49, 4.00
** -----
LOCATION L0000376    VOLUME  378269.111 3746690.103 21.00
LOCATION L0000377    VOLUME  378269.111 3746681.513 21.00
LOCATION L0000378    VOLUME  378269.111 3746672.923 21.00
LOCATION L0000379    VOLUME  378269.111 3746664.333 21.00
LOCATION L0000380    VOLUME  378269.111 3746655.743 21.00
LOCATION L0000381    VOLUME  378269.111 3746647.153 21.00
LOCATION L0000382    VOLUME  378269.111 3746638.563 21.00
LOCATION L0000383    VOLUME  378269.111 3746629.973 21.00
LOCATION L0000384    VOLUME  378269.111 3746621.383 21.00
LOCATION L0000385    VOLUME  378269.111 3746612.793 21.00
LOCATION L0000386    VOLUME  378269.111 3746604.203 21.00
** End of LINE VOLUME Source ID = SLINE2
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC On-Site Idling Building 3
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.00002627
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 378457.834, 3746684.085, 21.00, 3.49, 4.00
** 378458.865, 3746596.427, 21.00, 3.49, 4.00
** -----
LOCATION L0000387    VOLUME  378457.884 3746679.790 21.00
LOCATION L0000388    VOLUME  378457.985 3746671.201 21.00
LOCATION L0000389    VOLUME  378458.087 3746662.611 21.00
LOCATION L0000390    VOLUME  378458.188 3746654.022 21.00
LOCATION L0000391    VOLUME  378458.289 3746645.433 21.00
LOCATION L0000392    VOLUME  378458.390 3746636.843 21.00
LOCATION L0000393    VOLUME  378458.491 3746628.254 21.00
LOCATION L0000394    VOLUME  378458.592 3746619.664 21.00
LOCATION L0000395    VOLUME  378458.693 3746611.075 21.00
LOCATION L0000396    VOLUME  378458.794 3746602.486 21.00
** End of LINE VOLUME Source ID = SLINE3
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE4
** DESCRSRC On-Site Travel Building 1
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 7.696E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 5
** 378237.142, 3746754.211, 21.00, 3.49, 4.00
** 378237.142, 3746740.289, 21.00, 3.49, 4.00
** 378225.798, 3746737.195, 21.00, 3.49, 4.00
** 378223.220, 3746725.851, 21.00, 3.49, 4.00
** 378223.220, 3746568.067, 21.00, 3.49, 4.00
** -----
LOCATION L0000397    VOLUME  378237.142 3746749.916 21.00
LOCATION L0000398    VOLUME  378237.142 3746741.326 21.00
LOCATION L0000399    VOLUME  378229.855 3746738.302 21.00

```


11458 HRA

LOCATION	L0000400	VOLUME	378224.826	3746732.920	21.00
LOCATION	L0000401	VOLUME	378223.220	3746724.510	21.00
LOCATION	L0000402	VOLUME	378223.220	3746715.920	21.00
LOCATION	L0000403	VOLUME	378223.220	3746707.330	21.00
LOCATION	L0000404	VOLUME	378223.220	3746698.740	21.00
LOCATION	L0000405	VOLUME	378223.220	3746690.150	21.00
LOCATION	L0000406	VOLUME	378223.220	3746681.560	21.00
LOCATION	L0000407	VOLUME	378223.220	3746672.970	21.00
LOCATION	L0000408	VOLUME	378223.220	3746664.380	21.00
LOCATION	L0000409	VOLUME	378223.220	3746655.790	21.00
LOCATION	L0000410	VOLUME	378223.220	3746647.200	21.00
LOCATION	L0000411	VOLUME	378223.220	3746638.610	21.00
LOCATION	L0000412	VOLUME	378223.220	3746630.020	21.00
LOCATION	L0000413	VOLUME	378223.220	3746621.430	21.00
LOCATION	L0000414	VOLUME	378223.220	3746612.840	21.00
LOCATION	L0000415	VOLUME	378223.220	3746604.250	21.00
LOCATION	L0000416	VOLUME	378223.220	3746595.660	21.00
LOCATION	L0000417	VOLUME	378223.220	3746587.070	21.00
LOCATION	L0000418	VOLUME	378223.220	3746578.480	21.00
LOCATION	L0000419	VOLUME	378223.220	3746569.890	21.00

** End of LINE VOLUME Source ID = SLINE4

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE5

** DESCRSRC On-Site Travel Building 2

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 7.448E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 4

** 378237.142, 3746751.633, 21.00, 3.49, 4.00

** 378236.626, 3746740.805, 21.00, 3.49, 4.00

** 378249.002, 3746726.883, 21.00, 3.49, 4.00

** 378251.064, 3746567.551, 21.00, 3.49, 4.00

**

LOCATION	L0000420	VOLUME	378236.938	3746747.343	21.00
LOCATION	L0000421	VOLUME	378237.985	3746739.277	21.00
LOCATION	L0000422	VOLUME	378243.691	3746732.857	21.00
LOCATION	L0000423	VOLUME	378249.009	3746726.285	21.00
LOCATION	L0000424	VOLUME	378249.121	3746717.696	21.00
LOCATION	L0000425	VOLUME	378249.232	3746709.107	21.00
LOCATION	L0000426	VOLUME	378249.343	3746700.518	21.00
LOCATION	L0000427	VOLUME	378249.454	3746691.928	21.00
LOCATION	L0000428	VOLUME	378249.565	3746683.339	21.00
LOCATION	L0000429	VOLUME	378249.676	3746674.750	21.00
LOCATION	L0000430	VOLUME	378249.788	3746666.161	21.00
LOCATION	L0000431	VOLUME	378249.899	3746657.571	21.00
LOCATION	L0000432	VOLUME	378250.010	3746648.982	21.00
LOCATION	L0000433	VOLUME	378250.121	3746640.393	21.00
LOCATION	L0000434	VOLUME	378250.232	3746631.803	21.00
LOCATION	L0000435	VOLUME	378250.344	3746623.214	21.00
LOCATION	L0000436	VOLUME	378250.455	3746614.625	21.00
LOCATION	L0000437	VOLUME	378250.566	3746606.036	21.00
LOCATION	L0000438	VOLUME	378250.677	3746597.446	21.00
LOCATION	L0000439	VOLUME	378250.788	3746588.857	21.00
LOCATION	L0000440	VOLUME	378250.900	3746580.268	21.00
LOCATION	L0000441	VOLUME	378251.011	3746571.678	21.00

** End of LINE VOLUME Source ID = SLINE5

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE6

** DESCRSRC On-Site Travel Building 3

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 6.714E-06
 ** Vertical Dimension = 6.99
 ** SZINIT = 3.25
 ** Nodes = 2
 ** 378477.944, 3746736.164, 21.00, 3.49, 4.00
 ** 378478.975, 3746566.004, 21.00, 3.49, 4.00

** -----

LOCATION	VOLUME	378477.970	3746731.869	21.00
LOCATION L0000442	VOLUME	378477.970	3746731.869	21.00
LOCATION L0000443	VOLUME	378478.022	3746723.279	21.00
LOCATION L0000444	VOLUME	378478.074	3746714.689	21.00
LOCATION L0000445	VOLUME	378478.126	3746706.100	21.00
LOCATION L0000446	VOLUME	378478.178	3746697.510	21.00
LOCATION L0000447	VOLUME	378478.230	3746688.920	21.00
LOCATION L0000448	VOLUME	378478.282	3746680.330	21.00
LOCATION L0000449	VOLUME	378478.334	3746671.740	21.00
LOCATION L0000450	VOLUME	378478.386	3746663.150	21.00
LOCATION L0000451	VOLUME	378478.438	3746654.561	21.00
LOCATION L0000452	VOLUME	378478.490	3746645.971	21.00
LOCATION L0000453	VOLUME	378478.542	3746637.381	21.00
LOCATION L0000454	VOLUME	378478.594	3746628.791	21.00
LOCATION L0000455	VOLUME	378478.646	3746620.201	21.00
LOCATION L0000456	VOLUME	378478.699	3746611.611	21.00
LOCATION L0000457	VOLUME	378478.751	3746603.021	21.00
LOCATION L0000458	VOLUME	378478.803	3746594.432	21.00
LOCATION L0000459	VOLUME	378478.855	3746585.842	21.00
LOCATION L0000460	VOLUME	378478.907	3746577.252	21.00
LOCATION L0000461	VOLUME	378478.959	3746568.662	21.00

** End of LINE VOLUME Source ID = SLINE6

** -----
 ** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE7
 ** DESCRSRC Off-Site Travel
 ** PREFIX
 ** Length of Side = 8.59
 ** Configuration = Adjacent
 ** Emission Rate = 0.00003459
 ** Vertical Dimension = 6.99
 ** SZINIT = 3.25
 ** Nodes = 9
 ** 378090.702, 3746544.863, 21.00, 3.49, 4.00
 ** 378090.702, 3746764.524, 21.00, 3.49, 4.00
 ** 378281.487, 3746762.461, 21.00, 3.49, 4.00
 ** 378384.098, 3746761.946, 21.00, 3.49, 4.00
 ** 378412.974, 3746759.368, 21.00, 3.49, 4.00
 ** 378442.365, 3746751.633, 21.00, 3.49, 4.00
 ** 378474.334, 3746744.414, 21.00, 3.49, 4.00
 ** 378530.538, 3746745.961, 21.00, 3.49, 4.00
 ** 378570.242, 3746746.477, 20.96, 3.49, 4.00

** -----

LOCATION	VOLUME	378090.702	3746549.158	21.00
LOCATION L0000462	VOLUME	378090.702	3746549.158	21.00
LOCATION L0000463	VOLUME	378090.702	3746557.748	21.00
LOCATION L0000464	VOLUME	378090.702	3746566.338	21.00
LOCATION L0000465	VOLUME	378090.702	3746574.928	21.00
LOCATION L0000466	VOLUME	378090.702	3746583.518	21.00
LOCATION L0000467	VOLUME	378090.702	3746592.108	21.00
LOCATION L0000468	VOLUME	378090.702	3746600.698	21.00
LOCATION L0000469	VOLUME	378090.702	3746609.288	21.00
LOCATION L0000470	VOLUME	378090.702	3746617.878	21.00
LOCATION L0000471	VOLUME	378090.702	3746626.468	21.00
LOCATION L0000472	VOLUME	378090.702	3746635.058	21.00
LOCATION L0000473	VOLUME	378090.702	3746643.648	21.00
LOCATION L0000474	VOLUME	378090.702	3746652.238	21.00
LOCATION L0000475	VOLUME	378090.702	3746660.828	21.00
LOCATION L0000476	VOLUME	378090.702	3746669.418	21.00
LOCATION L0000477	VOLUME	378090.702	3746678.008	21.00
LOCATION L0000478	VOLUME	378090.702	3746686.598	21.00
LOCATION L0000479	VOLUME	378090.702	3746695.188	21.00

11458 HRA

LOCATION	L0000480	VOLUME	378090.702	3746703.778	21.00
LOCATION	L0000481	VOLUME	378090.702	3746712.368	21.00
LOCATION	L0000482	VOLUME	378090.702	3746720.958	21.00
LOCATION	L0000483	VOLUME	378090.702	3746729.548	21.00
LOCATION	L0000484	VOLUME	378090.702	3746738.138	21.00
LOCATION	L0000485	VOLUME	378090.702	3746746.728	21.00
LOCATION	L0000486	VOLUME	378090.702	3746755.318	21.00
LOCATION	L0000487	VOLUME	378090.702	3746763.908	21.00
LOCATION	L0000488	VOLUME	378098.675	3746764.438	21.00
LOCATION	L0000489	VOLUME	378107.265	3746764.345	21.00
LOCATION	L0000490	VOLUME	378115.854	3746764.252	21.00
LOCATION	L0000491	VOLUME	378124.444	3746764.159	21.00
LOCATION	L0000492	VOLUME	378133.033	3746764.066	21.00
LOCATION	L0000493	VOLUME	378141.623	3746763.973	21.00
LOCATION	L0000494	VOLUME	378150.212	3746763.881	21.00
LOCATION	L0000495	VOLUME	378158.802	3746763.788	21.00
LOCATION	L0000496	VOLUME	378167.391	3746763.695	21.00
LOCATION	L0000497	VOLUME	378175.981	3746763.602	21.00
LOCATION	L0000498	VOLUME	378184.570	3746763.509	21.00
LOCATION	L0000499	VOLUME	378193.160	3746763.416	21.00
LOCATION	L0000500	VOLUME	378201.749	3746763.323	21.00
LOCATION	L0000501	VOLUME	378210.339	3746763.231	21.00
LOCATION	L0000502	VOLUME	378218.928	3746763.138	21.00
LOCATION	L0000503	VOLUME	378227.518	3746763.045	21.00
LOCATION	L0000504	VOLUME	378236.107	3746762.952	21.00
LOCATION	L0000505	VOLUME	378244.697	3746762.859	21.00
LOCATION	L0000506	VOLUME	378253.286	3746762.766	21.00
LOCATION	L0000507	VOLUME	378261.876	3746762.673	21.00
LOCATION	L0000508	VOLUME	378270.465	3746762.581	21.00
LOCATION	L0000509	VOLUME	378279.055	3746762.488	21.00
LOCATION	L0000510	VOLUME	378287.645	3746762.430	21.00
LOCATION	L0000511	VOLUME	378296.235	3746762.387	21.00
LOCATION	L0000512	VOLUME	378304.824	3746762.344	21.00
LOCATION	L0000513	VOLUME	378313.414	3746762.301	21.00
LOCATION	L0000514	VOLUME	378322.004	3746762.258	21.00
LOCATION	L0000515	VOLUME	378330.594	3746762.215	21.00
LOCATION	L0000516	VOLUME	378339.184	3746762.171	21.00
LOCATION	L0000517	VOLUME	378347.774	3746762.128	21.00
LOCATION	L0000518	VOLUME	378356.364	3746762.085	21.00
LOCATION	L0000519	VOLUME	378364.954	3746762.042	21.00
LOCATION	L0000520	VOLUME	378373.544	3746761.999	21.00
LOCATION	L0000521	VOLUME	378382.133	3746761.956	21.00
LOCATION	L0000522	VOLUME	378390.697	3746761.913	21.00
LOCATION	L0000523	VOLUME	378399.253	3746760.870	21.00
LOCATION	L0000524	VOLUME	378407.809	3746759.827	21.00
LOCATION	L0000525	VOLUME	378416.266	3746758.784	21.00
LOCATION	L0000526	VOLUME	378424.574	3746756.741	21.00
LOCATION	L0000527	VOLUME	378432.881	3746754.698	21.00
LOCATION	L0000528	VOLUME	378441.188	3746751.655	21.00
LOCATION	L0000529	VOLUME	378449.557	3746750.612	21.00
LOCATION	L0000530	VOLUME	378457.936	3746748.569	21.00
LOCATION	L0000531	VOLUME	378466.315	3746746.526	21.00
LOCATION	L0000532	VOLUME	378474.703	3746744.483	21.00
LOCATION	L0000533	VOLUME	378483.290	3746744.440	21.00
LOCATION	L0000534	VOLUME	378491.876	3746744.397	21.00
LOCATION	L0000535	VOLUME	378500.463	3746745.354	21.00
LOCATION	L0000536	VOLUME	378509.050	3746745.311	21.00
LOCATION	L0000537	VOLUME	378517.637	3746745.268	21.00
LOCATION	L0000538	VOLUME	378526.223	3746745.225	21.00
LOCATION	L0000539	VOLUME	378534.811	3746746.182	21.00
LOCATION	L0000540	VOLUME	378543.401	3746746.139	21.00
LOCATION	L0000541	VOLUME	378551.990	3746746.096	21.00
LOCATION	L0000542	VOLUME	378560.579	3746746.053	21.00
LOCATION	L0000543	VOLUME	378569.168	3746746.010	21.00

** End of LINE VOLUME Source ID = SLINE7

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

11458 HRA

SRCPARAM	L0000363	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000364	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000365	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000366	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000367	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000368	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000369	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000370	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000371	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000372	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000373	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000374	0.000002021	3.49	4.00	3.25
SRCPARAM	L0000375	0.000002021	3.49	4.00	3.25

**

 ** LINE VOLUME Source ID = SLINE2

SRCPARAM	L0000376	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000377	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000378	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000379	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000380	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000381	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000382	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000383	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000384	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000385	0.000002388	3.49	4.00	3.25
SRCPARAM	L0000386	0.000002388	3.49	4.00	3.25

**

 ** LINE VOLUME Source ID = SLINE3

SRCPARAM	L0000387	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000388	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000389	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000390	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000391	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000392	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000393	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000394	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000395	0.000002627	3.49	4.00	3.25
SRCPARAM	L0000396	0.000002627	3.49	4.00	3.25

**

 ** LINE VOLUME Source ID = SLINE4

SRCPARAM	L0000397	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000398	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000399	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000400	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000401	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000402	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000403	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000404	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000405	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000406	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000407	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000408	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000409	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000410	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000411	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000412	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000413	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000414	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000415	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000416	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000417	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000418	0.0000003346	3.49	4.00	3.25
SRCPARAM	L0000419	0.0000003346	3.49	4.00	3.25

**

 ** LINE VOLUME Source ID = SLINE5

SRCPARAM	L0000420	0.0000003385	3.49	4.00	3.25
SRCPARAM	L0000421	0.0000003385	3.49	4.00	3.25

11458 HRA

SRCPARAM	L0000485	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000486	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000487	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000488	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000489	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000490	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000491	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000492	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000493	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000494	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000495	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000496	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000497	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000498	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000499	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000500	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000501	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000502	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000503	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000504	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000505	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000506	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000507	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000508	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000509	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000510	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000511	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000512	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000513	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000514	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000515	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000516	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000517	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000518	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000519	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000520	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000521	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000522	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000523	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000524	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000525	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000526	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000527	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000528	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000529	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000530	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000531	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000532	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000533	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000534	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000535	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000536	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000537	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000538	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000539	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000540	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000541	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000542	0.0000004218	3.49	4.00	3.25
SRCPARAM	L0000543	0.0000004218	3.49	4.00	3.25

**

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

11458 HRA

**
**

RE STARTING
INCLUDED "11458 HRA.rou"
RE FINISHED

**

** AERMOD Meteorology Pathway

**
**

ME STARTING
SURFFILE KLAX_V9_ADJU\KLAX_v9.SFC
PROFFILE KLAX_V9_ADJU\KLAX_v9.PFL
SURFDATA 23174 2012 LOS_ANGELES/INT'L_ARPT
UAIRDATA 3190 2012
PROFBASE 30.0 METERS
ME FINISHED

**

** AERMOD Output Pathway

**
**

OU STARTING
** Auto-Generated Plotfiles
PLOTFILE ANNUAL ALL "11458 HRA.AD\AN00GALL.PLT" 31
SUMMFILE "11458 HRA.sum"
OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 554 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 554 MEOPEN: ADJ_U* Option for Low Winds used in AERMET

*** SETUP Finishes Successfully ***

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
 01/31/18
*** AERMET - VERSION 16216 *** *** ***
 22:58:47

PAGE 1
*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- - - - -
**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

11458 HRA

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 181 Source(s),
for Total of 1 Urban Area(s):

Urban Population = 9818605.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:

ADJ_U* - Use ADJ_U* BETA option for SBL in AERMET

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: DPM

**Model Calculates ANNUAL Averages Only

**This Run Includes: 181 Source(s); 1 Source Group(s); and 11 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 181 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 30.00 ; Decay Coef. = 0.000 ; Rot. Angle
= 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor =
0.10000E+07

Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Detailed Error/Message File: 11458 HRA.err

**File for Summary of Results: 11458 HRA.sum

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc
01/31/18

*** AERMET - VERSION 16216 ***

22:58:47

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000363	0	0.20210E-05	378200.1	3746699.9	21.0	3.49	4.00	3.25	YES	
L0000364	0	0.20210E-05	378200.1	3746691.3	21.0	3.49	4.00	3.25	YES	
L0000365	0	0.20210E-05	378200.2	3746682.7	21.0	3.49	4.00	3.25	YES	
L0000366	0	0.20210E-05	378200.3	3746674.1	21.0	3.49	4.00	3.25	YES	
L0000367	0	0.20210E-05	378200.4	3746665.5	21.0	3.49	4.00	3.25	YES	
L0000368	0	0.20210E-05	378200.5	3746657.0	21.0	3.49	4.00	3.25	YES	
L0000369	0	0.20210E-05	378200.6	3746648.4	21.0	3.49	4.00	3.25	YES	
L0000370	0	0.20210E-05	378200.6	3746639.8	21.0	3.49	4.00	3.25	YES	
L0000371	0	0.20210E-05	378200.7	3746631.2	21.0	3.49	4.00	3.25	YES	
L0000372	0	0.20210E-05	378200.8	3746622.6	21.0	3.49	4.00	3.25	YES	
L0000373	0	0.20210E-05	378200.9	3746614.0	21.0	3.49	4.00	3.25	YES	
L0000374	0	0.20210E-05	378201.0	3746605.4	21.0	3.49	4.00	3.25	YES	
L0000375	0	0.20210E-05	378201.0	3746596.8	21.0	3.49	4.00	3.25	YES	
L0000376	0	0.23880E-05	378269.1	3746690.1	21.0	3.49	4.00	3.25	YES	
L0000377	0	0.23880E-05	378269.1	3746681.5	21.0	3.49	4.00	3.25	YES	
L0000378	0	0.23880E-05	378269.1	3746672.9	21.0	3.49	4.00	3.25	YES	
L0000379	0	0.23880E-05	378269.1	3746664.3	21.0	3.49	4.00	3.25	YES	
L0000380	0	0.23880E-05	378269.1	3746655.7	21.0	3.49	4.00	3.25	YES	
L0000381	0	0.23880E-05	378269.1	3746647.2	21.0	3.49	4.00	3.25	YES	
L0000382	0	0.23880E-05	378269.1	3746638.6	21.0	3.49	4.00	3.25	YES	
L0000383	0	0.23880E-05	378269.1	3746630.0	21.0	3.49	4.00	3.25	YES	
L0000384	0	0.23880E-05	378269.1	3746621.4	21.0	3.49	4.00	3.25	YES	
L0000385	0	0.23880E-05	378269.1	3746612.8	21.0	3.49	4.00	3.25	YES	
L0000386	0	0.23880E-05	378269.1	3746604.2	21.0	3.49	4.00	3.25	YES	
L0000387	0	0.26270E-05	378457.9	3746679.8	21.0	3.49	4.00	3.25	YES	
L0000388	0	0.26270E-05	378458.0	3746671.2	21.0	3.49	4.00	3.25	YES	
L0000389	0	0.26270E-05	378458.1	3746662.6	21.0	3.49	4.00	3.25	YES	
L0000390	0	0.26270E-05	378458.2	3746654.0	21.0	3.49	4.00	3.25	YES	
L0000391	0	0.26270E-05	378458.3	3746645.4	21.0	3.49	4.00	3.25	YES	
L0000392	0	0.26270E-05	378458.4	3746636.8	21.0	3.49	4.00	3.25	YES	
L0000393	0	0.26270E-05	378458.5	3746628.3	21.0	3.49	4.00	3.25	YES	
L0000394	0	0.26270E-05	378458.6	3746619.7	21.0	3.49	4.00	3.25	YES	
L0000395	0	0.26270E-05	378458.7	3746611.1	21.0	3.49	4.00	3.25	YES	
L0000396	0	0.26270E-05	378458.8	3746602.5	21.0	3.49	4.00	3.25	YES	
L0000397	0	0.33460E-06	378237.1	3746749.9	21.0	3.49	4.00	3.25	YES	
L0000398	0	0.33460E-06	378237.1	3746741.3	21.0	3.49	4.00	3.25	YES	
L0000399	0	0.33460E-06	378229.9	3746738.3	21.0	3.49	4.00	3.25	YES	
L0000400	0	0.33460E-06	378224.8	3746732.9	21.0	3.49	4.00	3.25	YES	
L0000401	0	0.33460E-06	378223.2	3746724.5	21.0	3.49	4.00	3.25	YES	
L0000402	0	0.33460E-06	378223.2	3746715.9	21.0	3.49	4.00	3.25	YES	

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
01/31/18
*** AERMET - VERSION 16216 *** ***
22:58:47

PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE	NUMBER PART.	EMISSION RATE (GRAMS/SEC)	X	Y	BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY
--------	--------------	---------------------------	---	---	------------	----------------	----------	----------	--------------	---------------------------

11458 HRA

ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY
L0000403	0	0.33460E-06	378223.2	3746707.3	21.0	3.49	4.00	3.25	YES
L0000404	0	0.33460E-06	378223.2	3746698.7	21.0	3.49	4.00	3.25	YES
L0000405	0	0.33460E-06	378223.2	3746690.1	21.0	3.49	4.00	3.25	YES
L0000406	0	0.33460E-06	378223.2	3746681.6	21.0	3.49	4.00	3.25	YES
L0000407	0	0.33460E-06	378223.2	3746673.0	21.0	3.49	4.00	3.25	YES
L0000408	0	0.33460E-06	378223.2	3746664.4	21.0	3.49	4.00	3.25	YES
L0000409	0	0.33460E-06	378223.2	3746655.8	21.0	3.49	4.00	3.25	YES
L0000410	0	0.33460E-06	378223.2	3746647.2	21.0	3.49	4.00	3.25	YES
L0000411	0	0.33460E-06	378223.2	3746638.6	21.0	3.49	4.00	3.25	YES
L0000412	0	0.33460E-06	378223.2	3746630.0	21.0	3.49	4.00	3.25	YES
L0000413	0	0.33460E-06	378223.2	3746621.4	21.0	3.49	4.00	3.25	YES
L0000414	0	0.33460E-06	378223.2	3746612.8	21.0	3.49	4.00	3.25	YES
L0000415	0	0.33460E-06	378223.2	3746604.2	21.0	3.49	4.00	3.25	YES
L0000416	0	0.33460E-06	378223.2	3746595.7	21.0	3.49	4.00	3.25	YES
L0000417	0	0.33460E-06	378223.2	3746587.1	21.0	3.49	4.00	3.25	YES
L0000418	0	0.33460E-06	378223.2	3746578.5	21.0	3.49	4.00	3.25	YES
L0000419	0	0.33460E-06	378223.2	3746569.9	21.0	3.49	4.00	3.25	YES
L0000420	0	0.33850E-06	378236.9	3746747.3	21.0	3.49	4.00	3.25	YES
L0000421	0	0.33850E-06	378238.0	3746739.3	21.0	3.49	4.00	3.25	YES
L0000422	0	0.33850E-06	378243.7	3746732.9	21.0	3.49	4.00	3.25	YES
L0000423	0	0.33850E-06	378249.0	3746726.3	21.0	3.49	4.00	3.25	YES
L0000424	0	0.33850E-06	378249.1	3746717.7	21.0	3.49	4.00	3.25	YES
L0000425	0	0.33850E-06	378249.2	3746709.1	21.0	3.49	4.00	3.25	YES
L0000426	0	0.33850E-06	378249.3	3746700.5	21.0	3.49	4.00	3.25	YES
L0000427	0	0.33850E-06	378249.5	3746691.9	21.0	3.49	4.00	3.25	YES
L0000428	0	0.33850E-06	378249.6	3746683.3	21.0	3.49	4.00	3.25	YES
L0000429	0	0.33850E-06	378249.7	3746674.8	21.0	3.49	4.00	3.25	YES
L0000430	0	0.33850E-06	378249.8	3746666.2	21.0	3.49	4.00	3.25	YES
L0000431	0	0.33850E-06	378249.9	3746657.6	21.0	3.49	4.00	3.25	YES
L0000432	0	0.33850E-06	378250.0	3746649.0	21.0	3.49	4.00	3.25	YES
L0000433	0	0.33850E-06	378250.1	3746640.4	21.0	3.49	4.00	3.25	YES
L0000434	0	0.33850E-06	378250.2	3746631.8	21.0	3.49	4.00	3.25	YES
L0000435	0	0.33850E-06	378250.3	3746623.2	21.0	3.49	4.00	3.25	YES
L0000436	0	0.33850E-06	378250.5	3746614.6	21.0	3.49	4.00	3.25	YES
L0000437	0	0.33850E-06	378250.6	3746606.0	21.0	3.49	4.00	3.25	YES
L0000438	0	0.33850E-06	378250.7	3746597.4	21.0	3.49	4.00	3.25	YES
L0000439	0	0.33850E-06	378250.8	3746588.9	21.0	3.49	4.00	3.25	YES
L0000440	0	0.33850E-06	378250.9	3746580.3	21.0	3.49	4.00	3.25	YES
L0000441	0	0.33850E-06	378251.0	3746571.7	21.0	3.49	4.00	3.25	YES
L0000442	0	0.33570E-06	378478.0	3746731.9	21.0	3.49	4.00	3.25	YES

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
 01/31/18
 *** AERMET - VERSION 16216 *** ***
 22:58:47

PAGE 4
 *** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000443	0	0.33570E-06	378478.0	3746723.3	21.0	3.49	4.00	3.25	YES	
L0000444	0	0.33570E-06	378478.1	3746714.7	21.0	3.49	4.00	3.25	YES	
L0000445	0	0.33570E-06	378478.1	3746706.1	21.0	3.49	4.00	3.25	YES	
L0000446	0	0.33570E-06	378478.2	3746697.5	21.0	3.49	4.00	3.25	YES	
L0000447	0	0.33570E-06	378478.2	3746688.9	21.0	3.49	4.00	3.25	YES	
L0000448	0	0.33570E-06	378478.3	3746680.3	21.0	3.49	4.00	3.25	YES	

11458 HRA

L0000449	0	0.33570E-06	378478.3	3746671.7	21.0	3.49	4.00	3.25	YES
L0000450	0	0.33570E-06	378478.4	3746663.1	21.0	3.49	4.00	3.25	YES
L0000451	0	0.33570E-06	378478.4	3746654.6	21.0	3.49	4.00	3.25	YES
L0000452	0	0.33570E-06	378478.5	3746646.0	21.0	3.49	4.00	3.25	YES
L0000453	0	0.33570E-06	378478.5	3746637.4	21.0	3.49	4.00	3.25	YES
L0000454	0	0.33570E-06	378478.6	3746628.8	21.0	3.49	4.00	3.25	YES
L0000455	0	0.33570E-06	378478.6	3746620.2	21.0	3.49	4.00	3.25	YES
L0000456	0	0.33570E-06	378478.7	3746611.6	21.0	3.49	4.00	3.25	YES
L0000457	0	0.33570E-06	378478.8	3746603.0	21.0	3.49	4.00	3.25	YES
L0000458	0	0.33570E-06	378478.8	3746594.4	21.0	3.49	4.00	3.25	YES
L0000459	0	0.33570E-06	378478.9	3746585.8	21.0	3.49	4.00	3.25	YES
L0000460	0	0.33570E-06	378478.9	3746577.3	21.0	3.49	4.00	3.25	YES
L0000461	0	0.33570E-06	378479.0	3746568.7	21.0	3.49	4.00	3.25	YES
L0000462	0	0.42180E-06	378090.7	3746549.2	21.0	3.49	4.00	3.25	YES
L0000463	0	0.42180E-06	378090.7	3746557.7	21.0	3.49	4.00	3.25	YES
L0000464	0	0.42180E-06	378090.7	3746566.3	21.0	3.49	4.00	3.25	YES
L0000465	0	0.42180E-06	378090.7	3746574.9	21.0	3.49	4.00	3.25	YES
L0000466	0	0.42180E-06	378090.7	3746583.5	21.0	3.49	4.00	3.25	YES
L0000467	0	0.42180E-06	378090.7	3746592.1	21.0	3.49	4.00	3.25	YES
L0000468	0	0.42180E-06	378090.7	3746600.7	21.0	3.49	4.00	3.25	YES
L0000469	0	0.42180E-06	378090.7	3746609.3	21.0	3.49	4.00	3.25	YES
L0000470	0	0.42180E-06	378090.7	3746617.9	21.0	3.49	4.00	3.25	YES
L0000471	0	0.42180E-06	378090.7	3746626.5	21.0	3.49	4.00	3.25	YES
L0000472	0	0.42180E-06	378090.7	3746635.1	21.0	3.49	4.00	3.25	YES
L0000473	0	0.42180E-06	378090.7	3746643.6	21.0	3.49	4.00	3.25	YES
L0000474	0	0.42180E-06	378090.7	3746652.2	21.0	3.49	4.00	3.25	YES
L0000475	0	0.42180E-06	378090.7	3746660.8	21.0	3.49	4.00	3.25	YES
L0000476	0	0.42180E-06	378090.7	3746669.4	21.0	3.49	4.00	3.25	YES
L0000477	0	0.42180E-06	378090.7	3746678.0	21.0	3.49	4.00	3.25	YES
L0000478	0	0.42180E-06	378090.7	3746686.6	21.0	3.49	4.00	3.25	YES
L0000479	0	0.42180E-06	378090.7	3746695.2	21.0	3.49	4.00	3.25	YES
L0000480	0	0.42180E-06	378090.7	3746703.8	21.0	3.49	4.00	3.25	YES
L0000481	0	0.42180E-06	378090.7	3746712.4	21.0	3.49	4.00	3.25	YES
L0000482	0	0.42180E-06	378090.7	3746721.0	21.0	3.49	4.00	3.25	YES

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***

01/31/18

*** AERMET - VERSION 16216 *** *** ***

22:58:47

PAGE 5

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000483	0	0.42180E-06	378090.7	3746729.5	21.0	3.49	4.00	3.25	YES	
L0000484	0	0.42180E-06	378090.7	3746738.1	21.0	3.49	4.00	3.25	YES	
L0000485	0	0.42180E-06	378090.7	3746746.7	21.0	3.49	4.00	3.25	YES	
L0000486	0	0.42180E-06	378090.7	3746755.3	21.0	3.49	4.00	3.25	YES	
L0000487	0	0.42180E-06	378090.7	3746763.9	21.0	3.49	4.00	3.25	YES	
L0000488	0	0.42180E-06	378098.7	3746764.4	21.0	3.49	4.00	3.25	YES	
L0000489	0	0.42180E-06	378107.3	3746764.3	21.0	3.49	4.00	3.25	YES	
L0000490	0	0.42180E-06	378115.9	3746764.3	21.0	3.49	4.00	3.25	YES	
L0000491	0	0.42180E-06	378124.4	3746764.2	21.0	3.49	4.00	3.25	YES	
L0000492	0	0.42180E-06	378133.0	3746764.1	21.0	3.49	4.00	3.25	YES	
L0000493	0	0.42180E-06	378141.6	3746764.0	21.0	3.49	4.00	3.25	YES	
L0000494	0	0.42180E-06	378150.2	3746763.9	21.0	3.49	4.00	3.25	YES	
L0000495	0	0.42180E-06	378158.8	3746763.8	21.0	3.49	4.00	3.25	YES	
L0000496	0	0.42180E-06	378167.4	3746763.7	21.0	3.49	4.00	3.25	YES	
L0000497	0	0.42180E-06	378176.0	3746763.6	21.0	3.49	4.00	3.25	YES	
L0000498	0	0.42180E-06	378184.6	3746763.5	21.0	3.49	4.00	3.25	YES	

11458 HRA

L0000499	0	0.42180E-06	378193.2	3746763.4	21.0	3.49	4.00	3.25	YES
L0000500	0	0.42180E-06	378201.7	3746763.3	21.0	3.49	4.00	3.25	YES
L0000501	0	0.42180E-06	378210.3	3746763.2	21.0	3.49	4.00	3.25	YES
L0000502	0	0.42180E-06	378218.9	3746763.1	21.0	3.49	4.00	3.25	YES
L0000503	0	0.42180E-06	378227.5	3746763.0	21.0	3.49	4.00	3.25	YES
L0000504	0	0.42180E-06	378236.1	3746763.0	21.0	3.49	4.00	3.25	YES
L0000505	0	0.42180E-06	378244.7	3746762.9	21.0	3.49	4.00	3.25	YES
L0000506	0	0.42180E-06	378253.3	3746762.8	21.0	3.49	4.00	3.25	YES
L0000507	0	0.42180E-06	378261.9	3746762.7	21.0	3.49	4.00	3.25	YES
L0000508	0	0.42180E-06	378270.5	3746762.6	21.0	3.49	4.00	3.25	YES
L0000509	0	0.42180E-06	378279.1	3746762.5	21.0	3.49	4.00	3.25	YES
L0000510	0	0.42180E-06	378287.6	3746762.4	21.0	3.49	4.00	3.25	YES
L0000511	0	0.42180E-06	378296.2	3746762.4	21.0	3.49	4.00	3.25	YES
L0000512	0	0.42180E-06	378304.8	3746762.3	21.0	3.49	4.00	3.25	YES
L0000513	0	0.42180E-06	378313.4	3746762.3	21.0	3.49	4.00	3.25	YES
L0000514	0	0.42180E-06	378322.0	3746762.3	21.0	3.49	4.00	3.25	YES
L0000515	0	0.42180E-06	378330.6	3746762.2	21.0	3.49	4.00	3.25	YES
L0000516	0	0.42180E-06	378339.2	3746762.2	21.0	3.49	4.00	3.25	YES
L0000517	0	0.42180E-06	378347.8	3746762.1	21.0	3.49	4.00	3.25	YES
L0000518	0	0.42180E-06	378356.4	3746762.1	21.0	3.49	4.00	3.25	YES
L0000519	0	0.42180E-06	378365.0	3746762.0	21.0	3.49	4.00	3.25	YES
L0000520	0	0.42180E-06	378373.5	3746762.0	21.0	3.49	4.00	3.25	YES
L0000521	0	0.42180E-06	378382.1	3746762.0	21.0	3.49	4.00	3.25	YES
L0000522	0	0.42180E-06	378390.7	3746761.4	21.0	3.49	4.00	3.25	YES

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
 01/31/18
 *** AERMET - VERSION 16216 *** ***
 22:58:47

PAGE 6
 *** MODELOPTS: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000523	0	0.42180E-06	378399.3	3746760.6	21.0	3.49	4.00	3.25	YES	
L0000524	0	0.42180E-06	378407.8	3746759.8	21.0	3.49	4.00	3.25	YES	
L0000525	0	0.42180E-06	378416.3	3746758.5	21.0	3.49	4.00	3.25	YES	
L0000526	0	0.42180E-06	378424.6	3746756.3	21.0	3.49	4.00	3.25	YES	
L0000527	0	0.42180E-06	378432.9	3746754.1	21.0	3.49	4.00	3.25	YES	
L0000528	0	0.42180E-06	378441.2	3746751.9	21.0	3.49	4.00	3.25	YES	
L0000529	0	0.42180E-06	378449.6	3746750.0	21.0	3.49	4.00	3.25	YES	
L0000530	0	0.42180E-06	378457.9	3746748.1	21.0	3.49	4.00	3.25	YES	
L0000531	0	0.42180E-06	378466.3	3746746.2	21.0	3.49	4.00	3.25	YES	
L0000532	0	0.42180E-06	378474.7	3746744.4	21.0	3.49	4.00	3.25	YES	
L0000533	0	0.42180E-06	378483.3	3746744.7	21.0	3.49	4.00	3.25	YES	
L0000534	0	0.42180E-06	378491.9	3746744.9	21.0	3.49	4.00	3.25	YES	
L0000535	0	0.42180E-06	378500.5	3746745.1	21.0	3.49	4.00	3.25	YES	
L0000536	0	0.42180E-06	378509.0	3746745.4	21.0	3.49	4.00	3.25	YES	
L0000537	0	0.42180E-06	378517.6	3746745.6	21.0	3.49	4.00	3.25	YES	
L0000538	0	0.42180E-06	378526.2	3746745.8	21.0	3.49	4.00	3.25	YES	
L0000539	0	0.42180E-06	378534.8	3746746.0	21.0	3.49	4.00	3.25	YES	
L0000540	0	0.42180E-06	378543.4	3746746.1	21.0	3.49	4.00	3.25	YES	
L0000541	0	0.42180E-06	378552.0	3746746.2	21.0	3.49	4.00	3.25	YES	
L0000542	0	0.42180E-06	378560.6	3746746.4	21.0	3.49	4.00	3.25	YES	
L0000543	0	0.42180E-06	378569.2	3746746.5	21.0	3.49	4.00	3.25	YES	

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
 01/31/18
 *** AERMET - VERSION 16216 *** ***
 22:58:47

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs							
-----	-----	-----	-----	-----	-----	-----	-----	-----
ALL	L0000363	, L0000364	, L0000365	, L0000366	, L0000367	, L0000368	, L0000369	,
L0000370	,							
	L0000371	, L0000372	, L0000373	, L0000374	, L0000375	, L0000376	, L0000377	,
L0000378	,							
	L0000379	, L0000380	, L0000381	, L0000382	, L0000383	, L0000384	, L0000385	,
L0000386	,							
	L0000387	, L0000388	, L0000389	, L0000390	, L0000391	, L0000392	, L0000393	,
L0000394	,							
	L0000395	, L0000396	, L0000397	, L0000398	, L0000399	, L0000400	, L0000401	,
L0000402	,							
	L0000403	, L0000404	, L0000405	, L0000406	, L0000407	, L0000408	, L0000409	,
L0000410	,							
	L0000411	, L0000412	, L0000413	, L0000414	, L0000415	, L0000416	, L0000417	,
L0000418	,							
	L0000419	, L0000420	, L0000421	, L0000422	, L0000423	, L0000424	, L0000425	,
L0000426	,							
	L0000427	, L0000428	, L0000429	, L0000430	, L0000431	, L0000432	, L0000433	,
L0000434	,							
	L0000435	, L0000436	, L0000437	, L0000438	, L0000439	, L0000440	, L0000441	,
L0000442	,							
	L0000443	, L0000444	, L0000445	, L0000446	, L0000447	, L0000448	, L0000449	,
L0000450	,							
	L0000451	, L0000452	, L0000453	, L0000454	, L0000455	, L0000456	, L0000457	,
L0000458	,							
	L0000459	, L0000460	, L0000461	, L0000462	, L0000463	, L0000464	, L0000465	,
L0000466	,							
	L0000467	, L0000468	, L0000469	, L0000470	, L0000471	, L0000472	, L0000473	,
L0000474	,							
	L0000475	, L0000476	, L0000477	, L0000478	, L0000479	, L0000480	, L0000481	,
L0000482	,							
	L0000483	, L0000484	, L0000485	, L0000486	, L0000487	, L0000488	, L0000489	,
L0000490	,							
	L0000491	, L0000492	, L0000493	, L0000494	, L0000495	, L0000496	, L0000497	,
L0000498	,							
	L0000499	, L0000500	, L0000501	, L0000502	, L0000503	, L0000504	, L0000505	,
L0000506	,							
	L0000507	, L0000508	, L0000509	, L0000510	, L0000511	, L0000512	, L0000513	,
L0000514	,							

L0000522 , L0000515 , L0000516 , L0000517 , 11458 HRA , L0000518 , L0000519 , L0000520 , L0000521 ,
 ♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
 01/31/18
 *** AERMET - VERSION 16216 *** ***
 22:58:47

PAGE 8
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
L0000530 ,	L0000523 , L0000524 , L0000525 , L0000526 , L0000527 , L0000528 , L0000529 ,
L0000538 ,	L0000531 , L0000532 , L0000533 , L0000534 , L0000535 , L0000536 , L0000537 ,
♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc *** 01/31/18 *** AERMET - VERSION 16216 *** *** 22:58:47	L0000539 , L0000540 , L0000541 , L0000542 , L0000543 ,

PAGE 9
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000369 , L0000370 ,	9818605.	L0000363 , L0000364 , L0000365 , L0000366 , L0000367 , L0000368 ,
L0000378 ,		L0000371 , L0000372 , L0000373 , L0000374 , L0000375 , L0000376 , L0000377 ,
L0000386 ,		L0000379 , L0000380 , L0000381 , L0000382 , L0000383 , L0000384 , L0000385 ,
L0000394 ,		L0000387 , L0000388 , L0000389 , L0000390 , L0000391 , L0000392 , L0000393 ,
L0000402 ,		L0000395 , L0000396 , L0000397 , L0000398 , L0000399 , L0000400 , L0000401 ,
L0000410 ,		L0000403 , L0000404 , L0000405 , L0000406 , L0000407 , L0000408 , L0000409 ,
L0000418 ,		L0000411 , L0000412 , L0000413 , L0000414 , L0000415 , L0000416 , L0000417 ,
L0000426 ,		L0000419 , L0000420 , L0000421 , L0000422 , L0000423 , L0000424 , L0000425 ,
L0000434 ,		L0000427 , L0000428 , L0000429 , L0000430 , L0000431 , L0000432 , L0000433 ,

11458 HRA
L0000442 , L0000435 , L0000436 , L0000437 , L0000438 , L0000439 , L0000440 , L0000441 ,
L0000450 , L0000443 , L0000444 , L0000445 , L0000446 , L0000447 , L0000448 , L0000449 ,
L0000458 , L0000451 , L0000452 , L0000453 , L0000454 , L0000455 , L0000456 , L0000457 ,
L0000466 , L0000459 , L0000460 , L0000461 , L0000462 , L0000463 , L0000464 , L0000465 ,
L0000474 , L0000467 , L0000468 , L0000469 , L0000470 , L0000471 , L0000472 , L0000473 ,
L0000482 , L0000475 , L0000476 , L0000477 , L0000478 , L0000479 , L0000480 , L0000481 ,
L0000490 , L0000483 , L0000484 , L0000485 , L0000486 , L0000487 , L0000488 , L0000489 ,
L0000498 , L0000491 , L0000492 , L0000493 , L0000494 , L0000495 , L0000496 , L0000497 ,
L0000506 , L0000499 , L0000500 , L0000501 , L0000502 , L0000503 , L0000504 , L0000505 ,
L0000514 , L0000507 , L0000508 , L0000509 , L0000510 , L0000511 , L0000512 , L0000513 ,
L0000522 , L0000515 , L0000516 , L0000517 , L0000518 , L0000519 , L0000520 , L0000521 ,

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
01/31/18
*** AERMET - VERSION 16216 *** ***
22:58:47

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs						
-----	-----	-----						
L0000530		L0000523	L0000524	L0000525	L0000526	L0000527	L0000528	L0000529
L0000538		L0000531	L0000532	L0000533	L0000534	L0000535	L0000536	L0000537

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
01/31/18
*** AERMET - VERSION 16216 *** ***
22:58:47

PAGE 11

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(378121.6, 3746784.6, 21.0, 21.0, 0.0); (378241.8, 3746779.5, 21.0, 21.0,

11458 HRA

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA
12	01	01	1	01	-5.9	0.105	-9.000	-9.000	-999.	82.	17.6	0.10	2.55	1.00	1.35	246.	10.1	282.5	2.0		
12	01	01	1	02	-21.8	0.218	-9.000	-9.000	-999.	244.	52.3	0.10	2.55	1.00	2.67	268.	10.1	282.0	2.0		
12	01	01	1	03	-10.3	0.139	-9.000	-9.000	-999.	127.	23.6	0.10	2.55	1.00	1.76	311.	10.1	281.4	2.0		
12	01	01	1	04	-3.3	0.080	-9.000	-9.000	-999.	55.	14.1	0.10	2.55	1.00	0.97	280.	10.1	282.0	2.0		
12	01	01	1	05	-10.9	0.144	-9.000	-9.000	-999.	131.	24.4	0.10	2.55	1.00	1.81	267.	10.1	281.4	2.0		
12	01	01	1	06	-20.5	0.205	-9.000	-9.000	-999.	223.	46.3	0.10	2.55	1.00	2.52	283.	10.1	282.5	2.0		
12	01	01	1	07	-5.5	0.101	-9.000	-9.000	-999.	83.	16.9	0.10	2.55	1.00	1.30	324.	10.1	281.4	2.0		
12	01	01	1	08	-4.3	0.096	-9.000	-9.000	-999.	71.	18.6	0.10	2.55	0.55	1.23	90.	10.1	282.5	2.0		
12	01	01	1	09	45.7	0.183	0.378	0.007	43.	188.	-12.2	0.10	2.55	0.32	1.67	106.	10.1	289.2	2.0		
12	01	01	1	10	117.3	0.180	0.751	0.007	131.	184.	-4.5	0.10	2.55	0.24	1.42	105.	10.1	293.8	2.0		
12	01	01	1	11	168.5	0.173	1.222	0.005	391.	173.	-2.8	0.10	2.55	0.21	1.25	27.	10.1	297.5	2.0		
12	01	01	1	12	186.3	0.227	1.521	0.005	680.	260.	-5.7	0.10	2.55	0.20	1.86	63.	10.1	299.2	2.0		
12	01	01	1	13	190.2	0.253	1.817	0.005	1136.	306.	-7.7	0.10	2.55	0.20	2.16	300.	10.1	296.4	2.0		
12	01	01	1	14	160.2	0.448	1.842	0.005	1405.	720.	-50.6	0.10	2.55	0.21	4.68	276.	10.1	291.4	2.0		
12	01	01	1	15	108.6	0.466	1.661	0.005	1520.	764.	-83.9	0.10	2.55	0.24	5.02	270.	10.1	289.9	2.0		
12	01	01	1	16	37.3	0.455	1.167	0.005	1543.	737.	-228.8	0.10	2.55	0.33	5.10	270.	10.1	288.1	2.0		
12	01	01	1	17	-31.4	0.381	-9.000	-9.000	-999.	569.	159.8	0.10	2.55	0.59	4.54	268.	10.1	287.5	2.0		
12	01	01	1	18	-36.0	0.365	-9.000	-9.000	-999.	529.	146.4	0.10	2.55	1.00	4.37	274.	10.1	286.4	2.0		
12	01	01	1	19	-29.6	0.301	-9.000	-9.000	-999.	398.	99.5	0.10	2.55	1.00	3.63	271.	10.1	286.4	2.0		
12	01	01	1	20	-21.0	0.213	-9.000	-9.000	-999.	239.	49.9	0.10	2.55	1.00	2.61	271.	10.1	286.4	2.0		
12	01	01	1	21	-10.3	0.140	-9.000	-9.000	-999.	128.	24.0	0.10	2.55	1.00	1.77	281.	10.1	286.4	2.0		
12	01	01	1	22	-22.9	0.230	-9.000	-9.000	-999.	265.	58.3	0.10	2.55	1.00	2.81	270.	10.1	285.9	2.0		
12	01	01	1	23	-37.0	0.374	-9.000	-9.000	-999.	550.	154.2	0.10	2.55	1.00	4.48	272.	10.1	285.9	2.0		
12	01	01	1	24	-24.0	0.243	-9.000	-9.000	-999.	299.	65.0	0.10	2.55	1.00	2.96	274.	10.1	285.9	2.0		

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.1	1	246.	1.35	282.6	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
 01/31/18
 *** AERMET - VERSION 16216 *** ***
 22:58:47

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S):

L0000367 , L0000368 , L0000369 , L0000370 , L0000371 , L0000372 , L0000373 , L0000374 ,
L0000375 , L0000376 , L0000377 , L0000378 , L0000379 , L0000380 , L0000381 , L0000382 ,
L0000383 , L0000384 , L0000385 , L0000386 , L0000387 , L0000388 , L0000389 , L0000390 ,
. . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

Table with 7 columns: X-COORD (M), Y-COORD (M), CONC, X-COORD (M), Y-COORD (M), CONC. Data rows include coordinates and concentration values like 378121.64, 3746784.63, 0.00433.

♀ *** AERMOD - VERSION 16216r *** 01/31/18 *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
*** AERMET - VERSION 16216 *** 22:58:47 ***

PAGE 15

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Table with 8 columns: NETWORK GROUP ID, AVERAGE CONC, RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG), OF TYPE. Data rows show highest values at various receptor points like 1ST HIGHEST VALUE IS 0.00678 AT (378241.78, 3746779.48).

11458 HRA

9TH HIGHEST VALUE IS 0.00234 AT (378375.33, 3746516.50, 21.00, 21.00, 0.00) DC
10TH HIGHEST VALUE IS 0.00023 AT (378050.66, 3745989.57, 21.00, 21.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11458 HRA\11458 HRA.isc ***
01/31/18
*** AERMET - VERSION 16216 *** ***
22:58:47 ***

PAGE 16

*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 718 Informational Message(s)

A Total of 43848 Hours Were Processed
A Total of 458 Calm Hours Identified
A Total of 260 Missing Hours Identified (0.59 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 554 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 554 MEOPEN: ADJ_U* Option for Low Winds used in AERMET

*** AERMOD Finishes Successfully ***

Attachment A

Industrial Park CalEEMod Output

Torrance Technology Park - South Coast AQMD Air District, Summer

Torrance Technology Park
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates provided by Michael Baker International.

Fleet Mix - Fleet Mix provided by Michael Baker International.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

Torrance Technology Park - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblFleetMix	HHD	0.03	0.11
tblFleetMix	LDA	0.54	0.87
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.01
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	2.00	0.00
tblVehicleTrips	PR_TP	79.00	100.00
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	WD_TR	6.83	3.37

Torrance Technology Park - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.8741	26,435.8741	1.1749		26,465.2466
Total	12.7465	48.1646	55.5759	0.2626	17.7803	0.3764	18.1567	4.7438	0.3600	5.1039		27,643.8285	27,643.8285	1.1983	0.0221	27,680.3848

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.8741	26,435.8741	1.1749		26,465.2466
Total	12.7465	48.1646	55.5759	0.2626	17.7803	0.3764	18.1567	4.7438	0.3600	5.1039		27,643.8285	27,643.8285	1.1983	0.0221	27,680.3848

Torrance Technology Park - South Coast AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	

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 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Torrance Technology Park - South Coast AQMD Air District, Summer

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

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

Torrance Technology Park - South Coast AQMD Air District, Summer

3.2 Demolition - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Torrance Technology Park - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.8741	26,435.8741	1.1749		26,465.2466
Unmitigated	3.4724	47.1577	54.6879	0.2565	17.7803	0.2998	18.0801	4.7438	0.2834	5.0272		26,435.8741	26,435.8741	1.1749		26,465.2466

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,381.70	1,041.40	508.40	7,301,205	7,301,205
Total	1,381.70	1,041.40	508.40	7,301,205	7,301,205

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.870000	0.000000	0.000000	0.000000	0.010000	0.000000	0.010000	0.110000	0.000000	0.000000	0.000000	0.000000	0.000000

Torrance Technology Park - South Coast AQMD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
NaturalGas Unmitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Torrance Technology Park - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10266.8	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10.2668	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

6.0 Area Detail

6.1 Mitigation Measures Area

Torrance Technology Park - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Torrance Technology Park - South Coast AQMD Air District, Summer

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Winter

Torrance Technology Park
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates provided by Michael Baker International.

Fleet Mix - Fleet Mix provided by Michael Baker International.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

Torrance Technology Park - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblFleetMix	HHD	0.03	0.11
tblFleetMix	LDA	0.54	0.87
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.01
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	2.00	0.00
tblVehicleTrips	PR_TP	79.00	100.00
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	WD_TR	6.83	3.37

Torrance Technology Park - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407
Total	12.6272	48.9757	51.4329	0.2507	17.7803	0.3800	18.1603	4.7438	0.3635	5.1073		26,450.4297	26,450.4297	1.2140	0.0221	26,487.3789

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Energy	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Mobile	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407
Total	12.6272	48.9757	51.4329	0.2507	17.7803	0.3800	18.1603	4.7438	0.3635	5.1073		26,450.4297	26,450.4297	1.2140	0.0221	26,487.3789

Torrance Technology Park - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	

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 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Torrance Technology Park - South Coast AQMD Air District, Winter

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

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

Torrance Technology Park - South Coast AQMD Air District, Winter

3.2 Demolition - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Torrance Technology Park - South Coast AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407
Unmitigated	3.3531	47.9688	50.5449	0.2447	17.7803	0.3034	18.0836	4.7438	0.2868	5.0306		25,242.4753	25,242.4753	1.1906		25,272.2407

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,381.70	1,041.40	508.40	7,301,205	7,301,205
Total	1,381.70	1,041.40	508.40	7,301,205	7,301,205

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.870000	0.000000	0.000000	0.000000	0.010000	0.000000	0.010000	0.110000	0.000000	0.000000	0.000000	0.000000	0.000000

Torrance Technology Park - South Coast AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
NaturalGas Unmitigated	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Torrance Technology Park - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10266.8	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	10.2668	0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424
Total		0.1107	1.0066	0.8455	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,207.8646	1,207.8646	0.0232	0.0221	1,215.0424

6.0 Area Detail

6.1 Mitigation Measures Area

Torrance Technology Park - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Unmitigated	9.1633	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

Torrance Technology Park - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.1180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959
Total	9.1634	4.0000e-004	0.0424	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0897	0.0897	2.5000e-004		0.0959

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Torrance Technology Park - South Coast AQMD Air District, Winter

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Torrance Technology Park - South Coast AQMD Air District, Annual

Torrance Technology Park
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	410.00	1000sqft	9.41	410,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates provided by Michael Baker International.

Fleet Mix - Fleet Mix provided by Michael Baker International.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

Torrance Technology Park - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseEndDate	2/27/2018	1/31/2018
tblFleetMix	HHD	0.03	0.11
tblFleetMix	LDA	0.54	0.87
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.01
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	2.00	0.00
tblVehicleTrips	PR_TP	79.00	100.00
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	WD_TR	6.83	3.37

Torrance Technology Park - South Coast AQMD Air District, Annual

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	2,027.5562	2,027.5562	0.0793	0.0193	2,035.2827
Mobile	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.2173	7.9556	8.3292	0.0406	2.7787	0.0619	2.8406	0.7425	0.0593	0.8017	133.2802	6,114.9932	6,248.2734	9.4533	0.0956	6,513.0901

Torrance Technology Park - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Energy	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	2,027.5562	2,027.5562	0.0793	0.0193	2,035.2827
Mobile	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038
Waste						0.0000	0.0000		0.0000	0.0000	103.2006	0.0000	103.2006	6.0990	0.0000	255.6751
Water						0.0000	0.0000		0.0000	0.0000	30.0796	393.3552	423.4349	3.1057	0.0763	523.8176
Total	2.2173	7.9556	8.3292	0.0406	2.7787	0.0619	2.8406	0.7425	0.0593	0.8017	133.2802	6,114.9932	6,248.2734	9.4533	0.0956	6,513.0901

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/31/2018	1/31/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Torrance Technology Park - South Coast AQMD Air District, Annual

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 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Torrance Technology Park - South Coast AQMD Air District, Annual

3.2 Demolition - 2018

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Torrance Technology Park - South Coast AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038
Unmitigated	0.5250	7.7719	8.1696	0.0395	2.7787	0.0479	2.8266	0.7425	0.0453	0.7878	0.0000	3,694.0716	3,694.0716	0.1693	0.0000	3,698.3038

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,381.70	1,041.40	508.40	7,301,205	7,301,205
Total	1,381.70	1,041.40	508.40	7,301,205	7,301,205

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.870000	0.000000	0.000000	0.000000	0.010000	0.000000	0.010000	0.110000	0.000000	0.000000	0.000000	0.000000	0.000000

Torrance Technology Park - South Coast AQMD Air District, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,827.5806	1,827.5806	0.0755	0.0156	1,834.1189
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,827.5806	1,827.5806	0.0755	0.0156	1,834.1189
NaturalGas Mitigated	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639
NaturalGas Unmitigated	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639

Torrance Technology Park - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	3.7474e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639
Total		0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	3.7474e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639
Total		0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9755	199.9755	3.8300e-003	3.6700e-003	201.1639

Torrance Technology Park - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	5.7359e+006	1,827.5806	0.0755	0.0156	1,834.1189
Total		1,827.5806	0.0755	0.0156	1,834.1189

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	5.7359e+006	1,827.5806	0.0755	0.0156	1,834.1189
Total		1,827.5806	0.0755	0.0156	1,834.1189

6.0 Area Detail

6.1 Mitigation Measures Area

Torrance Technology Park - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Unmitigated	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

Torrance Technology Park - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109
Total	1.6721	5.0000e-005	5.3000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0102	0.0102	3.0000e-005	0.0000	0.0109

7.0 Water Detail

7.1 Mitigation Measures Water

Torrance Technology Park - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	423.4349	3.1057	0.0763	523.8176
Unmitigated	423.4349	3.1057	0.0763	523.8176

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

Torrance Technology Park - South Coast AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	94.8125 / 0	423.4349	3.1057	0.0763	523.8176
Total		423.4349	3.1057	0.0763	523.8176

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	103.2006	6.0990	0.0000	255.6751
Unmitigated	103.2006	6.0990	0.0000	255.6751

Torrance Technology Park - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	508.4	103.2006	6.0990	0.0000	255.6751
Total		103.2006	6.0990	0.0000	255.6751

9.0 Operational Offroad

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

Torrance Technology Park - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation
