

# **APPENDIX B**

## **Air Quality and Greenhouse Gas Model**

**Prepared by:**

MIG, Inc

Avalon Bay - existing - Los Angeles-South Coast County, Annual

**Avalon Bay - existing**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	27.06	1000sqft	0.62	27,059.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2018
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - Trip rate from TIA

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	27,060.00	27,059.00
tblVehicleTrips	ST_TR	2.46	9.87
tblVehicleTrips	SU_TR	1.05	9.87
tblVehicleTrips	WD_TR	11.03	9.87

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**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1935	0.6676	0.4948	8.0000e-004	8.4400e-003	0.0413	0.0497	2.4400e-003	0.0381	0.0406	0.0000	73.0596	73.0596	0.0189	0.0000	73.5316
<b>Maximum</b>	<b>0.1935</b>	<b>0.6676</b>	<b>0.4948</b>	<b>8.0000e-004</b>	<b>8.4400e-003</b>	<b>0.0413</b>	<b>0.0497</b>	<b>2.4400e-003</b>	<b>0.0381</b>	<b>0.0406</b>	<b>0.0000</b>	<b>73.0596</b>	<b>73.0596</b>	<b>0.0189</b>	<b>0.0000</b>	<b>73.5316</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1935	0.6676	0.4948	8.0000e-004	8.4400e-003	0.0413	0.0497	2.4400e-003	0.0381	0.0406	0.0000	73.0596	73.0596	0.0189	0.0000	73.5315
<b>Maximum</b>	<b>0.1935</b>	<b>0.6676</b>	<b>0.4948</b>	<b>8.0000e-004</b>	<b>8.4400e-003</b>	<b>0.0413</b>	<b>0.0497</b>	<b>2.4400e-003</b>	<b>0.0381</b>	<b>0.0406</b>	<b>0.0000</b>	<b>73.0596</b>	<b>73.0596</b>	<b>0.0189</b>	<b>0.0000</b>	<b>73.5315</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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)
1	3-13-2018	6-12-2018	0.4049	0.4049
2	6-13-2018	9-12-2018	0.4509	0.4509
		Highest	0.4509	0.4509

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1104	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.7000e-004	6.7000e-004	0.0000	0.0000	7.2000e-004
Energy	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	127.0260	127.0260	4.9100e-003	1.2300e-003	127.5160
Mobile	0.1145	0.5572	1.5676	4.3900e-003	0.3266	5.3700e-003	0.3320	0.0876	5.0500e-003	0.0926	0.0000	403.9157	403.9157	0.0251	0.0000	404.5442
Waste						0.0000	0.0000		0.0000	0.0000	5.1093	0.0000	5.1093	0.3020	0.0000	12.6580
Water						0.0000	0.0000		0.0000	0.0000	1.5258	30.3881	31.9139	0.1580	3.9600e-003	37.0433
<b>Total</b>	<b>0.2264</b>	<b>0.5710</b>	<b>1.5795</b>	<b>4.4700e-003</b>	<b>0.3266</b>	<b>6.4200e-003</b>	<b>0.3330</b>	<b>0.0876</b>	<b>6.1000e-003</b>	<b>0.0937</b>	<b>6.6351</b>	<b>561.3305</b>	<b>567.9656</b>	<b>0.4900</b>	<b>5.1900e-003</b>	<b>581.7622</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1104	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.7000e-004	6.7000e-004	0.0000	0.0000	7.2000e-004
Energy	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	127.0260	127.0260	4.9100e-003	1.2300e-003	127.5160
Mobile	0.1145	0.5572	1.5676	4.3900e-003	0.3266	5.3700e-003	0.3320	0.0876	5.0500e-003	0.0926	0.0000	403.9157	403.9157	0.0251	0.0000	404.5442
Waste						0.0000	0.0000		0.0000	0.0000	5.1093	0.0000	5.1093	0.3020	0.0000	12.6580
Water						0.0000	0.0000		0.0000	0.0000	1.5258	30.3881	31.9139	0.1580	3.9600e-003	37.0433
<b>Total</b>	<b>0.2264</b>	<b>0.5710</b>	<b>1.5795</b>	<b>4.4700e-003</b>	<b>0.3266</b>	<b>6.4200e-003</b>	<b>0.3330</b>	<b>0.0876</b>	<b>6.1000e-003</b>	<b>0.0937</b>	<b>6.6351</b>	<b>561.3305</b>	<b>567.9656</b>	<b>0.4900</b>	<b>5.1900e-003</b>	<b>581.7622</b>

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

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/13/2018	3/26/2018	5	10	
2	Site Preparation	Site Preparation	3/27/2018	3/27/2018	5	1	
3	Grading	Grading	3/28/2018	3/29/2018	5	2	
4	Building Construction	Building Construction	3/30/2018	8/16/2018	5	100	
5	Paving	Paving	8/17/2018	8/23/2018	5	5	
6	Architectural Coating	Architectural Coating	8/24/2018	8/30/2018	5	5	

**Acres of Grading (Site Preparation Phase): 0.5**

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,589; Non-Residential Outdoor: 13,530; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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**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	tons/yr										MT/yr					
Off-Road	5.3200e-003	0.0472	0.0389	6.0000e-005		3.1100e-003	3.1100e-003		2.9700e-003	2.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3297
<b>Total</b>	<b>5.3200e-003</b>	<b>0.0472</b>	<b>0.0389</b>	<b>6.0000e-005</b>		<b>3.1100e-003</b>	<b>3.1100e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>5.3041</b>	<b>5.3041</b>	<b>1.0200e-003</b>	<b>0.0000</b>	<b>5.3297</b>



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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.4000e-004	2.5500e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5444	0.5444	2.0000e-005	0.0000	0.5449
<b>Total</b>	<b>2.8000e-004</b>	<b>2.4000e-004</b>	<b>2.5500e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5444</b>	<b>0.5444</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5449</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3200e-003	0.0472	0.0389	6.0000e-005		3.1100e-003	3.1100e-003		2.9700e-003	2.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3296
<b>Total</b>	<b>5.3200e-003</b>	<b>0.0472</b>	<b>0.0389</b>	<b>6.0000e-005</b>		<b>3.1100e-003</b>	<b>3.1100e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>5.3041</b>	<b>5.3041</b>	<b>1.0200e-003</b>	<b>0.0000</b>	<b>5.3296</b>

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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.4000e-004	2.5500e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5444	0.5444	2.0000e-005	0.0000	0.5449
<b>Total</b>	<b>2.8000e-004</b>	<b>2.4000e-004</b>	<b>2.5500e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5444</b>	<b>0.5444</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5449</b>

**3.3 Site Preparation - 2018**

**Unmitigated Construction On-Site**

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

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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0272	0.0272	0.0000	0.0000	0.0273
<b>Total</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0272</b>	<b>0.0272</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0273</b>

**Mitigated Construction On-Site**

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

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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0272	0.0272	0.0000	0.0000	0.0273
<b>Total</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0272</b>	<b>0.0272</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0273</b>

**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	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
<b>Total</b>	<b>1.0600e-003</b>	<b>9.4300e-003</b>	<b>7.7800e-003</b>	<b>1.0000e-005</b>	<b>7.5000e-004</b>	<b>6.2000e-004</b>	<b>1.3700e-003</b>	<b>4.1000e-004</b>	<b>5.9000e-004</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>1.0608</b>	<b>1.0608</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>1.0659</b>

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**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	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	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090
<b>Total</b>	<b>6.0000e-005</b>	<b>5.0000e-005</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1089</b>	<b>0.1089</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1090</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
<b>Total</b>	<b>1.0600e-003</b>	<b>9.4300e-003</b>	<b>7.7800e-003</b>	<b>1.0000e-005</b>	<b>7.5000e-004</b>	<b>6.2000e-004</b>	<b>1.3700e-003</b>	<b>4.1000e-004</b>	<b>5.9000e-004</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>1.0608</b>	<b>1.0608</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>1.0659</b>

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**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	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	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090
<b>Total</b>	<b>6.0000e-005</b>	<b>5.0000e-005</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1089</b>	<b>0.1089</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1090</b>

**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	tons/yr										MT/yr					
Off-Road	0.0542	0.5516	0.3876	5.7000e-004		0.0354	0.0354		0.0326	0.0326	0.0000	52.0058	52.0058	0.0162	0.0000	52.4106
<b>Total</b>	<b>0.0542</b>	<b>0.5516</b>	<b>0.3876</b>	<b>5.7000e-004</b>		<b>0.0354</b>	<b>0.0354</b>		<b>0.0326</b>	<b>0.0326</b>	<b>0.0000</b>	<b>52.0058</b>	<b>52.0058</b>	<b>0.0162</b>	<b>0.0000</b>	<b>52.4106</b>

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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4000e-004	0.0251	7.0400e-003	5.0000e-005	1.2600e-003	1.7000e-004	1.4300e-003	3.6000e-004	1.7000e-004	5.3000e-004	0.0000	5.0533	5.0533	3.5000e-004	0.0000	5.0620
Worker	2.4900e-003	2.1300e-003	0.0229	5.0000e-005	4.9300e-003	4.0000e-005	4.9800e-003	1.3100e-003	4.0000e-005	1.3500e-003	0.0000	4.8996	4.8996	1.8000e-004	0.0000	4.9042
<b>Total</b>	<b>3.4300e-003</b>	<b>0.0272</b>	<b>0.0300</b>	<b>1.0000e-004</b>	<b>6.1900e-003</b>	<b>2.1000e-004</b>	<b>6.4100e-003</b>	<b>1.6700e-003</b>	<b>2.1000e-004</b>	<b>1.8800e-003</b>	<b>0.0000</b>	<b>9.9529</b>	<b>9.9529</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>9.9662</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0542	0.5516	0.3876	5.7000e-004		0.0354	0.0354		0.0326	0.0326	0.0000	52.0058	52.0058	0.0162	0.0000	52.4105
<b>Total</b>	<b>0.0542</b>	<b>0.5516</b>	<b>0.3876</b>	<b>5.7000e-004</b>		<b>0.0354</b>	<b>0.0354</b>		<b>0.0326</b>	<b>0.0326</b>	<b>0.0000</b>	<b>52.0058</b>	<b>52.0058</b>	<b>0.0162</b>	<b>0.0000</b>	<b>52.4105</b>

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**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	9.4000e-004	0.0251	7.0400e-003	5.0000e-005	1.2600e-003	1.7000e-004	1.4300e-003	3.6000e-004	1.7000e-004	5.3000e-004	0.0000	5.0533	5.0533	3.5000e-004	0.0000	5.0620
Worker	2.4900e-003	2.1300e-003	0.0229	5.0000e-005	4.9300e-003	4.0000e-005	4.9800e-003	1.3100e-003	4.0000e-005	1.3500e-003	0.0000	4.8996	4.8996	1.8000e-004	0.0000	4.9042
<b>Total</b>	<b>3.4300e-003</b>	<b>0.0272</b>	<b>0.0300</b>	<b>1.0000e-004</b>	<b>6.1900e-003</b>	<b>2.1000e-004</b>	<b>6.4100e-003</b>	<b>1.6700e-003</b>	<b>2.1000e-004</b>	<b>1.8800e-003</b>	<b>0.0000</b>	<b>9.9529</b>	<b>9.9529</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>9.9662</b>

**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	tons/yr										MT/yr					
Off-Road	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.3000e-003</b>	<b>0.0219</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>1.2800e-003</b>	<b>1.2800e-003</b>		<b>1.1800e-003</b>	<b>1.1800e-003</b>	<b>0.0000</b>	<b>2.4270</b>	<b>2.4270</b>	<b>6.8000e-004</b>	<b>0.0000</b>	<b>2.4441</b>



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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	2.1000e-004	2.2900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4900	0.4900	2.0000e-005	0.0000	0.4904
<b>Total</b>	<b>2.5000e-004</b>	<b>2.1000e-004</b>	<b>2.2900e-003</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>5.0000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4900</b>	<b>0.4900</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.4904</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.3000e-003</b>	<b>0.0219</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>1.2800e-003</b>	<b>1.2800e-003</b>		<b>1.1800e-003</b>	<b>1.1800e-003</b>	<b>0.0000</b>	<b>2.4270</b>	<b>2.4270</b>	<b>6.8000e-004</b>	<b>0.0000</b>	<b>2.4441</b>

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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	2.1000e-004	2.2900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4900	0.4900	2.0000e-005	0.0000	0.4904
<b>Total</b>	<b>2.5000e-004</b>	<b>2.1000e-004</b>	<b>2.2900e-003</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>5.0000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4900</b>	<b>0.4900</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.4904</b>

**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	tons/yr										MT/yr					
Archit. Coating	0.1254					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
<b>Total</b>	<b>0.1262</b>	<b>5.0100e-003</b>	<b>4.6400e-003</b>	<b>1.0000e-005</b>		<b>3.8000e-004</b>	<b>3.8000e-004</b>		<b>3.8000e-004</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.6398</b>

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**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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0544	0.0544	0.0000	0.0000	0.0545
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0544</b>	<b>0.0544</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0545</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1254					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6398
<b>Total</b>	<b>0.1262</b>	<b>5.0100e-003</b>	<b>4.6400e-003</b>	<b>1.0000e-005</b>		<b>3.8000e-004</b>	<b>3.8000e-004</b>		<b>3.8000e-004</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.6398</b>

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**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	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0544	0.0544	0.0000	0.0000	0.0545
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0544</b>	<b>0.0544</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0545</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1145	0.5572	1.5676	4.3900e-003	0.3266	5.3700e-003	0.3320	0.0876	5.0500e-003	0.0926	0.0000	403.9157	403.9157	0.0251	0.0000	404.5442
Unmitigated	0.1145	0.5572	1.5676	4.3900e-003	0.3266	5.3700e-003	0.3320	0.0876	5.0500e-003	0.0926	0.0000	403.9157	403.9157	0.0251	0.0000	404.5442

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	267.08	267.08	267.08	860,395	860,395
Total	267.08	267.08	267.08	860,395	860,395

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	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

Historical Energy Use: N

Avalon Bay - existing - Los Angeles-South Coast County, 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	111.9943	111.9943	4.6200e-003	9.6000e-004	112.3950
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	111.9943	111.9943	4.6200e-003	9.6000e-004	112.3950
NaturalGas Mitigated	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0317	15.0317	2.9000e-004	2.8000e-004	15.1211
NaturalGas Unmitigated	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0317	15.0317	2.9000e-004	2.8000e-004	15.1211

**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	281684	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0317	15.0317	2.9000e-004	2.8000e-004	15.1211
<b>Total</b>		<b>1.5200e-003</b>	<b>0.0138</b>	<b>0.0116</b>	<b>8.0000e-005</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>15.0317</b>	<b>15.0317</b>	<b>2.9000e-004</b>	<b>2.8000e-004</b>	<b>15.1211</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	281684	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0317	15.0317	2.9000e-004	2.8000e-004	15.1211
<b>Total</b>		<b>1.5200e-003</b>	<b>0.0138</b>	<b>0.0116</b>	<b>8.0000e-005</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>15.0317</b>	<b>15.0317</b>	<b>2.9000e-004</b>	<b>2.8000e-004</b>	<b>15.1211</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	351496	111.9943	4.6200e-003	9.6000e-004	112.3950
<b>Total</b>		<b>111.9943</b>	<b>4.6200e-003</b>	<b>9.6000e-004</b>	<b>112.3950</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	351496	111.9943	4.6200e-003	9.6000e-004	112.3950
<b>Total</b>		<b>111.9943</b>	<b>4.6200e-003</b>	<b>9.6000e-004</b>	<b>112.3950</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1104	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.7000e-004	6.7000e-004	0.0000	0.0000	7.2000e-004
Unmitigated	0.1104	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.7000e-004	6.7000e-004	0.0000	0.0000	7.2000e-004



Avalon Bay - existing - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0978					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.7000e-004	6.7000e-004	0.0000	0.0000	7.2000e-004
<b>Total</b>	<b>0.1104</b>	<b>0.0000</b>	<b>3.5000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.7000e-004</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.2000e-004</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0978					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.7000e-004	6.7000e-004	0.0000	0.0000	7.2000e-004
<b>Total</b>	<b>0.1104</b>	<b>0.0000</b>	<b>3.5000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.7000e-004</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.2000e-004</b>

**7.0 Water Detail**

Avalon Bay - existing - Los Angeles-South Coast County, Annual

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	31.9139	0.1580	3.9600e-003	37.0433
Unmitigated	31.9139	0.1580	3.9600e-003	37.0433

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	4.80948 / 2.94774	31.9139	0.1580	3.9600e-003	37.0433
<b>Total</b>		<b>31.9139</b>	<b>0.1580</b>	<b>3.9600e-003</b>	<b>37.0433</b>

Avalon Bay - existing - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	4.80948 / 2.94774	31.9139	0.1580	3.9600e-003	37.0433
<b>Total</b>		<b>31.9139</b>	<b>0.1580</b>	<b>3.9600e-003</b>	<b>37.0433</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.1093	0.3020	0.0000	12.6580
Unmitigated	5.1093	0.3020	0.0000	12.6580

Avalon Bay - existing - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	25.17	5.1093	0.3020	0.0000	12.6580
<b>Total</b>		<b>5.1093</b>	<b>0.3020</b>	<b>0.0000</b>	<b>12.6580</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	25.17	5.1093	0.3020	0.0000	12.6580
<b>Total</b>		<b>5.1093</b>	<b>0.3020</b>	<b>0.0000</b>	<b>12.6580</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Avalon Bay - existing - Los Angeles-South Coast County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Avalon Bay - existing - Los Angeles-South Coast County, Summer

**Avalon Bay - existing**  
**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	27.06	1000sqft	0.62	27,059.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2018
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - Trip rate from TIA

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	27,060.00	27,059.00
tblVehicleTrips	ST_TR	2.46	9.87
tblVehicleTrips	SU_TR	1.05	9.87
tblVehicleTrips	WD_TR	11.03	9.87

Avalon Bay - existing - Los Angeles-South Coast County, Summer

**2.0 Emissions Summary**

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	50.4780	11.5594	8.3713	0.0136	0.8645	0.7130	1.4883	0.4434	0.6561	1.0386	0.0000	1,372.036 1	1,372.036 1	0.3686	0.0000	1,381.250 7
<b>Maximum</b>	<b>50.4780</b>	<b>11.5594</b>	<b>8.3713</b>	<b>0.0136</b>	<b>0.8645</b>	<b>0.7130</b>	<b>1.4883</b>	<b>0.4434</b>	<b>0.6561</b>	<b>1.0386</b>	<b>0.0000</b>	<b>1,372.036 1</b>	<b>1,372.036 1</b>	<b>0.3686</b>	<b>0.0000</b>	<b>1,381.250 7</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	50.4780	11.5594	8.3713	0.0136	0.8645	0.7130	1.4883	0.4434	0.6561	1.0386	0.0000	1,372.036 1	1,372.036 1	0.3686	0.0000	1,381.250 7
<b>Maximum</b>	<b>50.4780</b>	<b>11.5594</b>	<b>8.3713</b>	<b>0.0136</b>	<b>0.8645</b>	<b>0.7130</b>	<b>1.4883</b>	<b>0.4434</b>	<b>0.6561</b>	<b>1.0386</b>	<b>0.0000</b>	<b>1,372.036 1</b>	<b>1,372.036 1</b>	<b>0.3686</b>	<b>0.0000</b>	<b>1,381.250 7</b>





Avalon Bay - existing - Los Angeles-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
Energy	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
Mobile	0.6598	2.9124	8.9037	0.0250	1.8299	0.0294	1.8593	0.4898	0.0277	0.5176		2,537.0610	2,537.0610	0.1536		2,540.9012
<b>Total</b>	<b>1.2728</b>	<b>2.9881</b>	<b>8.9701</b>	<b>0.0255</b>	<b>1.8299</b>	<b>0.0352</b>	<b>1.8651</b>	<b>0.4898</b>	<b>0.0335</b>	<b>0.5233</b>		<b>2,627.8595</b>	<b>2,627.8595</b>	<b>0.1554</b>	<b>1.6600e-003</b>	<b>2,632.2397</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
Energy	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
Mobile	0.6598	2.9124	8.9037	0.0250	1.8299	0.0294	1.8593	0.4898	0.0277	0.5176		2,537.0610	2,537.0610	0.1536		2,540.9012
<b>Total</b>	<b>1.2728</b>	<b>2.9881</b>	<b>8.9701</b>	<b>0.0255</b>	<b>1.8299</b>	<b>0.0352</b>	<b>1.8651</b>	<b>0.4898</b>	<b>0.0335</b>	<b>0.5233</b>		<b>2,627.8595</b>	<b>2,627.8595</b>	<b>0.1554</b>	<b>1.6600e-003</b>	<b>2,632.2397</b>

## Avalon Bay - existing - Los Angeles-South Coast County, Summer

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

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/13/2018	3/26/2018	5	10	
2	Site Preparation	Site Preparation	3/27/2018	3/27/2018	5	1	
3	Grading	Grading	3/28/2018	3/29/2018	5	2	
4	Building Construction	Building Construction	3/30/2018	8/16/2018	5	100	
5	Paving	Paving	8/17/2018	8/23/2018	5	5	
6	Architectural Coating	Architectural Coating	8/24/2018	8/30/2018	5	5	

**Acres of Grading (Site Preparation Phase): 0.5**

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,589; Non-Residential Outdoor: 13,530; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Avalon Bay - existing - Los Angeles-South Coast County, Summer

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Avalon Bay - existing - Los Angeles-South Coast County, 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	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.350 2	1,169.350 2	0.2254		1,174.985 7
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>		<b>0.6228</b>	<b>0.6228</b>		<b>0.5943</b>	<b>0.5943</b>		<b>1,169.350 2</b>	<b>1,169.350 2</b>	<b>0.2254</b>		<b>1,174.985 7</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
<b>Total</b>	<b>0.0553</b>	<b>0.0417</b>	<b>0.5401</b>	<b>1.2600e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>125.3690</b>	<b>125.3690</b>	<b>4.7000e-003</b>		<b>125.4865</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>		<b>0.6228</b>	<b>0.6228</b>		<b>0.5943</b>	<b>0.5943</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
<b>Total</b>	<b>0.0553</b>	<b>0.0417</b>	<b>0.5401</b>	<b>1.2600e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>125.3690</b>	<b>125.3690</b>	<b>4.7000e-003</b>		<b>125.4865</b>

**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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.5303</b>	<b>0.4180</b>	<b>0.9483</b>	<b>0.0573</b>	<b>0.3846</b>	<b>0.4418</b>		<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
<b>Total</b>	<b>0.0276</b>	<b>0.0209</b>	<b>0.2700</b>	<b>6.3000e-004</b>	<b>0.0559</b>	<b>5.0000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.6000e-004</b>	<b>0.0153</b>		<b>62.6845</b>	<b>62.6845</b>	<b>2.3500e-003</b>		<b>62.7433</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.5303</b>	<b>0.4180</b>	<b>0.9483</b>	<b>0.0573</b>	<b>0.3846</b>	<b>0.4418</b>	<b>0.0000</b>	<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
<b>Total</b>	<b>0.0276</b>	<b>0.0209</b>	<b>0.2700</b>	<b>6.3000e-004</b>	<b>0.0559</b>	<b>5.0000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.6000e-004</b>	<b>0.0153</b>		<b>62.6845</b>	<b>62.6845</b>	<b>2.3500e-003</b>		<b>62.7433</b>

**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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.6228</b>	<b>1.3755</b>	<b>0.4138</b>	<b>0.5943</b>	<b>1.0081</b>		<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>



Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
<b>Total</b>	<b>0.0553</b>	<b>0.0417</b>	<b>0.5401</b>	<b>1.2600e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>125.3690</b>	<b>125.3690</b>	<b>4.7000e-003</b>		<b>125.4865</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.6228</b>	<b>1.3755</b>	<b>0.4138</b>	<b>0.5943</b>	<b>1.0081</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
<b>Total</b>	<b>0.0553</b>	<b>0.0417</b>	<b>0.5401</b>	<b>1.2600e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>125.3690</b>	<b>125.3690</b>	<b>4.7000e-003</b>		<b>125.4865</b>

**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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>		<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0184	0.4902	0.1340	1.0600e-003	0.0256	3.4500e-003	0.0291	7.3700e-003	3.3000e-003	0.0107		112.6718	112.6718	7.4200e-003		112.8572
Worker	0.0497	0.0375	0.4861	1.1300e-003	0.1006	9.0000e-004	0.1015	0.0267	8.3000e-004	0.0275		112.8321	112.8321	4.2300e-003		112.9379
<b>Total</b>	<b>0.0681</b>	<b>0.5278</b>	<b>0.6201</b>	<b>2.1900e-003</b>	<b>0.1262</b>	<b>4.3500e-003</b>	<b>0.1306</b>	<b>0.0341</b>	<b>4.1300e-003</b>	<b>0.0382</b>		<b>225.5039</b>	<b>225.5039</b>	<b>0.0117</b>		<b>225.7951</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>	<b>0.0000</b>	<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0184	0.4902	0.1340	1.0600e-003	0.0256	3.4500e-003	0.0291	7.3700e-003	3.3000e-003	0.0107		112.6718	112.6718	7.4200e-003		112.8572
Worker	0.0497	0.0375	0.4861	1.1300e-003	0.1006	9.0000e-004	0.1015	0.0267	8.3000e-004	0.0275		112.8321	112.8321	4.2300e-003		112.9379
<b>Total</b>	<b>0.0681</b>	<b>0.5278</b>	<b>0.6201</b>	<b>2.1900e-003</b>	<b>0.1262</b>	<b>4.3500e-003</b>	<b>0.1306</b>	<b>0.0341</b>	<b>4.1300e-003</b>	<b>0.0382</b>		<b>225.5039</b>	<b>225.5039</b>	<b>0.0117</b>		<b>225.7951</b>

**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	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9202</b>	<b>8.7447</b>	<b>7.2240</b>	<b>0.0113</b>		<b>0.5109</b>	<b>0.5109</b>		<b>0.4735</b>	<b>0.4735</b>		<b>1,070.1372</b>	<b>1,070.1372</b>	<b>0.3017</b>		<b>1,077.6798</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
<b>Total</b>	<b>0.0995</b>	<b>0.0751</b>	<b>0.9721</b>	<b>2.2700e-003</b>	<b>0.2012</b>	<b>1.7900e-003</b>	<b>0.2030</b>	<b>0.0534</b>	<b>1.6500e-003</b>	<b>0.0550</b>		<b>225.6642</b>	<b>225.6642</b>	<b>8.4600e-003</b>		<b>225.8758</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9202</b>	<b>8.7447</b>	<b>7.2240</b>	<b>0.0113</b>		<b>0.5109</b>	<b>0.5109</b>		<b>0.4735</b>	<b>0.4735</b>	<b>0.0000</b>	<b>1,070.1372</b>	<b>1,070.1372</b>	<b>0.3017</b>		<b>1,077.6798</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
<b>Total</b>	<b>0.0995</b>	<b>0.0751</b>	<b>0.9721</b>	<b>2.2700e-003</b>	<b>0.2012</b>	<b>1.7900e-003</b>	<b>0.2030</b>	<b>0.0534</b>	<b>1.6500e-003</b>	<b>0.0550</b>		<b>225.6642</b>	<b>225.6642</b>	<b>8.4600e-003</b>		<b>225.8758</b>

**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	50.1683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>50.4669</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0111	8.3400e-003	0.1080	2.5000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		25.0738	25.0738	9.4000e-004		25.0973
<b>Total</b>	<b>0.0111</b>	<b>8.3400e-003</b>	<b>0.1080</b>	<b>2.5000e-004</b>	<b>0.0224</b>	<b>2.0000e-004</b>	<b>0.0226</b>	<b>5.9300e-003</b>	<b>1.8000e-004</b>	<b>6.1100e-003</b>		<b>25.0738</b>	<b>25.0738</b>	<b>9.4000e-004</b>		<b>25.0973</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.1683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>50.4669</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0111	8.3400e-003	0.1080	2.5000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		25.0738	25.0738	9.4000e-004		25.0973
<b>Total</b>	<b>0.0111</b>	<b>8.3400e-003</b>	<b>0.1080</b>	<b>2.5000e-004</b>	<b>0.0224</b>	<b>2.0000e-004</b>	<b>0.0226</b>	<b>5.9300e-003</b>	<b>1.8000e-004</b>	<b>6.1100e-003</b>		<b>25.0738</b>	<b>25.0738</b>	<b>9.4000e-004</b>		<b>25.0973</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



Avalon Bay - existing - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6598	2.9124	8.9037	0.0250	1.8299	0.0294	1.8593	0.4898	0.0277	0.5176		2,537.0610	2,537.0610	0.1536		2,540.9012
Unmitigated	0.6598	2.9124	8.9037	0.0250	1.8299	0.0294	1.8593	0.4898	0.0277	0.5176		2,537.0610	2,537.0610	0.1536		2,540.9012

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	267.08	267.08	267.08	860,395	860,395
Total	267.08	267.08	267.08	860,395	860,395

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	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

Historical Energy Use: N

Avalon Bay - existing - Los Angeles-South Coast County, Summer

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
NaturalGas Unmitigated	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322

**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	771.738	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
<b>Total</b>		<b>8.3200e-003</b>	<b>0.0757</b>	<b>0.0636</b>	<b>4.5000e-004</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>90.7927</b>	<b>90.7927</b>	<b>1.7400e-003</b>	<b>1.6600e-003</b>	<b>91.3322</b>

Avalon Bay - existing - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.771738	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
<b>Total</b>		<b>8.3200e-003</b>	<b>0.0757</b>	<b>0.0636</b>	<b>4.5000e-004</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>90.7927</b>	<b>90.7927</b>	<b>1.7400e-003</b>	<b>1.6600e-003</b>	<b>91.3322</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
Unmitigated	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003

Avalon Bay - existing - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
<b>Total</b>	<b>0.6048</b>	<b>3.0000e-005</b>	<b>2.8000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>5.9200e-003</b>	<b>5.9200e-003</b>	<b>2.0000e-005</b>		<b>6.3300e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
<b>Total</b>	<b>0.6048</b>	<b>3.0000e-005</b>	<b>2.8000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>5.9200e-003</b>	<b>5.9200e-003</b>	<b>2.0000e-005</b>		<b>6.3300e-003</b>

**7.0 Water Detail**

## Avalon Bay - existing - Los Angeles-South Coast County, Summer

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

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

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Avalon Bay - existing - Los Angeles-South Coast County, Winter

**Avalon Bay - existing**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	27.06	1000sqft	0.62	27,059.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2018
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - Trip rate from TIA

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	27,060.00	27,059.00
tblVehicleTrips	ST_TR	2.46	9.87
tblVehicleTrips	SU_TR	1.05	9.87
tblVehicleTrips	WD_TR	11.03	9.87

Avalon Bay - existing - Los Angeles-South Coast County, Winter

**2.0 Emissions Summary**

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

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	50.4792	11.5645	8.3461	0.0135	0.8645	0.7131	1.4883	0.4434	0.6562	1.0386	0.0000	1,362.444 0	1,362.444 0	0.3688	0.0000	1,371.665 1
<b>Maximum</b>	<b>50.4792</b>	<b>11.5645</b>	<b>8.3461</b>	<b>0.0135</b>	<b>0.8645</b>	<b>0.7131</b>	<b>1.4883</b>	<b>0.4434</b>	<b>0.6562</b>	<b>1.0386</b>	<b>0.0000</b>	<b>1,362.444 0</b>	<b>1,362.444 0</b>	<b>0.3688</b>	<b>0.0000</b>	<b>1,371.665 1</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	50.4792	11.5645	8.3461	0.0135	0.8645	0.7131	1.4883	0.4434	0.6562	1.0386	0.0000	1,362.444 0	1,362.444 0	0.3688	0.0000	1,371.665 1
<b>Maximum</b>	<b>50.4792</b>	<b>11.5645</b>	<b>8.3461</b>	<b>0.0135</b>	<b>0.8645</b>	<b>0.7131</b>	<b>1.4883</b>	<b>0.4434</b>	<b>0.6562</b>	<b>1.0386</b>	<b>0.0000</b>	<b>1,362.444 0</b>	<b>1,362.444 0</b>	<b>0.3688</b>	<b>0.0000</b>	<b>1,371.665 1</b>





Avalon Bay - existing - Los Angeles-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
Energy	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
Mobile	0.6451	3.0035	8.4980	0.0238	1.8299	0.0296	1.8595	0.4898	0.0279	0.5177		2,412.4029	2,412.4029	0.1526		2,416.2183
<b>Total</b>	<b>1.2581</b>	<b>3.0792</b>	<b>8.5644</b>	<b>0.0242</b>	<b>1.8299</b>	<b>0.0354</b>	<b>1.8653</b>	<b>0.4898</b>	<b>0.0337</b>	<b>0.5235</b>		<b>2,503.2014</b>	<b>2,503.2014</b>	<b>0.1544</b>	<b>1.6600e-003</b>	<b>2,507.5568</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
Energy	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
Mobile	0.6451	3.0035	8.4980	0.0238	1.8299	0.0296	1.8595	0.4898	0.0279	0.5177		2,412.4029	2,412.4029	0.1526		2,416.2183
<b>Total</b>	<b>1.2581</b>	<b>3.0792</b>	<b>8.5644</b>	<b>0.0242</b>	<b>1.8299</b>	<b>0.0354</b>	<b>1.8653</b>	<b>0.4898</b>	<b>0.0337</b>	<b>0.5235</b>		<b>2,503.2014</b>	<b>2,503.2014</b>	<b>0.1544</b>	<b>1.6600e-003</b>	<b>2,507.5568</b>

## Avalon Bay - existing - Los Angeles-South Coast County, Winter

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/13/2018	3/26/2018	5	10	
2	Site Preparation	Site Preparation	3/27/2018	3/27/2018	5	1	
3	Grading	Grading	3/28/2018	3/29/2018	5	2	
4	Building Construction	Building Construction	3/30/2018	8/16/2018	5	100	
5	Paving	Paving	8/17/2018	8/23/2018	5	5	
6	Architectural Coating	Architectural Coating	8/24/2018	8/30/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,589; Non-Residential Outdoor: 13,530; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Avalon Bay - existing - Los Angeles-South Coast County, Winter

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Avalon Bay - existing - Los Angeles-South Coast County, 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	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.350 2	1,169.350 2	0.2254		1,174.985 7
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>		<b>0.6228</b>	<b>0.6228</b>		<b>0.5943</b>	<b>0.5943</b>		<b>1,169.350 2</b>	<b>1,169.350 2</b>	<b>0.2254</b>		<b>1,174.985 7</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
<b>Total</b>	<b>0.0612</b>	<b>0.0462</b>	<b>0.4973</b>	<b>1.1900e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>118.0576</b>	<b>118.0576</b>	<b>4.4400e-003</b>		<b>118.1687</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>		<b>0.6228</b>	<b>0.6228</b>		<b>0.5943</b>	<b>0.5943</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
<b>Total</b>	<b>0.0612</b>	<b>0.0462</b>	<b>0.4973</b>	<b>1.1900e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>118.0576</b>	<b>118.0576</b>	<b>4.4400e-003</b>		<b>118.1687</b>

**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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.5303</b>	<b>0.4180</b>	<b>0.9483</b>	<b>0.0573</b>	<b>0.3846</b>	<b>0.4418</b>		<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843
<b>Total</b>	<b>0.0306</b>	<b>0.0231</b>	<b>0.2486</b>	<b>5.9000e-004</b>	<b>0.0559</b>	<b>5.0000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.6000e-004</b>	<b>0.0153</b>		<b>59.0288</b>	<b>59.0288</b>	<b>2.2200e-003</b>		<b>59.0843</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.5303</b>	<b>0.4180</b>	<b>0.9483</b>	<b>0.0573</b>	<b>0.3846</b>	<b>0.4418</b>	<b>0.0000</b>	<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843
<b>Total</b>	<b>0.0306</b>	<b>0.0231</b>	<b>0.2486</b>	<b>5.9000e-004</b>	<b>0.0559</b>	<b>5.0000e-004</b>	<b>0.0564</b>	<b>0.0148</b>	<b>4.6000e-004</b>	<b>0.0153</b>		<b>59.0288</b>	<b>59.0288</b>	<b>2.2200e-003</b>		<b>59.0843</b>

**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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.6228</b>	<b>1.3755</b>	<b>0.4138</b>	<b>0.5943</b>	<b>1.0081</b>		<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>



Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
<b>Total</b>	<b>0.0612</b>	<b>0.0462</b>	<b>0.4973</b>	<b>1.1900e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>118.0576</b>	<b>118.0576</b>	<b>4.4400e-003</b>		<b>118.1687</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.6228</b>	<b>1.3755</b>	<b>0.4138</b>	<b>0.5943</b>	<b>1.0081</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
<b>Total</b>	<b>0.0612</b>	<b>0.0462</b>	<b>0.4973</b>	<b>1.1900e-003</b>	<b>0.1118</b>	<b>1.0000e-003</b>	<b>0.1128</b>	<b>0.0296</b>	<b>9.2000e-004</b>	<b>0.0306</b>		<b>118.0576</b>	<b>118.0576</b>	<b>4.4400e-003</b>		<b>118.1687</b>

**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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>		<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0192	0.4913	0.1473	1.0300e-003	0.0256	3.5100e-003	0.0291	7.3700e-003	3.3600e-003	0.0107		109.6599	109.6599	7.9100e-003		109.8578
Worker	0.0550	0.0416	0.4475	1.0700e-003	0.1006	9.0000e-004	0.1015	0.0267	8.3000e-004	0.0275		106.2518	106.2518	4.0000e-003		106.3518
<b>Total</b>	<b>0.0742</b>	<b>0.5329</b>	<b>0.5949</b>	<b>2.1000e-003</b>	<b>0.1262</b>	<b>4.4100e-003</b>	<b>0.1306</b>	<b>0.0341</b>	<b>4.1900e-003</b>	<b>0.0382</b>		<b>215.9118</b>	<b>215.9118</b>	<b>0.0119</b>		<b>216.2096</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>	<b>0.0000</b>	<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0192	0.4913	0.1473	1.0300e-003	0.0256	3.5100e-003	0.0291	7.3700e-003	3.3600e-003	0.0107		109.6599	109.6599	7.9100e-003		109.8578
Worker	0.0550	0.0416	0.4475	1.0700e-003	0.1006	9.0000e-004	0.1015	0.0267	8.3000e-004	0.0275		106.2518	106.2518	4.0000e-003		106.3518
<b>Total</b>	<b>0.0742</b>	<b>0.5329</b>	<b>0.5949</b>	<b>2.1000e-003</b>	<b>0.1262</b>	<b>4.4100e-003</b>	<b>0.1306</b>	<b>0.0341</b>	<b>4.1900e-003</b>	<b>0.0382</b>		<b>215.9118</b>	<b>215.9118</b>	<b>0.0119</b>		<b>216.2096</b>

**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	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9202</b>	<b>8.7447</b>	<b>7.2240</b>	<b>0.0113</b>		<b>0.5109</b>	<b>0.5109</b>		<b>0.4735</b>	<b>0.4735</b>		<b>1,070.1372</b>	<b>1,070.1372</b>	<b>0.3017</b>		<b>1,077.6798</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.1101	0.0831	0.8951	2.1400e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		212.5037	212.5037	8.0000e-003		212.7036
<b>Total</b>	<b>0.1101</b>	<b>0.0831</b>	<b>0.8951</b>	<b>2.1400e-003</b>	<b>0.2012</b>	<b>1.7900e-003</b>	<b>0.2030</b>	<b>0.0534</b>	<b>1.6500e-003</b>	<b>0.0550</b>		<b>212.5037</b>	<b>212.5037</b>	<b>8.0000e-003</b>		<b>212.7036</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9202</b>	<b>8.7447</b>	<b>7.2240</b>	<b>0.0113</b>		<b>0.5109</b>	<b>0.5109</b>		<b>0.4735</b>	<b>0.4735</b>	<b>0.0000</b>	<b>1,070.1372</b>	<b>1,070.1372</b>	<b>0.3017</b>		<b>1,077.6798</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.1101	0.0831	0.8951	2.1400e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		212.5037	212.5037	8.0000e-003		212.7036
<b>Total</b>	<b>0.1101</b>	<b>0.0831</b>	<b>0.8951</b>	<b>2.1400e-003</b>	<b>0.2012</b>	<b>1.7900e-003</b>	<b>0.2030</b>	<b>0.0534</b>	<b>1.6500e-003</b>	<b>0.0550</b>		<b>212.5037</b>	<b>212.5037</b>	<b>8.0000e-003</b>		<b>212.7036</b>

**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	50.1683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>50.4669</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0122	9.2300e-003	0.0995	2.4000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		23.6115	23.6115	8.9000e-004		23.6337
<b>Total</b>	<b>0.0122</b>	<b>9.2300e-003</b>	<b>0.0995</b>	<b>2.4000e-004</b>	<b>0.0224</b>	<b>2.0000e-004</b>	<b>0.0226</b>	<b>5.9300e-003</b>	<b>1.8000e-004</b>	<b>6.1100e-003</b>		<b>23.6115</b>	<b>23.6115</b>	<b>8.9000e-004</b>		<b>23.6337</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.1683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>50.4669</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Avalon Bay - existing - Los Angeles-South Coast County, 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	0.0122	9.2300e-003	0.0995	2.4000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		23.6115	23.6115	8.9000e-004		23.6337
<b>Total</b>	<b>0.0122</b>	<b>9.2300e-003</b>	<b>0.0995</b>	<b>2.4000e-004</b>	<b>0.0224</b>	<b>2.0000e-004</b>	<b>0.0226</b>	<b>5.9300e-003</b>	<b>1.8000e-004</b>	<b>6.1100e-003</b>		<b>23.6115</b>	<b>23.6115</b>	<b>8.9000e-004</b>		<b>23.6337</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



Avalon Bay - existing - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6451	3.0035	8.4980	0.0238	1.8299	0.0296	1.8595	0.4898	0.0279	0.5177		2,412.4029	2,412.4029	0.1526		2,416.2183
Unmitigated	0.6451	3.0035	8.4980	0.0238	1.8299	0.0296	1.8595	0.4898	0.0279	0.5177		2,412.4029	2,412.4029	0.1526		2,416.2183

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	267.08	267.08	267.08	860,395	860,395
Total	267.08	267.08	267.08	860,395	860,395

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	0.547972	0.046127	0.199330	0.125604	0.017697	0.005953	0.018360	0.027618	0.002341	0.002583	0.004804	0.000667	0.000944

5.0 Energy Detail

Historical Energy Use: N

Avalon Bay - existing - Los Angeles-South Coast County, Winter

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
NaturalGas Unmitigated	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322

**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	771.738	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
<b>Total</b>		<b>8.3200e-003</b>	<b>0.0757</b>	<b>0.0636</b>	<b>4.5000e-004</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>90.7927</b>	<b>90.7927</b>	<b>1.7400e-003</b>	<b>1.6600e-003</b>	<b>91.3322</b>

Avalon Bay - existing - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.771738	8.3200e-003	0.0757	0.0636	4.5000e-004		5.7500e-003	5.7500e-003		5.7500e-003	5.7500e-003		90.7927	90.7927	1.7400e-003	1.6600e-003	91.3322
<b>Total</b>		<b>8.3200e-003</b>	<b>0.0757</b>	<b>0.0636</b>	<b>4.5000e-004</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>5.7500e-003</b>	<b>5.7500e-003</b>		<b>90.7927</b>	<b>90.7927</b>	<b>1.7400e-003</b>	<b>1.6600e-003</b>	<b>91.3322</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
Unmitigated	0.6048	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003

Avalon Bay - existing - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
<b>Total</b>	<b>0.6048</b>	<b>3.0000e-005</b>	<b>2.8000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>5.9200e-003</b>	<b>5.9200e-003</b>	<b>2.0000e-005</b>		<b>6.3300e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0687					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7000e-004	3.0000e-005	2.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.9200e-003	5.9200e-003	2.0000e-005		6.3300e-003
<b>Total</b>	<b>0.6048</b>	<b>3.0000e-005</b>	<b>2.8000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>5.9200e-003</b>	<b>5.9200e-003</b>	<b>2.0000e-005</b>		<b>6.3300e-003</b>

**7.0 Water Detail**

## Avalon Bay - existing - Los Angeles-South Coast County, 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
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**Avalong Bay - Proposed Project (Unmitigated)**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	288.00	Space	0.47	115,200.00	0
Apartments Mid Rise	154.00	Dwelling Unit	0.92	154,000.00	440
Regional Shopping Center	3.90	1000sqft	0.09	3,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

Project Characteristics -

Land Use - Residential lot acreage - site plans A2.1 ground floor total building area

Parking lot acreage - lot acreage from email from Johnny Chun g3/15/2018: The full footprint alone will be 20,393 s.f. including all those shaft, lobby, and stair.

Construction Phase - Demo, grading and building construction from construction schedule from 1-23-2018. Paving and architectural coating from CalEEMod default

Demolition - Demo building square footage = total square footage of 3 existing office buildings

Grading - cut and fill material amount obtained from Ryan Chapman email 3/13/2018

Architectural Coating -

Vehicle Trips - Trip rate obtained from TIA

Woodstoves - No wood burning fireplace - consistent with SCAQMD Rule 445

Construction Off-road Equipment Mitigation - Mitigation measures from SCAQMD CEQA Handbook

Mobile Land Use Mitigation - Density from project description

## Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	264.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	5.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.90	138.60
tblFireplaces	NumberWood	7.70	0.00
tblGrading	AcresOfGrading	9.75	1.50
tblGrading	MaterialImported	0.00	3,775.00
tblLandUse	LotAcreage	2.59	0.47
tblLandUse	LotAcreage	4.05	0.92
tblVehicleTrips	ST_TR	6.39	5.40
tblVehicleTrips	ST_TR	49.97	37.70
tblVehicleTrips	SU_TR	5.86	5.40
tblVehicleTrips	SU_TR	25.24	37.70
tblVehicleTrips	WD_TR	6.65	5.40
tblVehicleTrips	WD_TR	42.70	37.70
tblWoodstoves	NumberCatalytic	7.70	0.00
tblWoodstoves	NumberNoncatalytic	7.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	3-15-2019	6-14-2019	0.2822	0.2822
6	6-15-2019	9-14-2019	0.8321	0.8321
7	9-15-2019	12-14-2019	0.7832	0.7832
8	12-15-2019	3-14-2020	0.7329	0.7329
9	3-15-2020	6-14-2020	0.7252	0.7252
10	6-15-2020	9-14-2020	0.9070	0.9070
		Highest	0.9070	0.9070

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456
Energy	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	540.9336	540.9336	0.0199	5.7000e-003	543.1300
Mobile	0.3196	1.6427	4.3571	0.0150	1.1992	0.0128	1.2120	0.3215	0.0120	0.3334	0.0000	1,380.0334	1,380.0334	0.0741	0.0000	1,381.8861
Waste						0.0000	0.0000		0.0000	0.0000	15.2101	0.0000	15.2101	0.8989	0.0000	37.6824
Water						0.0000	0.0000		0.0000	0.0000	3.2749	65.8448	69.1197	0.3391	8.5000e-003	80.1311
<b>Total</b>	<b>1.0123</b>	<b>1.7852</b>	<b>6.0054</b>	<b>0.0158</b>	<b>1.1992</b>	<b>0.0316</b>	<b>1.2309</b>	<b>0.3215</b>	<b>0.0308</b>	<b>0.3522</b>	<b>18.4850</b>	<b>2,022.6962</b>	<b>2,041.1812</b>	<b>1.3351</b>	<b>0.0148</b>	<b>2,078.9751</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456
Energy	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	540.9336	540.9336	0.0199	5.7000e-003	543.1300
Mobile	0.2757	1.3415	3.2806	0.0107	0.8395	9.2900e-003	0.8488	0.2250	8.6800e-003	0.2337	0.0000	988.8028	988.8028	0.0554	0.0000	990.1882
Waste						0.0000	0.0000		0.0000	0.0000	15.2101	0.0000	15.2101	0.8989	0.0000	37.6824
Water						0.0000	0.0000		0.0000	0.0000	3.2749	65.8448	69.1197	0.3391	8.5000e-003	80.1311
<b>Total</b>	<b>0.9684</b>	<b>1.4840</b>	<b>4.9289</b>	<b>0.0116</b>	<b>0.8395</b>	<b>0.0281</b>	<b>0.8676</b>	<b>0.2250</b>	<b>0.0275</b>	<b>0.2525</b>	<b>18.4850</b>	<b>1,631.4656</b>	<b>1,649.9506</b>	<b>1.3164</b>	<b>0.0148</b>	<b>1,687.2772</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>4.34</b>	<b>16.87</b>	<b>17.93</b>	<b>26.78</b>	<b>30.00</b>	<b>11.10</b>	<b>29.51</b>	<b>30.00</b>	<b>10.66</b>	<b>28.31</b>	<b>0.00</b>	<b>19.34</b>	<b>19.17</b>	<b>1.40</b>	<b>0.00</b>	<b>18.84</b>

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/16/2019	6/27/2019	5	31	
2	Grading	Grading	6/28/2019	8/2/2019	5	26	
3	Building Construction	Building Construction	7/29/2019	7/30/2020	5	264	
4	Paving	Paving	7/31/2020	8/6/2020	5	5	
5	Architectural Coating	Architectural Coating	8/7/2020	8/13/2020	5	5	

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

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0.47**

**Residential Indoor: 311,850; Residential Outdoor: 103,950; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 6,912 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	123.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	472.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	161.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0133	0.0000	0.0133	2.0200e-003	0.0000	2.0200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0356	0.3515	0.2309	3.7000e-004		0.0199	0.0199		0.0186	0.0186	0.0000	33.1949	33.1949	8.4500e-003	0.0000	33.4063
<b>Total</b>	<b>0.0356</b>	<b>0.3515</b>	<b>0.2309</b>	<b>3.7000e-004</b>	<b>0.0133</b>	<b>0.0199</b>	<b>0.0333</b>	<b>2.0200e-003</b>	<b>0.0186</b>	<b>0.0207</b>	<b>0.0000</b>	<b>33.1949</b>	<b>33.1949</b>	<b>8.4500e-003</b>	<b>0.0000</b>	<b>33.4063</b>

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**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-004	0.0195	4.1300e-003	5.0000e-005	1.0600e-003	7.0000e-005	1.1300e-003	2.9000e-004	7.0000e-005	3.6000e-004	0.0000	4.7889	4.7889	3.4000e-004	0.0000	4.7974
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	8.4000e-004	9.1500e-003	2.0000e-005	2.2100e-003	2.0000e-005	2.2300e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	2.1225	2.1225	7.0000e-005	0.0000	2.1243
<b>Total</b>	<b>1.5900e-003</b>	<b>0.0203</b>	<b>0.0133</b>	<b>7.0000e-005</b>	<b>3.2700e-003</b>	<b>9.0000e-005</b>	<b>3.3600e-003</b>	<b>8.8000e-004</b>	<b>9.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>6.9114</b>	<b>6.9114</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>6.9217</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9900e-003	0.0000	5.9900e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0356	0.3515	0.2309	3.7000e-004		0.0199	0.0199		0.0186	0.0186	0.0000	33.1949	33.1949	8.4500e-003	0.0000	33.4062
<b>Total</b>	<b>0.0356</b>	<b>0.3515</b>	<b>0.2309</b>	<b>3.7000e-004</b>	<b>5.9900e-003</b>	<b>0.0199</b>	<b>0.0259</b>	<b>9.1000e-004</b>	<b>0.0186</b>	<b>0.0195</b>	<b>0.0000</b>	<b>33.1949</b>	<b>33.1949</b>	<b>8.4500e-003</b>	<b>0.0000</b>	<b>33.4062</b>

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**3.2 Demolition - 2019**

**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	5.8000e-004	0.0195	4.1300e-003	5.0000e-005	8.6000e-004	7.0000e-005	9.3000e-004	2.4000e-004	7.0000e-005	3.1000e-004	0.0000	4.7889	4.7889	3.4000e-004	0.0000	4.7974
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	8.4000e-004	9.1500e-003	2.0000e-005	1.7300e-003	2.0000e-005	1.7500e-003	4.7000e-004	2.0000e-005	4.9000e-004	0.0000	2.1225	2.1225	7.0000e-005	0.0000	2.1243
<b>Total</b>	<b>1.5900e-003</b>	<b>0.0203</b>	<b>0.0133</b>	<b>7.0000e-005</b>	<b>2.5900e-003</b>	<b>9.0000e-005</b>	<b>2.6800e-003</b>	<b>7.1000e-004</b>	<b>9.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>6.9114</b>	<b>6.9114</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>6.9217</b>

**3.3 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0597	0.0000	0.0597	0.0324	0.0000	0.0324	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0185	0.2085	0.0859	1.8000e-004		9.5700e-003	9.5700e-003		8.8100e-003	8.8100e-003	0.0000	16.4682	16.4682	5.2100e-003	0.0000	16.5985
<b>Total</b>	<b>0.0185</b>	<b>0.2085</b>	<b>0.0859</b>	<b>1.8000e-004</b>	<b>0.0597</b>	<b>9.5700e-003</b>	<b>0.0693</b>	<b>0.0324</b>	<b>8.8100e-003</b>	<b>0.0412</b>	<b>0.0000</b>	<b>16.4682</b>	<b>16.4682</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.5985</b>



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**3.3 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2400e-003	0.0747	0.0159	1.9000e-004	4.0600e-003	2.7000e-004	4.3200e-003	1.1100e-003	2.6000e-004	1.3700e-003	0.0000	18.3770	18.3770	1.3000e-003	0.0000	18.4094
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.1400e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0955	1.0955	4.0000e-005	0.0000	1.0964
<b>Total</b>	<b>2.7600e-003</b>	<b>0.0751</b>	<b>0.0206</b>	<b>2.0000e-004</b>	<b>5.2000e-003</b>	<b>2.8000e-004</b>	<b>5.4700e-003</b>	<b>1.4100e-003</b>	<b>2.7000e-004</b>	<b>1.6800e-003</b>	<b>0.0000</b>	<b>19.4725</b>	<b>19.4725</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>19.5058</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0269	0.0000	0.0269	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0185	0.2085	0.0859	1.8000e-004		9.5700e-003	9.5700e-003		8.8100e-003	8.8100e-003	0.0000	16.4682	16.4682	5.2100e-003	0.0000	16.5984
<b>Total</b>	<b>0.0185</b>	<b>0.2085</b>	<b>0.0859</b>	<b>1.8000e-004</b>	<b>0.0269</b>	<b>9.5700e-003</b>	<b>0.0365</b>	<b>0.0146</b>	<b>8.8100e-003</b>	<b>0.0234</b>	<b>0.0000</b>	<b>16.4682</b>	<b>16.4682</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.5984</b>

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**3.3 Grading - 2019**

**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	2.2400e-003	0.0747	0.0159	1.9000e-004	3.2900e-003	2.7000e-004	3.5600e-003	9.3000e-004	2.6000e-004	1.1800e-003	0.0000	18.3770	18.3770	1.3000e-003	0.0000	18.4094
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.3000e-004	4.7200e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	1.0955	1.0955	4.0000e-005	0.0000	1.0964
<b>Total</b>	<b>2.7600e-003</b>	<b>0.0751</b>	<b>0.0206</b>	<b>2.0000e-004</b>	<b>4.1800e-003</b>	<b>2.8000e-004</b>	<b>4.4600e-003</b>	<b>1.1700e-003</b>	<b>2.7000e-004</b>	<b>1.4300e-003</b>	<b>0.0000</b>	<b>19.4725</b>	<b>19.4725</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>19.5058</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1272	0.8949	0.7553	1.2300e-003		0.0513	0.0513		0.0495	0.0495	0.0000	102.5203	102.5203	0.0197	0.0000	103.0130
<b>Total</b>	<b>0.1272</b>	<b>0.8949</b>	<b>0.7553</b>	<b>1.2300e-003</b>		<b>0.0513</b>	<b>0.0513</b>		<b>0.0495</b>	<b>0.0495</b>	<b>0.0000</b>	<b>102.5203</b>	<b>102.5203</b>	<b>0.0197</b>	<b>0.0000</b>	<b>103.0130</b>

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**3.4 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.5300e-003	0.2381	0.0651	5.2000e-004	0.0127	1.5000e-003	0.0142	3.6600e-003	1.4300e-003	5.1000e-003	0.0000	50.4130	50.4130	3.3700e-003	0.0000	50.4971
Worker	0.0452	0.0376	0.4093	1.0500e-003	0.0988	8.7000e-004	0.0997	0.0262	8.0000e-004	0.0270	0.0000	94.9707	94.9707	3.2700e-003	0.0000	95.0523
<b>Total</b>	<b>0.0537</b>	<b>0.2758</b>	<b>0.4745</b>	<b>1.5700e-003</b>	<b>0.1115</b>	<b>2.3700e-003</b>	<b>0.1139</b>	<b>0.0299</b>	<b>2.2300e-003</b>	<b>0.0321</b>	<b>0.0000</b>	<b>145.3837</b>	<b>145.3837</b>	<b>6.6400e-003</b>	<b>0.0000</b>	<b>145.5495</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1272	0.8949	0.7553	1.2300e-003		0.0513	0.0513		0.0495	0.0495	0.0000	102.5202	102.5202	0.0197	0.0000	103.0129
<b>Total</b>	<b>0.1272</b>	<b>0.8949</b>	<b>0.7553</b>	<b>1.2300e-003</b>		<b>0.0513</b>	<b>0.0513</b>		<b>0.0495</b>	<b>0.0495</b>	<b>0.0000</b>	<b>102.5202</b>	<b>102.5202</b>	<b>0.0197</b>	<b>0.0000</b>	<b>103.0129</b>

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**3.4 Building Construction - 2019**

**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	8.5300e-003	0.2381	0.0651	5.2000e-004	0.0105	1.5000e-003	0.0120	3.1100e-003	1.4300e-003	4.5500e-003	0.0000	50.4130	50.4130	3.3700e-003	0.0000	50.4971
Worker	0.0452	0.0376	0.4093	1.0500e-003	0.0774	8.7000e-004	0.0783	0.0210	8.0000e-004	0.0218	0.0000	94.9707	94.9707	3.2700e-003	0.0000	95.0523
<b>Total</b>	<b>0.0537</b>	<b>0.2758</b>	<b>0.4745</b>	<b>1.5700e-003</b>	<b>0.0878</b>	<b>2.3700e-003</b>	<b>0.0902</b>	<b>0.0241</b>	<b>2.2300e-003</b>	<b>0.0263</b>	<b>0.0000</b>	<b>145.3837</b>	<b>145.3837</b>	<b>6.6400e-003</b>	<b>0.0000</b>	<b>145.5495</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1543	1.1239	1.0023	1.6800e-003		0.0605	0.0605		0.0584	0.0584	0.0000	137.9720	137.9720	0.0256	0.0000	138.6123
<b>Total</b>	<b>0.1543</b>	<b>1.1239</b>	<b>1.0023</b>	<b>1.6800e-003</b>		<b>0.0605</b>	<b>0.0605</b>		<b>0.0584</b>	<b>0.0584</b>	<b>0.0000</b>	<b>137.9720</b>	<b>137.9720</b>	<b>0.0256</b>	<b>0.0000</b>	<b>138.6123</b>

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**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9200e-003	0.2965	0.0803	7.0000e-004	0.0172	1.3800e-003	0.0186	4.9700e-003	1.3200e-003	6.2900e-003	0.0000	67.9694	67.9694	4.3200e-003	0.0000	68.0774
Worker	0.0565	0.0456	0.5037	1.3800e-003	0.1341	1.1400e-003	0.1352	0.0356	1.0500e-003	0.0367	0.0000	124.9725	124.9725	3.9400e-003	0.0000	125.0709
<b>Total</b>	<b>0.0664</b>	<b>0.3420</b>	<b>0.5839</b>	<b>2.0800e-003</b>	<b>0.1513</b>	<b>2.5200e-003</b>	<b>0.1538</b>	<b>0.0406</b>	<b>2.3700e-003</b>	<b>0.0430</b>	<b>0.0000</b>	<b>192.9419</b>	<b>192.9419</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>193.1483</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1543	1.1239	1.0023	1.6800e-003		0.0605	0.0605		0.0584	0.0584	0.0000	137.9719	137.9719	0.0256	0.0000	138.6122
<b>Total</b>	<b>0.1543</b>	<b>1.1239</b>	<b>1.0023</b>	<b>1.6800e-003</b>		<b>0.0605</b>	<b>0.0605</b>		<b>0.0584</b>	<b>0.0584</b>	<b>0.0000</b>	<b>137.9719</b>	<b>137.9719</b>	<b>0.0256</b>	<b>0.0000</b>	<b>138.6122</b>

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**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9200e-003	0.2965	0.0803	7.0000e-004	0.0142	1.3800e-003	0.0156	4.2300e-003	1.3200e-003	5.5400e-003	0.0000	67.9694	67.9694	4.3200e-003	0.0000	68.0774
Worker	0.0565	0.0456	0.5037	1.3800e-003	0.1050	1.1400e-003	0.1062	0.0285	1.0500e-003	0.0295	0.0000	124.9725	124.9725	3.9400e-003	0.0000	125.0709
<b>Total</b>	<b>0.0664</b>	<b>0.3420</b>	<b>0.5839</b>	<b>2.0800e-003</b>	<b>0.1192</b>	<b>2.5200e-003</b>	<b>0.1217</b>	<b>0.0327</b>	<b>2.3700e-003</b>	<b>0.0351</b>	<b>0.0000</b>	<b>192.9419</b>	<b>192.9419</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>193.1483</b>

**3.5 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0211</b>	<b>0.0222</b>	<b>3.0000e-005</b>		<b>1.1700e-003</b>	<b>1.1700e-003</b>		<b>1.0800e-003</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>2.9414</b>	<b>2.9414</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>2.9647</b>

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**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.3400e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3319	0.3319	1.0000e-005	0.0000	0.3322
<b>Total</b>	<b>1.5000e-004</b>	<b>1.2000e-004</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3319</b>	<b>0.3319</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3322</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0211</b>	<b>0.0222</b>	<b>3.0000e-005</b>		<b>1.1700e-003</b>	<b>1.1700e-003</b>		<b>1.0800e-003</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>2.9414</b>	<b>2.9414</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>2.9647</b>

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**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.3400e-003	0.0000	2.8000e-004	0.0000	2.8000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3319	0.3319	1.0000e-005	0.0000	0.3322
<b>Total</b>	<b>1.5000e-004</b>	<b>1.2000e-004</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.3319</b>	<b>0.3319</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3322</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
<b>Total</b>	<b>0.5165</b>	<b>4.2100e-003</b>	<b>4.5800e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.6396</b>



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**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	3.0000e-004	3.2900e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8171	0.8171	3.0000e-005	0.0000	0.8177
<b>Total</b>	<b>3.7000e-004</b>	<b>3.0000e-004</b>	<b>3.2900e-003</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>2.3000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.8171</b>	<b>0.8171</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8177</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
<b>Total</b>	<b>0.5165</b>	<b>4.2100e-003</b>	<b>4.5800e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.6396</b>

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**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	3.0000e-004	3.2900e-003	1.0000e-005	6.9000e-004	1.0000e-005	6.9000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.8171	0.8171	3.0000e-005	0.0000	0.8177
<b>Total</b>	<b>3.7000e-004</b>	<b>3.0000e-004</b>	<b>3.2900e-003</b>	<b>1.0000e-005</b>	<b>6.9000e-004</b>	<b>1.0000e-005</b>	<b>6.9000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.8171</b>	<b>0.8171</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8177</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Increase Density

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2757	1.3415	3.2806	0.0107	0.8395	9.2900e-003	0.8488	0.2250	8.6800e-003	0.2337	0.0000	988.8028	988.8028	0.0554	0.0000	990.1882
Unmitigated	0.3196	1.6427	4.3571	0.0150	1.1992	0.0128	1.2120	0.3215	0.0120	0.3334	0.0000	1,380.0334	1,380.0334	0.0741	0.0000	1,381.8861

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	831.60	831.60	831.60	2,841,704	1,989,192
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	147.03	147.03	147.03	318,003	222,602
Total	978.63	978.63	978.63	3,159,706	2,211,795

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

**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	430.5022	430.5022	0.0178	3.6800e-003	432.0423
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.5022	430.5022	0.0178	3.6800e-003	432.0423
NaturalGas Mitigated	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	110.4314	110.4314	2.1200e-003	2.0200e-003	111.0876
NaturalGas Unmitigated	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	110.4314	110.4314	2.1200e-003	2.0200e-003	111.0876

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.06301e+006	0.0111	0.0951	0.0405	6.1000e-004		7.6900e-003	7.6900e-003		7.6900e-003	7.6900e-003	0.0000	110.0901	110.0901	2.1100e-003	2.0200e-003	110.7443
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	6396	3.0000e-005	3.1000e-004	2.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3413	0.3413	1.0000e-005	1.0000e-005	0.3433
<b>Total</b>		<b>0.0112</b>	<b>0.0954</b>	<b>0.0407</b>	<b>6.1000e-004</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>	<b>0.0000</b>	<b>110.4314</b>	<b>110.4314</b>	<b>2.1200e-003</b>	<b>2.0300e-003</b>	<b>111.0876</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.06301e+006	0.0111	0.0951	0.0405	6.1000e-004		7.6900e-003	7.6900e-003		7.6900e-003	7.6900e-003	0.0000	110.0901	110.0901	2.1100e-003	2.0200e-003	110.7443
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	6396	3.0000e-005	3.1000e-004	2.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3413	0.3413	1.0000e-005	1.0000e-005	0.3433
<b>Total</b>		<b>0.0112</b>	<b>0.0954</b>	<b>0.0407</b>	<b>6.1000e-004</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>	<b>0.0000</b>	<b>110.4314</b>	<b>110.4314</b>	<b>2.1200e-003</b>	<b>2.0300e-003</b>	<b>111.0876</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	623418	198.6344	8.2000e-003	1.7000e-003	199.3450
Enclosed Parking with Elevator	675072	215.0924	8.8800e-003	1.8400e-003	215.8619
Regional Shopping Center	52650	16.7754	6.9000e-004	1.4000e-004	16.8354
<b>Total</b>		<b>430.5022</b>	<b>0.0178</b>	<b>3.6800e-003</b>	<b>432.0423</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	623418	198.6344	8.2000e-003	1.7000e-003	199.3450
Enclosed Parking with Elevator	675072	215.0924	8.8800e-003	1.8400e-003	215.8619
Regional Shopping Center	52650	16.7754	6.9000e-004	1.4000e-004	16.8354
<b>Total</b>		<b>430.5022</b>	<b>0.0178</b>	<b>3.6800e-003</b>	<b>432.0423</b>

**6.0 Area Detail**

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**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	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456
Unmitigated	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3600e-003	0.0287	0.0122	1.8000e-004		2.3200e-003	2.3200e-003		2.3200e-003	2.3200e-003	0.0000	33.2830	33.2830	6.4000e-004	6.1000e-004	33.4808
Landscaping	0.0486	0.0184	1.5953	8.0000e-005		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	2.6015	2.6015	2.5300e-003	0.0000	2.6648
<b>Total</b>	<b>0.6815</b>	<b>0.0472</b>	<b>1.6076</b>	<b>2.6000e-004</b>		<b>0.0111</b>	<b>0.0111</b>		<b>0.0111</b>	<b>0.0111</b>	<b>0.0000</b>	<b>35.8845</b>	<b>35.8845</b>	<b>3.1700e-003</b>	<b>6.1000e-004</b>	<b>36.1456</b>



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3600e-003	0.0287	0.0122	1.8000e-004		2.3200e-003	2.3200e-003		2.3200e-003	2.3200e-003	0.0000	33.2830	33.2830	6.4000e-004	6.1000e-004	33.4808
Landscaping	0.0486	0.0184	1.5953	8.0000e-005		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	2.6015	2.6015	2.5300e-003	0.0000	2.6648
<b>Total</b>	<b>0.6815</b>	<b>0.0472</b>	<b>1.6076</b>	<b>2.6000e-004</b>		<b>0.0111</b>	<b>0.0111</b>		<b>0.0111</b>	<b>0.0111</b>	<b>0.0000</b>	<b>35.8845</b>	<b>35.8845</b>	<b>3.1700e-003</b>	<b>6.1000e-004</b>	<b>36.1456</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	69.1197	0.3391	8.5000e-003	80.1311
Unmitigated	69.1197	0.3391	8.5000e-003	80.1311

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.0337 / 6.32561	67.2027	0.3296	8.2700e-003	77.9061
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.288883 / 0.177057	1.9169	9.4900e-003	2.4000e-004	2.2250
<b>Total</b>		<b>69.1197</b>	<b>0.3391</b>	<b>8.5100e-003</b>	<b>80.1311</b>

## Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.0337 / 6.32561	67.2027	0.3296	8.2700e-003	77.9061
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.288883 / 0.177057	1.9169	9.4900e-003	2.4000e-004	2.2250
<b>Total</b>		<b>69.1197</b>	<b>0.3391</b>	<b>8.5100e-003</b>	<b>80.1311</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.2101	0.8989	0.0000	37.6824
Unmitigated	15.2101	0.8989	0.0000	37.6824

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	70.84	14.3799	0.8498	0.0000	35.6255
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.09	0.8302	0.0491	0.0000	2.0569
<b>Total</b>		<b>15.2101</b>	<b>0.8989</b>	<b>0.0000</b>	<b>37.6824</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	70.84	14.3799	0.8498	0.0000	35.6255
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.09	0.8302	0.0491	0.0000	2.0569
<b>Total</b>		<b>15.2101</b>	<b>0.8989</b>	<b>0.0000</b>	<b>37.6824</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Annual

## **11.0 Vegetation**

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Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**Avalong Bay - Proposed Project (Unmitigated)**  
**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	288.00	Space	0.47	115,200.00	0
Apartments Mid Rise	154.00	Dwelling Unit	0.92	154,000.00	440
Regional Shopping Center	3.90	1000sqft	0.09	3,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

Project Characteristics -

Land Use - Residential lot acreage - site plans A2.1 ground floor total building area

Parking lot acreage - lot acreage from email from Johnny Chun g3/15/2018: The full footprint alone will be 20,393 s.f. including all those shaft, lobby, and stair.

Construction Phase - Demo, grading and building construction from construction schedule from 1-23-2018. Paving and architectural coating from CalEEMod default

Demolition - Demo building square footage = total square footage of 3 existing office buildings

Grading - cut and fill material amount obtained from Ryan Chapman email 3/13/2018

Architectural Coating -

Vehicle Trips - Trip rate obtained from TIA

Woodstoves - No wood burning fireplace - consistent with SCAQMD Rule 445

Construction Off-road Equipment Mitigation - Mitigation measures from SCAQMD CEQA Handbook

Mobile Land Use Mitigation - Density from project description



## Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	264.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	5.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.90	138.60
tblFireplaces	NumberWood	7.70	0.00
tblGrading	AcresOfGrading	9.75	1.50
tblGrading	MaterialImported	0.00	3,775.00
tblLandUse	LotAcreage	2.59	0.47
tblLandUse	LotAcreage	4.05	0.92
tblVehicleTrips	ST_TR	6.39	5.40
tblVehicleTrips	ST_TR	49.97	37.70
tblVehicleTrips	SU_TR	5.86	5.40
tblVehicleTrips	SU_TR	25.24	37.70
tblVehicleTrips	WD_TR	6.65	5.40
tblVehicleTrips	WD_TR	42.70	37.70
tblWoodstoves	NumberCatalytic	7.70	0.00
tblWoodstoves	NumberNoncatalytic	7.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.8507	8.6414	24.8267	0.0852	6.7189	0.0703	6.7892	1.7982	0.0656	1.8638		8,662.2289	8,662.2289	0.4521		8,673.5312
<b>Total</b>	<b>6.0194</b>	<b>11.6104</b>	<b>38.7909</b>	<b>0.1039</b>	<b>6.7189</b>	<b>0.3687</b>	<b>7.0876</b>	<b>1.7982</b>	<b>0.3640</b>	<b>2.1622</b>	<b>0.0000</b>	<b>12,287.2411</b>	<b>12,287.2411</b>	<b>0.5435</b>	<b>0.0660</b>	<b>12,320.5072</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.6053	7.1102	18.4771	0.0610	4.7032	0.0510	4.7542	1.2587	0.0476	1.3063		6,207.2369	6,207.2369	0.3365		6,215.6488
<b>Total</b>	<b>5.7740</b>	<b>10.0791</b>	<b>32.4413</b>	<b>0.0797</b>	<b>4.7032</b>	<b>0.3494</b>	<b>5.0526</b>	<b>1.2587</b>	<b>0.3460</b>	<b>1.6047</b>	<b>0.0000</b>	<b>9,832.2491</b>	<b>9,832.2491</b>	<b>0.4279</b>	<b>0.0660</b>	<b>9,862.6249</b>

## Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.08	13.19	16.37	23.27	30.00	5.24	28.71	30.00	4.96	25.78	0.00	19.98	19.98	21.27	0.00	19.95

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/16/2019	6/27/2019	5	31	
2	Grading	Grading	6/28/2019	8/2/2019	5	26	
3	Building Construction	Building Construction	7/29/2019	7/30/2020	5	264	
4	Paving	Paving	7/31/2020	8/6/2020	5	5	
5	Architectural Coating	Architectural Coating	8/7/2020	8/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.47

Residential Indoor: 311,850; Residential Outdoor: 103,950; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 6,912 (Architectural Coating – sqft)

#### OffRoad Equipment

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	123.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	472.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	161.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8592	0.0000	0.8592	0.1301	0.0000	0.1301			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.8592</b>	<b>1.2863</b>	<b>2.1455</b>	<b>0.1301</b>	<b>1.2017</b>	<b>1.3318</b>		<b>2,360.7198</b>	<b>2,360.7198</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**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	0.0373	1.2153	0.2591	3.1700e-003	0.0694	4.4600e-003	0.0738	0.0190	4.2700e-003	0.0233		343.0160	343.0160	0.0236		343.6065
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	0.0649	0.0477	0.6268	1.5800e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		157.6839	157.6839	5.4200e-003		157.8193
<b>Total</b>	<b>0.1022</b>	<b>1.2630</b>	<b>0.8859</b>	<b>4.7500e-003</b>	<b>0.2147</b>	<b>5.7100e-003</b>	<b>0.2204</b>	<b>0.0576</b>	<b>5.4200e-003</b>	<b>0.0630</b>		<b>500.6998</b>	<b>500.6998</b>	<b>0.0290</b>		<b>501.4258</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3867	0.0000	0.3867	0.0585	0.0000	0.0585			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.3867</b>	<b>1.2863</b>	<b>1.6729</b>	<b>0.0585</b>	<b>1.2017</b>	<b>1.2603</b>	<b>0.0000</b>	<b>2,360.7197</b>	<b>2,360.7197</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**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	0.0373	1.2153	0.2591	3.1700e-003	0.0563	4.4600e-003	0.0607	0.0158	4.2700e-003	0.0201		343.0160	343.0160	0.0236		343.6065
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	0.0649	0.0477	0.6268	1.5800e-003	0.1137	1.2500e-003	0.1150	0.0308	1.1500e-003	0.0319		157.6839	157.6839	5.4200e-003		157.8193
<b>Total</b>	<b>0.1022</b>	<b>1.2630</b>	<b>0.8859</b>	<b>4.7500e-003</b>	<b>0.1700</b>	<b>5.7100e-003</b>	<b>0.1757</b>	<b>0.0466</b>	<b>5.4200e-003</b>	<b>0.0520</b>		<b>500.6998</b>	<b>500.6998</b>	<b>0.0290</b>		<b>501.4258</b>

**3.3 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5942	0.0000	4.5942	2.4918	0.0000	2.4918			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>4.5942</b>	<b>0.7365</b>	<b>5.3306</b>	<b>2.4918</b>	<b>0.6775</b>	<b>3.1693</b>		<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.3 Grading - 2019**

**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	0.1706	5.5602	1.1855	0.0145	0.3174	0.0204	0.3378	0.0870	0.0195	0.1065		1,569.4213	1,569.4213	0.1081		1,572.1234
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	0.0400	0.0294	0.3857	9.7000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		97.0362	97.0362	3.3300e-003		97.1196
<b>Total</b>	<b>0.2106</b>	<b>5.5896</b>	<b>1.5712</b>	<b>0.0155</b>	<b>0.4068</b>	<b>0.0212</b>	<b>0.4280</b>	<b>0.1107</b>	<b>0.0202</b>	<b>0.1310</b>		<b>1,666.4576</b>	<b>1,666.4576</b>	<b>0.1114</b>		<b>1,669.2430</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0674	0.0000	2.0674	1.1213	0.0000	1.1213			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>2.0674</b>	<b>0.7365</b>	<b>2.8038</b>	<b>1.1213</b>	<b>0.6775</b>	<b>1.7988</b>	<b>0.0000</b>	<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.3 Grading - 2019**

**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	0.1706	5.5602	1.1855	0.0145	0.2574	0.0204	0.2778	0.0723	0.0195	0.0918		1,569.4213	1,569.4213	0.1081		1,572.1234
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	0.0400	0.0294	0.3857	9.7000e-004	0.0700	7.7000e-004	0.0708	0.0189	7.1000e-004	0.0197		97.0362	97.0362	3.3300e-003		97.1196
<b>Total</b>	<b>0.2106</b>	<b>5.5896</b>	<b>1.5712</b>	<b>0.0155</b>	<b>0.3274</b>	<b>0.0212</b>	<b>0.3486</b>	<b>0.0912</b>	<b>0.0202</b>	<b>0.1115</b>		<b>1,666.4576</b>	<b>1,666.4576</b>	<b>0.1114</b>		<b>1,669.2430</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2019**

**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	0.1496	4.1663	1.1055	9.4100e-003	0.2305	0.0266	0.2570	0.0664	0.0254	0.0918		1,003.7326	1,003.7326	0.0643		1,005.3407
Worker	0.8043	0.5911	7.7628	0.0196	1.7996	0.0155	1.8151	0.4773	0.0143	0.4916		1,952.8541	1,952.8541	0.0671		1,954.5311
<b>Total</b>	<b>0.9539</b>	<b>4.7574</b>	<b>8.8683</b>	<b>0.0290</b>	<b>2.0301</b>	<b>0.0421</b>	<b>2.0722</b>	<b>0.5436</b>	<b>0.0397</b>	<b>0.5833</b>		<b>2,956.5868</b>	<b>2,956.5868</b>	<b>0.1314</b>		<b>2,959.8718</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2019**

**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	0.1496	4.1663	1.1055	9.4100e-003	0.1894	0.0266	0.2160	0.0563	0.0254	0.0817		1,003.7326	1,003.7326	0.0643		1,005.3407
Worker	0.8043	0.5911	7.7628	0.0196	1.4085	0.0155	1.4240	0.3813	0.0143	0.3956		1,952.8541	1,952.8541	0.0671		1,954.5311
<b>Total</b>	<b>0.9539</b>	<b>4.7574</b>	<b>8.8683</b>	<b>0.0290</b>	<b>1.5979</b>	<b>0.0421</b>	<b>1.6400</b>	<b>0.4375</b>	<b>0.0397</b>	<b>0.4773</b>		<b>2,956.5868</b>	<b>2,956.5868</b>	<b>0.1314</b>		<b>2,959.8718</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1280	3.8294	1.0033	9.3400e-003	0.2305	0.0180	0.2485	0.0664	0.0172	0.0836		997.2889	997.2889	0.0609		998.8104
Worker	0.7409	0.5271	7.0493	0.0190	1.7996	0.0150	1.8146	0.4773	0.0139	0.4911		1,893.5417	1,893.5417	0.0597		1,895.0342
<b>Total</b>	<b>0.8690</b>	<b>4.3565</b>	<b>8.0526</b>	<b>0.0284</b>	<b>2.0301</b>	<b>0.0331</b>	<b>2.0631</b>	<b>0.5436</b>	<b>0.0311</b>	<b>0.5747</b>		<b>2,890.8306</b>	<b>2,890.8306</b>	<b>0.1206</b>		<b>2,893.8446</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1280	3.8294	1.0033	9.3400e-003	0.1894	0.0180	0.2074	0.0563	0.0172	0.0735		997.2889	997.2889	0.0609		998.8104
Worker	0.7409	0.5271	7.0493	0.0190	1.4085	0.0150	1.4235	0.3813	0.0139	0.3951		1,893.5417	1,893.5417	0.0597		1,895.0342
<b>Total</b>	<b>0.8690</b>	<b>4.3565</b>	<b>8.0526</b>	<b>0.0284</b>	<b>1.5979</b>	<b>0.0331</b>	<b>1.6310</b>	<b>0.4375</b>	<b>0.0311</b>	<b>0.4686</b>		<b>2,890.8306</b>	<b>2,890.8306</b>	<b>0.1206</b>		<b>2,893.8446</b>

**3.5 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>		<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0426	0.5692	1.5400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		152.8947	152.8947	4.8200e-003		153.0152
<b>Total</b>	<b>0.0598</b>	<b>0.0426</b>	<b>0.5692</b>	<b>1.5400e-003</b>	<b>0.1453</b>	<b>1.2100e-003</b>	<b>0.1465</b>	<b>0.0385</b>	<b>1.1200e-003</b>	<b>0.0397</b>		<b>152.8947</b>	<b>152.8947</b>	<b>4.8200e-003</b>		<b>153.0152</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>	<b>0.0000</b>	<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0426	0.5692	1.5400e-003	0.1137	1.2100e-003	0.1149	0.0308	1.1200e-003	0.0319		152.8947	152.8947	4.8200e-003		153.0152
<b>Total</b>	<b>0.0598</b>	<b>0.0426</b>	<b>0.5692</b>	<b>1.5400e-003</b>	<b>0.1137</b>	<b>1.2100e-003</b>	<b>0.1149</b>	<b>0.0308</b>	<b>1.1200e-003</b>	<b>0.0319</b>		<b>152.8947</b>	<b>152.8947</b>	<b>4.8200e-003</b>		<b>153.0152</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	206.3613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>206.6035</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1473	0.1048	1.4011	3.7800e-003	0.3577	2.9900e-003	0.3607	0.0949	2.7500e-003	0.0976		376.3561	376.3561	0.0119		376.6528
<b>Total</b>	<b>0.1473</b>	<b>0.1048</b>	<b>1.4011</b>	<b>3.7800e-003</b>	<b>0.3577</b>	<b>2.9900e-003</b>	<b>0.3607</b>	<b>0.0949</b>	<b>2.7500e-003</b>	<b>0.0976</b>		<b>376.3561</b>	<b>376.3561</b>	<b>0.0119</b>		<b>376.6528</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	206.3613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>206.6035</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1473	0.1048	1.4011	3.7800e-003	0.2799	2.9900e-003	0.2829	0.0758	2.7500e-003	0.0785		376.3561	376.3561	0.0119		376.6528
<b>Total</b>	<b>0.1473</b>	<b>0.1048</b>	<b>1.4011</b>	<b>3.7800e-003</b>	<b>0.2799</b>	<b>2.9900e-003</b>	<b>0.2829</b>	<b>0.0758</b>	<b>2.7500e-003</b>	<b>0.0785</b>		<b>376.3561</b>	<b>376.3561</b>	<b>0.0119</b>		<b>376.6528</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Density

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6053	7.1102	18.4771	0.0610	4.7032	0.0510	4.7542	1.2587	0.0476	1.3063		6,207.2369	6,207.2369	0.3365		6,215.6488
Unmitigated	1.8507	8.6414	24.8267	0.0852	6.7189	0.0703	6.7892	1.7982	0.0656	1.8638		8,662.2289	8,662.2289	0.4521		8,673.5312

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	831.60	831.60	831.60	2,841,704	1,989,192
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	147.03	147.03	147.03	318,003	222,602
<b>Total</b>	<b>978.63</b>	<b>978.63</b>	<b>978.63</b>	<b>3,159,706</b>	<b>2,211,795</b>

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

**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	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
NaturalGas Unmitigated	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5652.08	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.5233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.65208	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.0175233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**6.0 Area Detail**

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**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	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Unmitigated	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Summer

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**Avalong Bay - Proposed Project (Unmitigated)**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	288.00	Space	0.47	115,200.00	0
Apartments Mid Rise	154.00	Dwelling Unit	0.92	154,000.00	440
Regional Shopping Center	3.90	1000sqft	0.09	3,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

Project Characteristics -

Land Use - Residential lot acreage - site plans A2.1 ground floor total building area

Parking lot acreage - lot acreage from email from Johnny Chun g3/15/2018: The full footprint alone will be 20,393 s.f. including all those shaft, lobby, and stair.

Construction Phase - Demo, grading and building construction from construction schedule from 1-23-2018. Paving and architectural coating from CalEEMod default

Demolition - Demo building square footage = total square footage of 3 existing office buildings

Grading - cut and fill material amount obtained from Ryan Chapman email 3/13/2018

Architectural Coating -

Vehicle Trips - Trip rate obtained from TIA

Woodstoves - No wood burning fireplace - consistent with SCAQMD Rule 445

Construction Off-road Equipment Mitigation - Mitigation measures from SCAQMD CEQA Handbook

Mobile Land Use Mitigation - Density from project description

## Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	264.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	5.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.90	138.60
tblFireplaces	NumberWood	7.70	0.00
tblGrading	AcresOfGrading	9.75	1.50
tblGrading	MaterialImported	0.00	3,775.00
tblLandUse	LotAcreage	2.59	0.47
tblLandUse	LotAcreage	4.05	0.92
tblVehicleTrips	ST_TR	6.39	5.40
tblVehicleTrips	ST_TR	49.97	37.70
tblVehicleTrips	SU_TR	5.86	5.40
tblVehicleTrips	SU_TR	25.24	37.70
tblVehicleTrips	WD_TR	6.65	5.40
tblVehicleTrips	WD_TR	42.70	37.70
tblWoodstoves	NumberCatalytic	7.70	0.00
tblWoodstoves	NumberNoncatalytic	7.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.7982	8.8598	23.6098	0.0810	6.7189	0.0707	6.7895	1.7982	0.0660	1.8641		8,241.8918	8,241.8918	0.4506		8,253.1560
<b>Total</b>	<b>5.9669</b>	<b>11.8287</b>	<b>37.5740</b>	<b>0.0997</b>	<b>6.7189</b>	<b>0.3691</b>	<b>7.0879</b>	<b>1.7982</b>	<b>0.3644</b>	<b>2.1625</b>	<b>0.0000</b>	<b>11,866.9040</b>	<b>11,866.9040</b>	<b>0.5419</b>	<b>0.0660</b>	<b>11,900.1321</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.5588	7.2383	17.8495	0.0580	4.7032	0.0514	4.7546	1.2587	0.0479	1.3066		5,899.7977	5,899.7977	0.3380		5,908.2485
<b>Total</b>	<b>5.7275</b>	<b>10.2073</b>	<b>31.8137</b>	<b>0.0767</b>	<b>4.7032</b>	<b>0.3498</b>	<b>5.0530</b>	<b>1.2587</b>	<b>0.3464</b>	<b>1.6051</b>	<b>0.0000</b>	<b>9,524.8099</b>	<b>9,524.8099</b>	<b>0.4294</b>	<b>0.0660</b>	<b>9,555.2245</b>

## Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.01	13.71	15.33	23.11	30.00	5.23	28.71	30.00	4.95	25.78	0.00	19.74	19.74	20.77	0.00	19.70

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/16/2019	6/27/2019	5	31	
2	Grading	Grading	6/28/2019	8/2/2019	5	26	
3	Building Construction	Building Construction	7/29/2019	7/30/2020	5	264	
4	Paving	Paving	7/31/2020	8/6/2020	5	5	
5	Architectural Coating	Architectural Coating	8/7/2020	8/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.47

Residential Indoor: 311,850; Residential Outdoor: 103,950; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 6,912 (Architectural Coating – sqft)

#### OffRoad Equipment

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	123.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	472.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	161.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8592	0.0000	0.8592	0.1301	0.0000	0.1301			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.8592</b>	<b>1.2863</b>	<b>2.1455</b>	<b>0.1301</b>	<b>1.2017</b>	<b>1.3318</b>		<b>2,360.7198</b>	<b>2,360.7198</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**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	0.0382	1.2315	0.2766	3.1200e-003	0.0694	4.5400e-003	0.0739	0.0190	4.3500e-003	0.0234		337.1984	337.1984	0.0245		337.8115
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	0.0720	0.0529	0.5752	1.4900e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		148.4770	148.4770	5.1100e-003		148.6047
<b>Total</b>	<b>0.1102</b>	<b>1.2843</b>	<b>0.8518</b>	<b>4.6100e-003</b>	<b>0.2147</b>	<b>5.7900e-003</b>	<b>0.2205</b>	<b>0.0576</b>	<b>5.5000e-003</b>	<b>0.0631</b>		<b>485.6754</b>	<b>485.6754</b>	<b>0.0296</b>		<b>486.4162</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3867	0.0000	0.3867	0.0585	0.0000	0.0585			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.3867</b>	<b>1.2863</b>	<b>1.6729</b>	<b>0.0585</b>	<b>1.2017</b>	<b>1.2603</b>	<b>0.0000</b>	<b>2,360.7197</b>	<b>2,360.7197</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**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	0.0382	1.2315	0.2766	3.1200e-003	0.0563	4.5400e-003	0.0608	0.0158	4.3500e-003	0.0201		337.1984	337.1984	0.0245		337.8115
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	0.0720	0.0529	0.5752	1.4900e-003	0.1137	1.2500e-003	0.1150	0.0308	1.1500e-003	0.0319		148.4770	148.4770	5.1100e-003		148.6047
<b>Total</b>	<b>0.1102</b>	<b>1.2843</b>	<b>0.8518</b>	<b>4.6100e-003</b>	<b>0.1700</b>	<b>5.7900e-003</b>	<b>0.1758</b>	<b>0.0466</b>	<b>5.5000e-003</b>	<b>0.0521</b>		<b>485.6754</b>	<b>485.6754</b>	<b>0.0296</b>		<b>486.4162</b>

**3.3 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5942	0.0000	4.5942	2.4918	0.0000	2.4918			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>4.5942</b>	<b>0.7365</b>	<b>5.3306</b>	<b>2.4918</b>	<b>0.6775</b>	<b>3.1693</b>		<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.3 Grading - 2019**

**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	0.1749	5.6344	1.2656	0.0143	0.3174	0.0208	0.3382	0.0870	0.0199	0.1069		1,542.8040	1,542.8040	0.1122		1,545.6091
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	0.0443	0.0325	0.3540	9.2000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		91.3705	91.3705	3.1400e-003		91.4491
<b>Total</b>	<b>0.2192</b>	<b>5.6669</b>	<b>1.6196</b>	<b>0.0152</b>	<b>0.4068</b>	<b>0.0216</b>	<b>0.4284</b>	<b>0.1107</b>	<b>0.0206</b>	<b>0.1313</b>		<b>1,634.1745</b>	<b>1,634.1745</b>	<b>0.1153</b>		<b>1,637.0582</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0674	0.0000	2.0674	1.1213	0.0000	1.1213			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>2.0674</b>	<b>0.7365</b>	<b>2.8038</b>	<b>1.1213</b>	<b>0.6775</b>	<b>1.7988</b>	<b>0.0000</b>	<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.3 Grading - 2019**

**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	0.1749	5.6344	1.2656	0.0143	0.2574	0.0208	0.2782	0.0723	0.0199	0.0922		1,542.8040	1,542.8040	0.1122		1,545.6091
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	0.0443	0.0325	0.3540	9.2000e-004	0.0700	7.7000e-004	0.0708	0.0189	7.1000e-004	0.0197		91.3705	91.3705	3.1400e-003		91.4491
<b>Total</b>	<b>0.2192</b>	<b>5.6669</b>	<b>1.6196</b>	<b>0.0152</b>	<b>0.3274</b>	<b>0.0216</b>	<b>0.3489</b>	<b>0.0912</b>	<b>0.0206</b>	<b>0.1118</b>		<b>1,634.1745</b>	<b>1,634.1745</b>	<b>0.1153</b>		<b>1,637.0582</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2019**

**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	0.1560	4.1719	1.2185	9.1600e-003	0.2305	0.0270	0.2575	0.0664	0.0258	0.0922		976.5976	976.5976	0.0686		978.3127
Worker	0.8916	0.6546	7.1239	0.0185	1.7996	0.0155	1.8151	0.4773	0.0143	0.4916		1,838.8306	1,838.8306	0.0633		1,840.4121
<b>Total</b>	<b>1.0476</b>	<b>4.8265</b>	<b>8.3424</b>	<b>0.0276</b>	<b>2.0301</b>	<b>0.0425</b>	<b>2.0726</b>	<b>0.5436</b>	<b>0.0401</b>	<b>0.5837</b>		<b>2,815.4282</b>	<b>2,815.4282</b>	<b>0.1319</b>		<b>2,818.7248</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2019**

**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	0.1560	4.1719	1.2185	9.1600e-003	0.1894	0.0270	0.2164	0.0563	0.0258	0.0821		976.5976	976.5976	0.0686		978.3127
Worker	0.8916	0.6546	7.1239	0.0185	1.4085	0.0155	1.4240	0.3813	0.0143	0.3956		1,838.8306	1,838.8306	0.0633		1,840.4121
<b>Total</b>	<b>1.0476</b>	<b>4.8265</b>	<b>8.3424</b>	<b>0.0276</b>	<b>1.5979</b>	<b>0.0425</b>	<b>1.6404</b>	<b>0.4375</b>	<b>0.0401</b>	<b>0.4777</b>		<b>2,815.4282</b>	<b>2,815.4282</b>	<b>0.1319</b>		<b>2,818.7248</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1339	3.8286	1.1066	9.0900e-003	0.2305	0.0183	0.2488	0.0664	0.0175	0.0839		970.0166	970.0166	0.0649		971.6382
Worker	0.8228	0.5836	6.4563	0.0179	1.7996	0.0150	1.8146	0.4773	0.0139	0.4911		1,782.9468	1,782.9468	0.0562		1,784.3518
<b>Total</b>	<b>0.9566</b>	<b>4.4122</b>	<b>7.5629</b>	<b>0.0270</b>	<b>2.0301</b>	<b>0.0334</b>	<b>2.0634</b>	<b>0.5436</b>	<b>0.0314</b>	<b>0.5750</b>		<b>2,752.9635</b>	<b>2,752.9635</b>	<b>0.1211</b>		<b>2,755.9900</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1339	3.8286	1.1066	9.0900e-003	0.1894	0.0183	0.2077	0.0563	0.0175	0.0738		970.0166	970.0166	0.0649		971.6382
Worker	0.8228	0.5836	6.4563	0.0179	1.4085	0.0150	1.4235	0.3813	0.0139	0.3951		1,782.9468	1,782.9468	0.0562		1,784.3518
<b>Total</b>	<b>0.9566</b>	<b>4.4122</b>	<b>7.5629</b>	<b>0.0270</b>	<b>1.5979</b>	<b>0.0334</b>	<b>1.6312</b>	<b>0.4375</b>	<b>0.0314</b>	<b>0.4689</b>		<b>2,752.9635</b>	<b>2,752.9635</b>	<b>0.1211</b>		<b>2,755.9900</b>

**3.5 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>		<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0471	0.5213	1.4500e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		143.9647	143.9647	4.5400e-003		144.0781
<b>Total</b>	<b>0.0664</b>	<b>0.0471</b>	<b>0.5213</b>	<b>1.4500e-003</b>	<b>0.1453</b>	<b>1.2100e-003</b>	<b>0.1465</b>	<b>0.0385</b>	<b>1.1200e-003</b>	<b>0.0397</b>		<b>143.9647</b>	<b>143.9647</b>	<b>4.5400e-003</b>		<b>144.0781</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>	<b>0.0000</b>	<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0471	0.5213	1.4500e-003	0.1137	1.2100e-003	0.1149	0.0308	1.1200e-003	0.0319		143.9647	143.9647	4.5400e-003		144.0781
<b>Total</b>	<b>0.0664</b>	<b>0.0471</b>	<b>0.5213</b>	<b>1.4500e-003</b>	<b>0.1137</b>	<b>1.2100e-003</b>	<b>0.1149</b>	<b>0.0308</b>	<b>1.1200e-003</b>	<b>0.0319</b>		<b>143.9647</b>	<b>143.9647</b>	<b>4.5400e-003</b>		<b>144.0781</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	206.3613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>206.6035</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1635	0.1160	1.2832	3.5600e-003	0.3577	2.9900e-003	0.3607	0.0949	2.7500e-003	0.0976		354.3745	354.3745	0.0112		354.6538
<b>Total</b>	<b>0.1635</b>	<b>0.1160</b>	<b>1.2832</b>	<b>3.5600e-003</b>	<b>0.3577</b>	<b>2.9900e-003</b>	<b>0.3607</b>	<b>0.0949</b>	<b>2.7500e-003</b>	<b>0.0976</b>		<b>354.3745</b>	<b>354.3745</b>	<b>0.0112</b>		<b>354.6538</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	206.3613					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>206.6035</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1635	0.1160	1.2832	3.5600e-003	0.2799	2.9900e-003	0.2829	0.0758	2.7500e-003	0.0785		354.3745	354.3745	0.0112		354.6538
<b>Total</b>	<b>0.1635</b>	<b>0.1160</b>	<b>1.2832</b>	<b>3.5600e-003</b>	<b>0.2799</b>	<b>2.9900e-003</b>	<b>0.2829</b>	<b>0.0758</b>	<b>2.7500e-003</b>	<b>0.0785</b>		<b>354.3745</b>	<b>354.3745</b>	<b>0.0112</b>		<b>354.6538</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Density

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5588	7.2383	17.8495	0.0580	4.7032	0.0514	4.7546	1.2587	0.0479	1.3066		5,899.7977	5,899.7977	0.3380		5,908.2485
Unmitigated	1.7982	8.8598	23.6098	0.0810	6.7189	0.0707	6.7895	1.7982	0.0660	1.8641		8,241.8918	8,241.8918	0.4506		8,253.1560

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	831.60	831.60	831.60	2,841,704	1,989,192
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	147.03	147.03	147.03	318,003	222,602
Total	978.63	978.63	978.63	3,159,706	2,211,795

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

**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	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
NaturalGas Unmitigated	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5652.08	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.5233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.65208	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.0175233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**6.0 Area Detail**



Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Unmitigated	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

Avalong Bay - Proposed Project (Unmitigated) - Los Angeles-South Coast County, Winter

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

**Avalong Bay - Proposed Project (Mitigated)**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	288.00	Space	0.47	115,200.00	0
Apartments Mid Rise	154.00	Dwelling Unit	0.92	154,000.00	440
Regional Shopping Center	3.90	1000sqft	0.09	3,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

Project Characteristics -

Land Use - Residential lot acreage - site plans A2.1 ground floor total building area

Parking lot acreage - lot acreage from email from Johnny Chun g3/15/2018: The full footprint alone will be 20,393 s.f. including all those shaft, lobby, and stair.

Construction Phase - Demo, grading and building construction from construction schedule from 1-23-2018. Paving and architectural coating from CalEEMod default

Demolition - Demo building square footage = total square footage of 3 existing office buildings

Grading - cut and fill material amount obtained from Ryan Chapman email 3/13/2018

Architectural Coating - Use low VOC coating to meet SCAQMD super compliant VOC standard of <10 g/L

Vehicle Trips - Trip rate obtained from TIA

Woodstoves - No wood burning fireplace - consistent with SCAQMD Rule 445

Construction Off-road Equipment Mitigation - Mitigation measures from SCAQMD CEQA Handbook

Mobile Land Use Mitigation - Density from project description

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	264.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	5.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.90	138.60
tblFireplaces	NumberWood	7.70	0.00
tblGrading	AcresOfGrading	9.75	1.50
tblGrading	MaterialImported	0.00	3,775.00
tblLandUse	LotAcreage	2.59	0.47
tblLandUse	LotAcreage	4.05	0.92
tblVehicleTrips	ST_TR	6.39	5.40
tblVehicleTrips	ST_TR	49.97	37.70
tblVehicleTrips	SU_TR	5.86	5.40
tblVehicleTrips	SU_TR	25.24	37.70
tblVehicleTrips	WD_TR	6.65	5.40
tblVehicleTrips	WD_TR	42.70	37.70
tblWoodstoves	NumberCatalytic	7.70	0.00
tblWoodstoves	NumberNoncatalytic	7.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2393	1.8260	1.5803	3.6400e-003	0.1930	0.0835	0.2765	0.0666	0.0796	0.1462	0.0000	323.9510	323.9510	0.0418	0.0000	324.9947
2020	0.3544	1.4917	1.6176	3.8100e-003	0.1526	0.0645	0.2170	0.0409	0.0622	0.1031	0.0000	335.6426	335.6426	0.0349	0.0000	336.5149
<b>Maximum</b>	<b>0.3544</b>	<b>1.8260</b>	<b>1.6176</b>	<b>3.8100e-003</b>	<b>0.1930</b>	<b>0.0835</b>	<b>0.2765</b>	<b>0.0666</b>	<b>0.0796</b>	<b>0.1462</b>	<b>0.0000</b>	<b>335.6426</b>	<b>335.6426</b>	<b>0.0418</b>	<b>0.0000</b>	<b>336.5149</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2393	1.8260	1.5803	3.6400e-003	0.1275	0.0835	0.2110	0.0415	0.0796	0.1210	0.0000	323.9508	323.9508	0.0418	0.0000	324.9945
2020	0.3544	1.4917	1.6176	3.8100e-003	0.1202	0.0645	0.1847	0.0330	0.0622	0.0951	0.0000	335.6425	335.6425	0.0349	0.0000	336.5147
<b>Maximum</b>	<b>0.3544</b>	<b>1.8260</b>	<b>1.6176</b>	<b>3.8100e-003</b>	<b>0.1275</b>	<b>0.0835</b>	<b>0.2110</b>	<b>0.0415</b>	<b>0.0796</b>	<b>0.1210</b>	<b>0.0000</b>	<b>335.6425</b>	<b>335.6425</b>	<b>0.0418</b>	<b>0.0000</b>	<b>336.5147</b>



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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.33	0.00	19.83	30.78	0.00	13.28	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)
5	3-15-2019	6-14-2019	0.2822	0.2822
6	6-15-2019	9-14-2019	0.8321	0.8321
7	9-15-2019	12-14-2019	0.7832	0.7832
8	12-15-2019	3-14-2020	0.7329	0.7329
9	3-15-2020	6-14-2020	0.7252	0.7252
10	6-15-2020	9-14-2020	0.5215	0.5215
		Highest	0.8321	0.8321

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456
Energy	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	540.9336	540.9336	0.0199	5.7000e-003	543.1300
Mobile	0.3196	1.6427	4.3571	0.0150	1.1992	0.0128	1.2120	0.3215	0.0120	0.3334	0.0000	1,380.033 <sub>4</sub>	1,380.033 <sub>4</sub>	0.0741	0.0000	1,381.886 <sub>1</sub>
Waste						0.0000	0.0000		0.0000	0.0000	15.2101	0.0000	15.2101	0.8989	0.0000	37.6824
Water						0.0000	0.0000		0.0000	0.0000	3.2749	65.8448	69.1197	0.3391	8.5000e-003	80.1311
<b>Total</b>	<b>1.0123</b>	<b>1.7852</b>	<b>6.0054</b>	<b>0.0158</b>	<b>1.1992</b>	<b>0.0316</b>	<b>1.2309</b>	<b>0.3215</b>	<b>0.0308</b>	<b>0.3522</b>	<b>18.4850</b>	<b>2,022.696<sub>2</sub></b>	<b>2,041.181<sub>2</sub></b>	<b>1.3351</b>	<b>0.0148</b>	<b>2,078.975<sub>1</sub></b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456
Energy	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	540.9336	540.9336	0.0199	5.7000e-003	543.1300
Mobile	0.2757	1.3415	3.2806	0.0107	0.8395	9.2900e-003	0.8488	0.2250	8.6800e-003	0.2337	0.0000	988.8028	988.8028	0.0554	0.0000	990.1882
Waste						0.0000	0.0000		0.0000	0.0000	15.2101	0.0000	15.2101	0.8989	0.0000	37.6824
Water						0.0000	0.0000		0.0000	0.0000	3.2749	65.8448	69.1197	0.3391	8.5000e-003	80.1311
<b>Total</b>	<b>0.9684</b>	<b>1.4840</b>	<b>4.9289</b>	<b>0.0116</b>	<b>0.8395</b>	<b>0.0281</b>	<b>0.8676</b>	<b>0.2250</b>	<b>0.0275</b>	<b>0.2525</b>	<b>18.4850</b>	<b>1,631.4656</b>	<b>1,649.9506</b>	<b>1.3164</b>	<b>0.0148</b>	<b>1,687.2772</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>4.34</b>	<b>16.87</b>	<b>17.93</b>	<b>26.78</b>	<b>30.00</b>	<b>11.10</b>	<b>29.51</b>	<b>30.00</b>	<b>10.66</b>	<b>28.31</b>	<b>0.00</b>	<b>19.34</b>	<b>19.17</b>	<b>1.40</b>	<b>0.00</b>	<b>18.84</b>

**3.0 Construction Detail**

**Construction Phase**

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/16/2019	6/27/2019	5	31	
2	Grading	Grading	6/28/2019	8/2/2019	5	26	
3	Building Construction	Building Construction	7/29/2019	7/30/2020	5	264	
4	Paving	Paving	7/31/2020	8/6/2020	5	5	
5	Architectural Coating	Architectural Coating	8/7/2020	8/13/2020	5	5	

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

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0.47**

**Residential Indoor: 311,850; Residential Outdoor: 103,950; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 6,912 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	123.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	472.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	161.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0133	0.0000	0.0133	2.0200e-003	0.0000	2.0200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0356	0.3515	0.2309	3.7000e-004		0.0199	0.0199		0.0186	0.0186	0.0000	33.1949	33.1949	8.4500e-003	0.0000	33.4063
<b>Total</b>	<b>0.0356</b>	<b>0.3515</b>	<b>0.2309</b>	<b>3.7000e-004</b>	<b>0.0133</b>	<b>0.0199</b>	<b>0.0333</b>	<b>2.0200e-003</b>	<b>0.0186</b>	<b>0.0207</b>	<b>0.0000</b>	<b>33.1949</b>	<b>33.1949</b>	<b>8.4500e-003</b>	<b>0.0000</b>	<b>33.4063</b>

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**3.2 Demolition - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-004	0.0195	4.1300e-003	5.0000e-005	1.0600e-003	7.0000e-005	1.1300e-003	2.9000e-004	7.0000e-005	3.6000e-004	0.0000	4.7889	4.7889	3.4000e-004	0.0000	4.7974
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	8.4000e-004	9.1500e-003	2.0000e-005	2.2100e-003	2.0000e-005	2.2300e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	2.1225	2.1225	7.0000e-005	0.0000	2.1243
<b>Total</b>	<b>1.5900e-003</b>	<b>0.0203</b>	<b>0.0133</b>	<b>7.0000e-005</b>	<b>3.2700e-003</b>	<b>9.0000e-005</b>	<b>3.3600e-003</b>	<b>8.8000e-004</b>	<b>9.0000e-005</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>6.9114</b>	<b>6.9114</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>6.9217</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9900e-003	0.0000	5.9900e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0356	0.3515	0.2309	3.7000e-004		0.0199	0.0199		0.0186	0.0186	0.0000	33.1949	33.1949	8.4500e-003	0.0000	33.4062
<b>Total</b>	<b>0.0356</b>	<b>0.3515</b>	<b>0.2309</b>	<b>3.7000e-004</b>	<b>5.9900e-003</b>	<b>0.0199</b>	<b>0.0259</b>	<b>9.1000e-004</b>	<b>0.0186</b>	<b>0.0195</b>	<b>0.0000</b>	<b>33.1949</b>	<b>33.1949</b>	<b>8.4500e-003</b>	<b>0.0000</b>	<b>33.4062</b>

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**3.2 Demolition - 2019**

**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	5.8000e-004	0.0195	4.1300e-003	5.0000e-005	8.6000e-004	7.0000e-005	9.3000e-004	2.4000e-004	7.0000e-005	3.1000e-004	0.0000	4.7889	4.7889	3.4000e-004	0.0000	4.7974
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	8.4000e-004	9.1500e-003	2.0000e-005	1.7300e-003	2.0000e-005	1.7500e-003	4.7000e-004	2.0000e-005	4.9000e-004	0.0000	2.1225	2.1225	7.0000e-005	0.0000	2.1243
<b>Total</b>	<b>1.5900e-003</b>	<b>0.0203</b>	<b>0.0133</b>	<b>7.0000e-005</b>	<b>2.5900e-003</b>	<b>9.0000e-005</b>	<b>2.6800e-003</b>	<b>7.1000e-004</b>	<b>9.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>6.9114</b>	<b>6.9114</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>6.9217</b>

**3.3 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0597	0.0000	0.0597	0.0324	0.0000	0.0324	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0185	0.2085	0.0859	1.8000e-004		9.5700e-003	9.5700e-003		8.8100e-003	8.8100e-003	0.0000	16.4682	16.4682	5.2100e-003	0.0000	16.5985
<b>Total</b>	<b>0.0185</b>	<b>0.2085</b>	<b>0.0859</b>	<b>1.8000e-004</b>	<b>0.0597</b>	<b>9.5700e-003</b>	<b>0.0693</b>	<b>0.0324</b>	<b>8.8100e-003</b>	<b>0.0412</b>	<b>0.0000</b>	<b>16.4682</b>	<b>16.4682</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.5985</b>

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**3.3 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2400e-003	0.0747	0.0159	1.9000e-004	4.0600e-003	2.7000e-004	4.3200e-003	1.1100e-003	2.6000e-004	1.3700e-003	0.0000	18.3770	18.3770	1.3000e-003	0.0000	18.4094
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.1400e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0955	1.0955	4.0000e-005	0.0000	1.0964
<b>Total</b>	<b>2.7600e-003</b>	<b>0.0751</b>	<b>0.0206</b>	<b>2.0000e-004</b>	<b>5.2000e-003</b>	<b>2.8000e-004</b>	<b>5.4700e-003</b>	<b>1.4100e-003</b>	<b>2.7000e-004</b>	<b>1.6800e-003</b>	<b>0.0000</b>	<b>19.4725</b>	<b>19.4725</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>19.5058</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0269	0.0000	0.0269	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0185	0.2085	0.0859	1.8000e-004		9.5700e-003	9.5700e-003		8.8100e-003	8.8100e-003	0.0000	16.4682	16.4682	5.2100e-003	0.0000	16.5984
<b>Total</b>	<b>0.0185</b>	<b>0.2085</b>	<b>0.0859</b>	<b>1.8000e-004</b>	<b>0.0269</b>	<b>9.5700e-003</b>	<b>0.0365</b>	<b>0.0146</b>	<b>8.8100e-003</b>	<b>0.0234</b>	<b>0.0000</b>	<b>16.4682</b>	<b>16.4682</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>16.5984</b>



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**3.3 Grading - 2019**

**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	2.2400e-003	0.0747	0.0159	1.9000e-004	3.2900e-003	2.7000e-004	3.5600e-003	9.3000e-004	2.6000e-004	1.1800e-003	0.0000	18.3770	18.3770	1.3000e-003	0.0000	18.4094
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.3000e-004	4.7200e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	1.0955	1.0955	4.0000e-005	0.0000	1.0964
<b>Total</b>	<b>2.7600e-003</b>	<b>0.0751</b>	<b>0.0206</b>	<b>2.0000e-004</b>	<b>4.1800e-003</b>	<b>2.8000e-004</b>	<b>4.4600e-003</b>	<b>1.1700e-003</b>	<b>2.7000e-004</b>	<b>1.4300e-003</b>	<b>0.0000</b>	<b>19.4725</b>	<b>19.4725</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>19.5058</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1272	0.8949	0.7553	1.2300e-003		0.0513	0.0513		0.0495	0.0495	0.0000	102.5203	102.5203	0.0197	0.0000	103.0130
<b>Total</b>	<b>0.1272</b>	<b>0.8949</b>	<b>0.7553</b>	<b>1.2300e-003</b>		<b>0.0513</b>	<b>0.0513</b>		<b>0.0495</b>	<b>0.0495</b>	<b>0.0000</b>	<b>102.5203</b>	<b>102.5203</b>	<b>0.0197</b>	<b>0.0000</b>	<b>103.0130</b>

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**3.4 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.5300e-003	0.2381	0.0651	5.2000e-004	0.0127	1.5000e-003	0.0142	3.6600e-003	1.4300e-003	5.1000e-003	0.0000	50.4130	50.4130	3.3700e-003	0.0000	50.4971
Worker	0.0452	0.0376	0.4093	1.0500e-003	0.0988	8.7000e-004	0.0997	0.0262	8.0000e-004	0.0270	0.0000	94.9707	94.9707	3.2700e-003	0.0000	95.0523
<b>Total</b>	<b>0.0537</b>	<b>0.2758</b>	<b>0.4745</b>	<b>1.5700e-003</b>	<b>0.1115</b>	<b>2.3700e-003</b>	<b>0.1139</b>	<b>0.0299</b>	<b>2.2300e-003</b>	<b>0.0321</b>	<b>0.0000</b>	<b>145.3837</b>	<b>145.3837</b>	<b>6.6400e-003</b>	<b>0.0000</b>	<b>145.5495</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1272	0.8949	0.7553	1.2300e-003		0.0513	0.0513		0.0495	0.0495	0.0000	102.5202	102.5202	0.0197	0.0000	103.0129
<b>Total</b>	<b>0.1272</b>	<b>0.8949</b>	<b>0.7553</b>	<b>1.2300e-003</b>		<b>0.0513</b>	<b>0.0513</b>		<b>0.0495</b>	<b>0.0495</b>	<b>0.0000</b>	<b>102.5202</b>	<b>102.5202</b>	<b>0.0197</b>	<b>0.0000</b>	<b>103.0129</b>

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**3.4 Building Construction - 2019**

**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	8.5300e-003	0.2381	0.0651	5.2000e-004	0.0105	1.5000e-003	0.0120	3.1100e-003	1.4300e-003	4.5500e-003	0.0000	50.4130	50.4130	3.3700e-003	0.0000	50.4971
Worker	0.0452	0.0376	0.4093	1.0500e-003	0.0774	8.7000e-004	0.0783	0.0210	8.0000e-004	0.0218	0.0000	94.9707	94.9707	3.2700e-003	0.0000	95.0523
<b>Total</b>	<b>0.0537</b>	<b>0.2758</b>	<b>0.4745</b>	<b>1.5700e-003</b>	<b>0.0878</b>	<b>2.3700e-003</b>	<b>0.0902</b>	<b>0.0241</b>	<b>2.2300e-003</b>	<b>0.0263</b>	<b>0.0000</b>	<b>145.3837</b>	<b>145.3837</b>	<b>6.6400e-003</b>	<b>0.0000</b>	<b>145.5495</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1543	1.1239	1.0023	1.6800e-003		0.0605	0.0605		0.0584	0.0584	0.0000	137.9720	137.9720	0.0256	0.0000	138.6123
<b>Total</b>	<b>0.1543</b>	<b>1.1239</b>	<b>1.0023</b>	<b>1.6800e-003</b>		<b>0.0605</b>	<b>0.0605</b>		<b>0.0584</b>	<b>0.0584</b>	<b>0.0000</b>	<b>137.9720</b>	<b>137.9720</b>	<b>0.0256</b>	<b>0.0000</b>	<b>138.6123</b>

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**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9200e-003	0.2965	0.0803	7.0000e-004	0.0172	1.3800e-003	0.0186	4.9700e-003	1.3200e-003	6.2900e-003	0.0000	67.9694	67.9694	4.3200e-003	0.0000	68.0774
Worker	0.0565	0.0456	0.5037	1.3800e-003	0.1341	1.1400e-003	0.1352	0.0356	1.0500e-003	0.0367	0.0000	124.9725	124.9725	3.9400e-003	0.0000	125.0709
<b>Total</b>	<b>0.0664</b>	<b>0.3420</b>	<b>0.5839</b>	<b>2.0800e-003</b>	<b>0.1513</b>	<b>2.5200e-003</b>	<b>0.1538</b>	<b>0.0406</b>	<b>2.3700e-003</b>	<b>0.0430</b>	<b>0.0000</b>	<b>192.9419</b>	<b>192.9419</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>193.1483</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1543	1.1239	1.0023	1.6800e-003		0.0605	0.0605		0.0584	0.0584	0.0000	137.9719	137.9719	0.0256	0.0000	138.6122
<b>Total</b>	<b>0.1543</b>	<b>1.1239</b>	<b>1.0023</b>	<b>1.6800e-003</b>		<b>0.0605</b>	<b>0.0605</b>		<b>0.0584</b>	<b>0.0584</b>	<b>0.0000</b>	<b>137.9719</b>	<b>137.9719</b>	<b>0.0256</b>	<b>0.0000</b>	<b>138.6122</b>

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**3.4 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9200e-003	0.2965	0.0803	7.0000e-004	0.0142	1.3800e-003	0.0156	4.2300e-003	1.3200e-003	5.5400e-003	0.0000	67.9694	67.9694	4.3200e-003	0.0000	68.0774
Worker	0.0565	0.0456	0.5037	1.3800e-003	0.1050	1.1400e-003	0.1062	0.0285	1.0500e-003	0.0295	0.0000	124.9725	124.9725	3.9400e-003	0.0000	125.0709
<b>Total</b>	<b>0.0664</b>	<b>0.3420</b>	<b>0.5839</b>	<b>2.0800e-003</b>	<b>0.1192</b>	<b>2.5200e-003</b>	<b>0.1217</b>	<b>0.0327</b>	<b>2.3700e-003</b>	<b>0.0351</b>	<b>0.0000</b>	<b>192.9419</b>	<b>192.9419</b>	<b>8.2600e-003</b>	<b>0.0000</b>	<b>193.1483</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0211</b>	<b>0.0222</b>	<b>3.0000e-005</b>		<b>1.1700e-003</b>	<b>1.1700e-003</b>		<b>1.0800e-003</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>2.9414</b>	<b>2.9414</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>2.9647</b>

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**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.3400e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3319	0.3319	1.0000e-005	0.0000	0.3322
<b>Total</b>	<b>1.5000e-004</b>	<b>1.2000e-004</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3319</b>	<b>0.3319</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3322</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1000e-003</b>	<b>0.0211</b>	<b>0.0222</b>	<b>3.0000e-005</b>		<b>1.1700e-003</b>	<b>1.1700e-003</b>		<b>1.0800e-003</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>2.9414</b>	<b>2.9414</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>2.9647</b>

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**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.3400e-003	0.0000	2.8000e-004	0.0000	2.8000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3319	0.3319	1.0000e-005	0.0000	0.3322
<b>Total</b>	<b>1.5000e-004</b>	<b>1.2000e-004</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.3319</b>	<b>0.3319</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3322</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
<b>Total</b>	<b>0.1311</b>	<b>4.2100e-003</b>	<b>4.5800e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.6396</b>

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**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	3.0000e-004	3.2900e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8171	0.8171	3.0000e-005	0.0000	0.8177
<b>Total</b>	<b>3.7000e-004</b>	<b>3.0000e-004</b>	<b>3.2900e-003</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>2.3000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.8171</b>	<b>0.8171</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8177</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
<b>Total</b>	<b>0.1311</b>	<b>4.2100e-003</b>	<b>4.5800e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.6396</b>



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**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	3.0000e-004	3.2900e-003	1.0000e-005	6.9000e-004	1.0000e-005	6.9000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.8171	0.8171	3.0000e-005	0.0000	0.8177
<b>Total</b>	<b>3.7000e-004</b>	<b>3.0000e-004</b>	<b>3.2900e-003</b>	<b>1.0000e-005</b>	<b>6.9000e-004</b>	<b>1.0000e-005</b>	<b>6.9000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.8171</b>	<b>0.8171</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8177</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Increase Density

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2757	1.3415	3.2806	0.0107	0.8395	9.2900e-003	0.8488	0.2250	8.6800e-003	0.2337	0.0000	988.8028	988.8028	0.0554	0.0000	990.1882
Unmitigated	0.3196	1.6427	4.3571	0.0150	1.1992	0.0128	1.2120	0.3215	0.0120	0.3334	0.0000	1,380.0334	1,380.0334	0.0741	0.0000	1,381.8861

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	831.60	831.60	831.60	2,841,704	1,989,192
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	147.03	147.03	147.03	318,003	222,602
Total	978.63	978.63	978.63	3,159,706	2,211,795

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

**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	430.5022	430.5022	0.0178	3.6800e-003	432.0423
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.5022	430.5022	0.0178	3.6800e-003	432.0423
NaturalGas Mitigated	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	110.4314	110.4314	2.1200e-003	2.0200e-003	111.0876
NaturalGas Unmitigated	0.0112	0.0954	0.0407	6.1000e-004		7.7100e-003	7.7100e-003		7.7100e-003	7.7100e-003	0.0000	110.4314	110.4314	2.1200e-003	2.0200e-003	111.0876

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.06301e+006	0.0111	0.0951	0.0405	6.1000e-004		7.6900e-003	7.6900e-003		7.6900e-003	7.6900e-003	0.0000	110.0901	110.0901	2.1100e-003	2.0200e-003	110.7443
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	6396	3.0000e-005	3.1000e-004	2.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3413	0.3413	1.0000e-005	1.0000e-005	0.3433
<b>Total</b>		<b>0.0112</b>	<b>0.0954</b>	<b>0.0407</b>	<b>6.1000e-004</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>	<b>0.0000</b>	<b>110.4314</b>	<b>110.4314</b>	<b>2.1200e-003</b>	<b>2.0300e-003</b>	<b>111.0876</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.06301e+006	0.0111	0.0951	0.0405	6.1000e-004		7.6900e-003	7.6900e-003		7.6900e-003	7.6900e-003	0.0000	110.0901	110.0901	2.1100e-003	2.0200e-003	110.7443
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	6396	3.0000e-005	3.1000e-004	2.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3413	0.3413	1.0000e-005	1.0000e-005	0.3433
<b>Total</b>		<b>0.0112</b>	<b>0.0954</b>	<b>0.0407</b>	<b>6.1000e-004</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>		<b>7.7100e-003</b>	<b>7.7100e-003</b>	<b>0.0000</b>	<b>110.4314</b>	<b>110.4314</b>	<b>2.1200e-003</b>	<b>2.0300e-003</b>	<b>111.0876</b>

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	623418	198.6344	8.2000e-003	1.7000e-003	199.3450
Enclosed Parking with Elevator	675072	215.0924	8.8800e-003	1.8400e-003	215.8619
Regional Shopping Center	52650	16.7754	6.9000e-004	1.4000e-004	16.8354
<b>Total</b>		<b>430.5022</b>	<b>0.0178</b>	<b>3.6800e-003</b>	<b>432.0423</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	623418	198.6344	8.2000e-003	1.7000e-003	199.3450
Enclosed Parking with Elevator	675072	215.0924	8.8800e-003	1.8400e-003	215.8619
Regional Shopping Center	52650	16.7754	6.9000e-004	1.4000e-004	16.8354
<b>Total</b>		<b>430.5022</b>	<b>0.0178</b>	<b>3.6800e-003</b>	<b>432.0423</b>

**6.0 Area Detail**

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**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456
Unmitigated	0.6815	0.0472	1.6076	2.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	35.8845	35.8845	3.1700e-003	6.1000e-004	36.1456

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**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	0.0516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3600e-003	0.0287	0.0122	1.8000e-004		2.3200e-003	2.3200e-003		2.3200e-003	2.3200e-003	0.0000	33.2830	33.2830	6.4000e-004	6.1000e-004	33.4808
Landscaping	0.0486	0.0184	1.5953	8.0000e-005		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	2.6015	2.6015	2.5300e-003	0.0000	2.6648
<b>Total</b>	<b>0.6815</b>	<b>0.0472</b>	<b>1.6076</b>	<b>2.6000e-004</b>		<b>0.0111</b>	<b>0.0111</b>		<b>0.0111</b>	<b>0.0111</b>	<b>0.0000</b>	<b>35.8845</b>	<b>35.8845</b>	<b>3.1700e-003</b>	<b>6.1000e-004</b>	<b>36.1456</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3600e-003	0.0287	0.0122	1.8000e-004		2.3200e-003	2.3200e-003		2.3200e-003	2.3200e-003	0.0000	33.2830	33.2830	6.4000e-004	6.1000e-004	33.4808
Landscaping	0.0486	0.0184	1.5953	8.0000e-005		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	2.6015	2.6015	2.5300e-003	0.0000	2.6648
<b>Total</b>	<b>0.6815</b>	<b>0.0472</b>	<b>1.6076</b>	<b>2.6000e-004</b>		<b>0.0111</b>	<b>0.0111</b>		<b>0.0111</b>	<b>0.0111</b>	<b>0.0000</b>	<b>35.8845</b>	<b>35.8845</b>	<b>3.1700e-003</b>	<b>6.1000e-004</b>	<b>36.1456</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	69.1197	0.3391	8.5000e-003	80.1311
Unmitigated	69.1197	0.3391	8.5000e-003	80.1311

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.0337 / 6.32561	67.2027	0.3296	8.2700e-003	77.9061
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.288883 / 0.177057	1.9169	9.4900e-003	2.4000e-004	2.2250
<b>Total</b>		<b>69.1197</b>	<b>0.3391</b>	<b>8.5100e-003</b>	<b>80.1311</b>

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**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.0337 / 6.32561	67.2027	0.3296	8.2700e-003	77.9061
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.288883 / 0.177057	1.9169	9.4900e-003	2.4000e-004	2.2250
<b>Total</b>		<b>69.1197</b>	<b>0.3391</b>	<b>8.5100e-003</b>	<b>80.1311</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.2101	0.8989	0.0000	37.6824
Unmitigated	15.2101	0.8989	0.0000	37.6824

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	70.84	14.3799	0.8498	0.0000	35.6255
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.09	0.8302	0.0491	0.0000	2.0569
<b>Total</b>		<b>15.2101</b>	<b>0.8989</b>	<b>0.0000</b>	<b>37.6824</b>

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**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	70.84	14.3799	0.8498	0.0000	35.6255
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.09	0.8302	0.0491	0.0000	2.0569
<b>Total</b>		<b>15.2101</b>	<b>0.8989</b>	<b>0.0000</b>	<b>37.6824</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Annual

## **11.0 Vegetation**

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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**Avalong Bay - Proposed Project (Mitigated)**  
**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	288.00	Space	0.47	115,200.00	0
Apartments Mid Rise	154.00	Dwelling Unit	0.92	154,000.00	440
Regional Shopping Center	3.90	1000sqft	0.09	3,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

Project Characteristics -

Land Use - Residential lot acreage - site plans A2.1 ground floor total building area

Parking lot acreage - lot acreage from email from Johnny Chun g3/15/2018: The full footprint alone will be 20,393 s.f. including all those shaft, lobby, and stair.

Construction Phase - Demo, grading and building construction from construction schedule from 1-23-2018. Paving and architectural coating from CalEEMod default

Demolition - Demo building square footage = total square footage of 3 existing office buildings

Grading - cut and fill material amount obtained from Ryan Chapman email 3/13/2018

Architectural Coating - Use low VOC coating to meet SCAQMD super compliant VOC standard of <10 g/L

Vehicle Trips - Trip rate obtained from TIA

Woodstoves - No wood burning fireplace - consistent with SCAQMD Rule 445

Construction Off-road Equipment Mitigation - Mitigation measures from SCAQMD CEQA Handbook

Mobile Land Use Mitigation - Density from project description

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	264.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	5.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.90	138.60
tblFireplaces	NumberWood	7.70	0.00
tblGrading	AcresOfGrading	9.75	1.50
tblGrading	MaterialImported	0.00	3,775.00
tblLandUse	LotAcreage	2.59	0.47
tblLandUse	LotAcreage	4.05	0.92
tblVehicleTrips	ST_TR	6.39	5.40
tblVehicleTrips	ST_TR	49.97	37.70
tblVehicleTrips	SU_TR	5.86	5.40
tblVehicleTrips	SU_TR	25.24	37.70
tblVehicleTrips	WD_TR	6.65	5.40
tblVehicleTrips	WD_TR	42.70	37.70
tblWoodstoves	NumberCatalytic	7.70	0.00
tblWoodstoves	NumberNoncatalytic	7.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00



Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**2.0 Emissions Summary**

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8562	42.3629	30.5330	0.0806	7.0311	1.7156	8.7466	3.1461	1.6220	4.7681	0.0000	8,037.4576	8,037.4576	1.0726	0.0000	8,064.2717
2020	52.5721	19.1447	21.2407	0.0504	2.0301	0.8290	2.8591	0.5436	0.7999	1.3436	0.0000	4,891.9901	4,891.9901	0.4921	0.0000	4,904.2913
<b>Maximum</b>	<b>52.5721</b>	<b>42.3629</b>	<b>30.5330</b>	<b>0.0806</b>	<b>7.0311</b>	<b>1.7156</b>	<b>8.7466</b>	<b>3.1461</b>	<b>1.6220</b>	<b>4.7681</b>	<b>0.0000</b>	<b>8,037.4576</b>	<b>8,037.4576</b>	<b>1.0726</b>	<b>0.0000</b>	<b>8,064.2717</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8562	42.3629	30.5330	0.0806	3.9927	1.7156	5.7082	1.6500	1.6220	3.2721	0.0000	8,037.4576	8,037.4576	1.0726	0.0000	8,064.2717
2020	52.5721	19.1447	21.2407	0.0504	1.5979	0.8290	2.4269	0.4375	0.7999	1.2375	0.0000	4,891.9901	4,891.9901	0.4921	0.0000	4,904.2913
<b>Maximum</b>	<b>52.5721</b>	<b>42.3629</b>	<b>30.5330</b>	<b>0.0806</b>	<b>3.9927</b>	<b>1.7156</b>	<b>5.7082</b>	<b>1.6500</b>	<b>1.6220</b>	<b>3.2721</b>	<b>0.0000</b>	<b>8,037.4576</b>	<b>8,037.4576</b>	<b>1.0726</b>	<b>0.0000</b>	<b>8,064.2717</b>

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	38.30	0.00	29.90	43.42	0.00	26.21	0.00	0.00	0.00	0.00	0.00	0.00

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.8507	8.6414	24.8267	0.0852	6.7189	0.0703	6.7892	1.7982	0.0656	1.8638		8,662.2289	8,662.2289	0.4521		8,673.5312
<b>Total</b>	<b>6.0194</b>	<b>11.6104</b>	<b>38.7909</b>	<b>0.1039</b>	<b>6.7189</b>	<b>0.3687</b>	<b>7.0876</b>	<b>1.7982</b>	<b>0.3640</b>	<b>2.1622</b>	<b>0.0000</b>	<b>12,287.2411</b>	<b>12,287.2411</b>	<b>0.5435</b>	<b>0.0660</b>	<b>12,320.5072</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.6053	7.1102	18.4771	0.0610	4.7032	0.0510	4.7542	1.2587	0.0476	1.3063		6,207.2369	6,207.2369	0.3365		6,215.6488
<b>Total</b>	<b>5.7740</b>	<b>10.0791</b>	<b>32.4413</b>	<b>0.0797</b>	<b>4.7032</b>	<b>0.3494</b>	<b>5.0526</b>	<b>1.2587</b>	<b>0.3460</b>	<b>1.6047</b>	<b>0.0000</b>	<b>9,832.2491</b>	<b>9,832.2491</b>	<b>0.4279</b>	<b>0.0660</b>	<b>9,862.6249</b>

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.08	13.19	16.37	23.27	30.00	5.24	28.71	30.00	4.96	25.78	0.00	19.98	19.98	21.27	0.00	19.95

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/16/2019	6/27/2019	5	31	
2	Grading	Grading	6/28/2019	8/2/2019	5	26	
3	Building Construction	Building Construction	7/29/2019	7/30/2020	5	264	
4	Paving	Paving	7/31/2020	8/6/2020	5	5	
5	Architectural Coating	Architectural Coating	8/7/2020	8/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.47

Residential Indoor: 311,850; Residential Outdoor: 103,950; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 6,912 (Architectural Coating – sqft)

#### OffRoad Equipment

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	123.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	472.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	161.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8592	0.0000	0.8592	0.1301	0.0000	0.1301			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.8592</b>	<b>1.2863</b>	<b>2.1455</b>	<b>0.1301</b>	<b>1.2017</b>	<b>1.3318</b>		<b>2,360.7198</b>	<b>2,360.7198</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**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	0.0373	1.2153	0.2591	3.1700e-003	0.0694	4.4600e-003	0.0738	0.0190	4.2700e-003	0.0233		343.0160	343.0160	0.0236		343.6065
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	0.0649	0.0477	0.6268	1.5800e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		157.6839	157.6839	5.4200e-003		157.8193
<b>Total</b>	<b>0.1022</b>	<b>1.2630</b>	<b>0.8859</b>	<b>4.7500e-003</b>	<b>0.2147</b>	<b>5.7100e-003</b>	<b>0.2204</b>	<b>0.0576</b>	<b>5.4200e-003</b>	<b>0.0630</b>		<b>500.6998</b>	<b>500.6998</b>	<b>0.0290</b>		<b>501.4258</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3867	0.0000	0.3867	0.0585	0.0000	0.0585			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.3867</b>	<b>1.2863</b>	<b>1.6729</b>	<b>0.0585</b>	<b>1.2017</b>	<b>1.2603</b>	<b>0.0000</b>	<b>2,360.7197</b>	<b>2,360.7197</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**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	0.0373	1.2153	0.2591	3.1700e-003	0.0563	4.4600e-003	0.0607	0.0158	4.2700e-003	0.0201		343.0160	343.0160	0.0236		343.6065
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	0.0649	0.0477	0.6268	1.5800e-003	0.1137	1.2500e-003	0.1150	0.0308	1.1500e-003	0.0319		157.6839	157.6839	5.4200e-003		157.8193
<b>Total</b>	<b>0.1022</b>	<b>1.2630</b>	<b>0.8859</b>	<b>4.7500e-003</b>	<b>0.1700</b>	<b>5.7100e-003</b>	<b>0.1757</b>	<b>0.0466</b>	<b>5.4200e-003</b>	<b>0.0520</b>		<b>500.6998</b>	<b>500.6998</b>	<b>0.0290</b>		<b>501.4258</b>

**3.3 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5942	0.0000	4.5942	2.4918	0.0000	2.4918			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>4.5942</b>	<b>0.7365</b>	<b>5.3306</b>	<b>2.4918</b>	<b>0.6775</b>	<b>3.1693</b>		<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>



Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.3 Grading - 2019**

**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	0.1706	5.5602	1.1855	0.0145	0.3174	0.0204	0.3378	0.0870	0.0195	0.1065		1,569.4213	1,569.4213	0.1081		1,572.1234
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	0.0400	0.0294	0.3857	9.7000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		97.0362	97.0362	3.3300e-003		97.1196
<b>Total</b>	<b>0.2106</b>	<b>5.5896</b>	<b>1.5712</b>	<b>0.0155</b>	<b>0.4068</b>	<b>0.0212</b>	<b>0.4280</b>	<b>0.1107</b>	<b>0.0202</b>	<b>0.1310</b>		<b>1,666.4576</b>	<b>1,666.4576</b>	<b>0.1114</b>		<b>1,669.2430</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0674	0.0000	2.0674	1.1213	0.0000	1.1213			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>2.0674</b>	<b>0.7365</b>	<b>2.8038</b>	<b>1.1213</b>	<b>0.6775</b>	<b>1.7988</b>	<b>0.0000</b>	<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.3 Grading - 2019**

**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	0.1706	5.5602	1.1855	0.0145	0.2574	0.0204	0.2778	0.0723	0.0195	0.0918		1,569.4213	1,569.4213	0.1081		1,572.1234
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	0.0400	0.0294	0.3857	9.7000e-004	0.0700	7.7000e-004	0.0708	0.0189	7.1000e-004	0.0197		97.0362	97.0362	3.3300e-003		97.1196
<b>Total</b>	<b>0.2106</b>	<b>5.5896</b>	<b>1.5712</b>	<b>0.0155</b>	<b>0.3274</b>	<b>0.0212</b>	<b>0.3486</b>	<b>0.0912</b>	<b>0.0202</b>	<b>0.1115</b>		<b>1,666.4576</b>	<b>1,666.4576</b>	<b>0.1114</b>		<b>1,669.2430</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2019**

**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	0.1496	4.1663	1.1055	9.4100e-003	0.2305	0.0266	0.2570	0.0664	0.0254	0.0918		1,003.7326	1,003.7326	0.0643		1,005.3407
Worker	0.8043	0.5911	7.7628	0.0196	1.7996	0.0155	1.8151	0.4773	0.0143	0.4916		1,952.8541	1,952.8541	0.0671		1,954.5311
<b>Total</b>	<b>0.9539</b>	<b>4.7574</b>	<b>8.8683</b>	<b>0.0290</b>	<b>2.0301</b>	<b>0.0421</b>	<b>2.0722</b>	<b>0.5436</b>	<b>0.0397</b>	<b>0.5833</b>		<b>2,956.5868</b>	<b>2,956.5868</b>	<b>0.1314</b>		<b>2,959.8718</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2019**

**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	0.1496	4.1663	1.1055	9.4100e-003	0.1894	0.0266	0.2160	0.0563	0.0254	0.0817		1,003.7326	1,003.7326	0.0643		1,005.3407
Worker	0.8043	0.5911	7.7628	0.0196	1.4085	0.0155	1.4240	0.3813	0.0143	0.3956		1,952.8541	1,952.8541	0.0671		1,954.5311
<b>Total</b>	<b>0.9539</b>	<b>4.7574</b>	<b>8.8683</b>	<b>0.0290</b>	<b>1.5979</b>	<b>0.0421</b>	<b>1.6400</b>	<b>0.4375</b>	<b>0.0397</b>	<b>0.4773</b>		<b>2,956.5868</b>	<b>2,956.5868</b>	<b>0.1314</b>		<b>2,959.8718</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1280	3.8294	1.0033	9.3400e-003	0.2305	0.0180	0.2485	0.0664	0.0172	0.0836		997.2889	997.2889	0.0609		998.8104
Worker	0.7409	0.5271	7.0493	0.0190	1.7996	0.0150	1.8146	0.4773	0.0139	0.4911		1,893.5417	1,893.5417	0.0597		1,895.0342
<b>Total</b>	<b>0.8690</b>	<b>4.3565</b>	<b>8.0526</b>	<b>0.0284</b>	<b>2.0301</b>	<b>0.0331</b>	<b>2.0631</b>	<b>0.5436</b>	<b>0.0311</b>	<b>0.5747</b>		<b>2,890.8306</b>	<b>2,890.8306</b>	<b>0.1206</b>		<b>2,893.8446</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1280	3.8294	1.0033	9.3400e-003	0.1894	0.0180	0.2074	0.0563	0.0172	0.0735		997.2889	997.2889	0.0609		998.8104
Worker	0.7409	0.5271	7.0493	0.0190	1.4085	0.0150	1.4235	0.3813	0.0139	0.3951		1,893.5417	1,893.5417	0.0597		1,895.0342
<b>Total</b>	<b>0.8690</b>	<b>4.3565</b>	<b>8.0526</b>	<b>0.0284</b>	<b>1.5979</b>	<b>0.0331</b>	<b>1.6310</b>	<b>0.4375</b>	<b>0.0311</b>	<b>0.4686</b>		<b>2,890.8306</b>	<b>2,890.8306</b>	<b>0.1206</b>		<b>2,893.8446</b>

**3.5 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>		<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0426	0.5692	1.5400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		152.8947	152.8947	4.8200e-003		153.0152
<b>Total</b>	<b>0.0598</b>	<b>0.0426</b>	<b>0.5692</b>	<b>1.5400e-003</b>	<b>0.1453</b>	<b>1.2100e-003</b>	<b>0.1465</b>	<b>0.0385</b>	<b>1.1200e-003</b>	<b>0.0397</b>		<b>152.8947</b>	<b>152.8947</b>	<b>4.8200e-003</b>		<b>153.0152</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>	<b>0.0000</b>	<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0426	0.5692	1.5400e-003	0.1137	1.2100e-003	0.1149	0.0308	1.1200e-003	0.0319		152.8947	152.8947	4.8200e-003		153.0152
<b>Total</b>	<b>0.0598</b>	<b>0.0426</b>	<b>0.5692</b>	<b>1.5400e-003</b>	<b>0.1137</b>	<b>1.2100e-003</b>	<b>0.1149</b>	<b>0.0308</b>	<b>1.1200e-003</b>	<b>0.0319</b>		<b>152.8947</b>	<b>152.8947</b>	<b>4.8200e-003</b>		<b>153.0152</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>52.4249</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1473	0.1048	1.4011	3.7800e-003	0.3577	2.9900e-003	0.3607	0.0949	2.7500e-003	0.0976		376.3561	376.3561	0.0119		376.6528
<b>Total</b>	<b>0.1473</b>	<b>0.1048</b>	<b>1.4011</b>	<b>3.7800e-003</b>	<b>0.3577</b>	<b>2.9900e-003</b>	<b>0.3607</b>	<b>0.0949</b>	<b>2.7500e-003</b>	<b>0.0976</b>		<b>376.3561</b>	<b>376.3561</b>	<b>0.0119</b>		<b>376.6528</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>52.4249</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1473	0.1048	1.4011	3.7800e-003	0.2799	2.9900e-003	0.2829	0.0758	2.7500e-003	0.0785		376.3561	376.3561	0.0119		376.6528
<b>Total</b>	<b>0.1473</b>	<b>0.1048</b>	<b>1.4011</b>	<b>3.7800e-003</b>	<b>0.2799</b>	<b>2.9900e-003</b>	<b>0.2829</b>	<b>0.0758</b>	<b>2.7500e-003</b>	<b>0.0785</b>		<b>376.3561</b>	<b>376.3561</b>	<b>0.0119</b>		<b>376.6528</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Increase Density

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6053	7.1102	18.4771	0.0610	4.7032	0.0510	4.7542	1.2587	0.0476	1.3063		6,207.2369	6,207.2369	0.3365		6,215.6488
Unmitigated	1.8507	8.6414	24.8267	0.0852	6.7189	0.0703	6.7892	1.7982	0.0656	1.8638		8,662.2289	8,662.2289	0.4521		8,673.5312

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	831.60	831.60	831.60	2,841,704	1,989,192
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	147.03	147.03	147.03	318,003	222,602
<b>Total</b>	<b>978.63</b>	<b>978.63</b>	<b>978.63</b>	<b>3,159,706</b>	<b>2,211,795</b>

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

**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	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
NaturalGas Unmitigated	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5652.08	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.5233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.65208	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.0175233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**6.0 Area Detail**

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**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	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Unmitigated	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Summer

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**Avalong Bay - Proposed Project (Mitigated)**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	288.00	Space	0.47	115,200.00	0
Apartments Mid Rise	154.00	Dwelling Unit	0.92	154,000.00	440
Regional Shopping Center	3.90	1000sqft	0.09	3,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

Project Characteristics -

Land Use - Residential lot acreage - site plans A2.1 ground floor total building area

Parking lot acreage - lot acreage from email from Johnny Chun g3/15/2018: The full footprint alone will be 20,393 s.f. including all those shaft, lobby, and stair.

Construction Phase - Demo, grading and building construction from construction schedule from 1-23-2018. Paving and architectural coating from CalEEMod default

Demolition - Demo building square footage = total square footage of 3 existing office buildings

Grading - cut and fill material amount obtained from Ryan Chapman email 3/13/2018

Architectural Coating - Use low VOC coating to meet SCAQMD super compliant VOC standard of <10 g/L

Vehicle Trips - Trip rate obtained from TIA

Woodstoves - No wood burning fireplace - consistent with SCAQMD Rule 445

Construction Off-road Equipment Mitigation - Mitigation measures from SCAQMD CEQA Handbook

Mobile Land Use Mitigation - Density from project description

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	264.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	5.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.90	138.60
tblFireplaces	NumberWood	7.70	0.00
tblGrading	AcresOfGrading	9.75	1.50
tblGrading	MaterialImported	0.00	3,775.00
tblLandUse	LotAcreage	2.59	0.47
tblLandUse	LotAcreage	4.05	0.92
tblVehicleTrips	ST_TR	6.39	5.40
tblVehicleTrips	ST_TR	49.97	37.70
tblVehicleTrips	SU_TR	5.86	5.40
tblVehicleTrips	SU_TR	25.24	37.70
tblVehicleTrips	WD_TR	6.65	5.40
tblVehicleTrips	WD_TR	42.70	37.70
tblWoodstoves	NumberCatalytic	7.70	0.00
tblWoodstoves	NumberNoncatalytic	7.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**2.0 Emissions Summary**

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.9585	42.5093	30.0555	0.0789	7.0311	1.7164	8.7474	3.1461	1.6228	4.7689	0.0000	7,864.0160	7,864.0160	1.0770	0.0000	7,890.9399
2020	52.5884	19.2004	20.7509	0.0490	2.0301	0.8293	2.8594	0.5436	0.8002	1.3438	0.0000	4,754.1229	4,754.1229	0.4926	0.0000	4,766.4367
<b>Maximum</b>	<b>52.5884</b>	<b>42.5093</b>	<b>30.0555</b>	<b>0.0789</b>	<b>7.0311</b>	<b>1.7164</b>	<b>8.7474</b>	<b>3.1461</b>	<b>1.6228</b>	<b>4.7689</b>	<b>0.0000</b>	<b>7,864.0160</b>	<b>7,864.0160</b>	<b>1.0770</b>	<b>0.0000</b>	<b>7,890.9399</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.9585	42.5093	30.0555	0.0789	3.9927	1.7164	5.7090	1.6500	1.6228	3.2729	0.0000	7,864.0160	7,864.0160	1.0770	0.0000	7,890.9399
2020	52.5884	19.2004	20.7509	0.0490	1.5979	0.8293	2.4272	0.4375	0.8002	1.2378	0.0000	4,754.1229	4,754.1229	0.4926	0.0000	4,766.4367
<b>Maximum</b>	<b>52.5884</b>	<b>42.5093</b>	<b>30.0555</b>	<b>0.0789</b>	<b>3.9927</b>	<b>1.7164</b>	<b>5.7090</b>	<b>1.6500</b>	<b>1.6228</b>	<b>3.2729</b>	<b>0.0000</b>	<b>7,864.0160</b>	<b>7,864.0160</b>	<b>1.0770</b>	<b>0.0000</b>	<b>7,890.9399</b>

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	38.30	0.00	29.90	43.42	0.00	26.21	0.00	0.00	0.00	0.00	0.00	0.00

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.7982	8.8598	23.6098	0.0810	6.7189	0.0707	6.7895	1.7982	0.0660	1.8641		8,241.8918	8,241.8918	0.4506		8,253.1560
<b>Total</b>	<b>5.9669</b>	<b>11.8287</b>	<b>37.5740</b>	<b>0.0997</b>	<b>6.7189</b>	<b>0.3691</b>	<b>7.0879</b>	<b>1.7982</b>	<b>0.3644</b>	<b>2.1625</b>	<b>0.0000</b>	<b>11,866.9040</b>	<b>11,866.9040</b>	<b>0.5419</b>	<b>0.0660</b>	<b>11,900.1321</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Energy	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
Mobile	1.5588	7.2383	17.8495	0.0580	4.7032	0.0514	4.7546	1.2587	0.0479	1.3066		5,899.7977	5,899.7977	0.3380		5,908.2485
<b>Total</b>	<b>5.7275</b>	<b>10.2073</b>	<b>31.8137</b>	<b>0.0767</b>	<b>4.7032</b>	<b>0.3498</b>	<b>5.0530</b>	<b>1.2587</b>	<b>0.3464</b>	<b>1.6051</b>	<b>0.0000</b>	<b>9,524.8099</b>	<b>9,524.8099</b>	<b>0.4294</b>	<b>0.0660</b>	<b>9,555.2245</b>

## Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.01	13.71	15.33	23.11	30.00	5.23	28.71	30.00	4.95	25.78	0.00	19.74	19.74	20.77	0.00	19.70

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/16/2019	6/27/2019	5	31	
2	Grading	Grading	6/28/2019	8/2/2019	5	26	
3	Building Construction	Building Construction	7/29/2019	7/30/2020	5	264	
4	Paving	Paving	7/31/2020	8/6/2020	5	5	
5	Architectural Coating	Architectural Coating	8/7/2020	8/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.47

Residential Indoor: 311,850; Residential Outdoor: 103,950; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 6,912 (Architectural Coating – sqft)

#### OffRoad Equipment



Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	123.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	472.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	161.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2019**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8592	0.0000	0.8592	0.1301	0.0000	0.1301			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.8592</b>	<b>1.2863</b>	<b>2.1455</b>	<b>0.1301</b>	<b>1.2017</b>	<b>1.3318</b>		<b>2,360.7198</b>	<b>2,360.7198</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**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	0.0382	1.2315	0.2766	3.1200e-003	0.0694	4.5400e-003	0.0739	0.0190	4.3500e-003	0.0234		337.1984	337.1984	0.0245		337.8115
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	0.0720	0.0529	0.5752	1.4900e-003	0.1453	1.2500e-003	0.1466	0.0385	1.1500e-003	0.0397		148.4770	148.4770	5.1100e-003		148.6047
<b>Total</b>	<b>0.1102</b>	<b>1.2843</b>	<b>0.8518</b>	<b>4.6100e-003</b>	<b>0.2147</b>	<b>5.7900e-003</b>	<b>0.2205</b>	<b>0.0576</b>	<b>5.5000e-003</b>	<b>0.0631</b>		<b>485.6754</b>	<b>485.6754</b>	<b>0.0296</b>		<b>486.4162</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3867	0.0000	0.3867	0.0585	0.0000	0.0585			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.3867</b>	<b>1.2863</b>	<b>1.6729</b>	<b>0.0585</b>	<b>1.2017</b>	<b>1.2603</b>	<b>0.0000</b>	<b>2,360.7197</b>	<b>2,360.7197</b>	<b>0.6011</b>		<b>2,375.7475</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**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	0.0382	1.2315	0.2766	3.1200e-003	0.0563	4.5400e-003	0.0608	0.0158	4.3500e-003	0.0201		337.1984	337.1984	0.0245		337.8115
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	0.0720	0.0529	0.5752	1.4900e-003	0.1137	1.2500e-003	0.1150	0.0308	1.1500e-003	0.0319		148.4770	148.4770	5.1100e-003		148.6047
<b>Total</b>	<b>0.1102</b>	<b>1.2843</b>	<b>0.8518</b>	<b>4.6100e-003</b>	<b>0.1700</b>	<b>5.7900e-003</b>	<b>0.1758</b>	<b>0.0466</b>	<b>5.5000e-003</b>	<b>0.0521</b>		<b>485.6754</b>	<b>485.6754</b>	<b>0.0296</b>		<b>486.4162</b>

**3.3 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5942	0.0000	4.5942	2.4918	0.0000	2.4918			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>4.5942</b>	<b>0.7365</b>	<b>5.3306</b>	<b>2.4918</b>	<b>0.6775</b>	<b>3.1693</b>		<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.3 Grading - 2019**

**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	0.1749	5.6344	1.2656	0.0143	0.3174	0.0208	0.3382	0.0870	0.0199	0.1069		1,542.8040	1,542.8040	0.1122		1,545.6091
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	0.0443	0.0325	0.3540	9.2000e-004	0.0894	7.7000e-004	0.0902	0.0237	7.1000e-004	0.0244		91.3705	91.3705	3.1400e-003		91.4491
<b>Total</b>	<b>0.2192</b>	<b>5.6669</b>	<b>1.6196</b>	<b>0.0152</b>	<b>0.4068</b>	<b>0.0216</b>	<b>0.4284</b>	<b>0.1107</b>	<b>0.0206</b>	<b>0.1313</b>		<b>1,634.1745</b>	<b>1,634.1745</b>	<b>0.1153</b>		<b>1,637.0582</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0674	0.0000	2.0674	1.1213	0.0000	1.1213			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>2.0674</b>	<b>0.7365</b>	<b>2.8038</b>	<b>1.1213</b>	<b>0.6775</b>	<b>1.7988</b>	<b>0.0000</b>	<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.3 Grading - 2019**

**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	0.1749	5.6344	1.2656	0.0143	0.2574	0.0208	0.2782	0.0723	0.0199	0.0922		1,542.8040	1,542.8040	0.1122		1,545.6091
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	0.0443	0.0325	0.3540	9.2000e-004	0.0700	7.7000e-004	0.0708	0.0189	7.1000e-004	0.0197		91.3705	91.3705	3.1400e-003		91.4491
<b>Total</b>	<b>0.2192</b>	<b>5.6669</b>	<b>1.6196</b>	<b>0.0152</b>	<b>0.3274</b>	<b>0.0216</b>	<b>0.3489</b>	<b>0.0912</b>	<b>0.0206</b>	<b>0.1118</b>		<b>1,634.1745</b>	<b>1,634.1745</b>	<b>0.1153</b>		<b>1,637.0582</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2019**

**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	0.1560	4.1719	1.2185	9.1600e-003	0.2305	0.0270	0.2575	0.0664	0.0258	0.0922		976.5976	976.5976	0.0686		978.3127
Worker	0.8916	0.6546	7.1239	0.0185	1.7996	0.0155	1.8151	0.4773	0.0143	0.4916		1,838.8306	1,838.8306	0.0633		1,840.4121
<b>Total</b>	<b>1.0476</b>	<b>4.8265</b>	<b>8.3424</b>	<b>0.0276</b>	<b>2.0301</b>	<b>0.0425</b>	<b>2.0726</b>	<b>0.5436</b>	<b>0.0401</b>	<b>0.5837</b>		<b>2,815.4282</b>	<b>2,815.4282</b>	<b>0.1319</b>		<b>2,818.7248</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2019**

**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	0.1560	4.1719	1.2185	9.1600e-003	0.1894	0.0270	0.2164	0.0563	0.0258	0.0821		976.5976	976.5976	0.0686		978.3127
Worker	0.8916	0.6546	7.1239	0.0185	1.4085	0.0155	1.4240	0.3813	0.0143	0.3956		1,838.8306	1,838.8306	0.0633		1,840.4121
<b>Total</b>	<b>1.0476</b>	<b>4.8265</b>	<b>8.3424</b>	<b>0.0276</b>	<b>1.5979</b>	<b>0.0425</b>	<b>1.6404</b>	<b>0.4375</b>	<b>0.0401</b>	<b>0.4777</b>		<b>2,815.4282</b>	<b>2,815.4282</b>	<b>0.1319</b>		<b>2,818.7248</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>



Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1339	3.8286	1.1066	9.0900e-003	0.2305	0.0183	0.2488	0.0664	0.0175	0.0839		970.0166	970.0166	0.0649		971.6382
Worker	0.8228	0.5836	6.4563	0.0179	1.7996	0.0150	1.8146	0.4773	0.0139	0.4911		1,782.9468	1,782.9468	0.0562		1,784.3518
<b>Total</b>	<b>0.9566</b>	<b>4.4122</b>	<b>7.5629</b>	<b>0.0270</b>	<b>2.0301</b>	<b>0.0334</b>	<b>2.0634</b>	<b>0.5436</b>	<b>0.0314</b>	<b>0.5750</b>		<b>2,752.9635</b>	<b>2,752.9635</b>	<b>0.1211</b>		<b>2,755.9900</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1339	3.8286	1.1066	9.0900e-003	0.1894	0.0183	0.2077	0.0563	0.0175	0.0738		970.0166	970.0166	0.0649		971.6382
Worker	0.8228	0.5836	6.4563	0.0179	1.4085	0.0150	1.4235	0.3813	0.0139	0.3951		1,782.9468	1,782.9468	0.0562		1,784.3518
<b>Total</b>	<b>0.9566</b>	<b>4.4122</b>	<b>7.5629</b>	<b>0.0270</b>	<b>1.5979</b>	<b>0.0334</b>	<b>1.6312</b>	<b>0.4375</b>	<b>0.0314</b>	<b>0.4689</b>		<b>2,752.9635</b>	<b>2,752.9635</b>	<b>0.1211</b>		<b>2,755.9900</b>

**3.5 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>		<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.5 Paving - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0471	0.5213	1.4500e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		143.9647	143.9647	4.5400e-003		144.0781
<b>Total</b>	<b>0.0664</b>	<b>0.0471</b>	<b>0.5213</b>	<b>1.4500e-003</b>	<b>0.1453</b>	<b>1.2100e-003</b>	<b>0.1465</b>	<b>0.0385</b>	<b>1.1200e-003</b>	<b>0.0397</b>		<b>143.9647</b>	<b>143.9647</b>	<b>4.5400e-003</b>		<b>144.0781</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8402</b>	<b>8.4514</b>	<b>8.8758</b>	<b>0.0135</b>		<b>0.4695</b>	<b>0.4695</b>		<b>0.4328</b>	<b>0.4328</b>	<b>0.0000</b>	<b>1,296.9461</b>	<b>1,296.9461</b>	<b>0.4111</b>		<b>1,307.2246</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.5 Paving - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0471	0.5213	1.4500e-003	0.1137	1.2100e-003	0.1149	0.0308	1.1200e-003	0.0319		143.9647	143.9647	4.5400e-003		144.0781
<b>Total</b>	<b>0.0664</b>	<b>0.0471</b>	<b>0.5213</b>	<b>1.4500e-003</b>	<b>0.1137</b>	<b>1.2100e-003</b>	<b>0.1149</b>	<b>0.0308</b>	<b>1.1200e-003</b>	<b>0.0319</b>		<b>143.9647</b>	<b>143.9647</b>	<b>4.5400e-003</b>		<b>144.0781</b>

**3.6 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>52.4249</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.6 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1635	0.1160	1.2832	3.5600e-003	0.3577	2.9900e-003	0.3607	0.0949	2.7500e-003	0.0976		354.3745	354.3745	0.0112		354.6538
<b>Total</b>	<b>0.1635</b>	<b>0.1160</b>	<b>1.2832</b>	<b>3.5600e-003</b>	<b>0.3577</b>	<b>2.9900e-003</b>	<b>0.3607</b>	<b>0.0949</b>	<b>2.7500e-003</b>	<b>0.0976</b>		<b>354.3745</b>	<b>354.3745</b>	<b>0.0112</b>		<b>354.6538</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>52.4249</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5588	7.2383	17.8495	0.0580	4.7032	0.0514	4.7546	1.2587	0.0479	1.3066		5,899.7977	5,899.7977	0.3380		5,908.2485
Unmitigated	1.7982	8.8598	23.6098	0.0810	6.7189	0.0707	6.7895	1.7982	0.0660	1.8641		8,241.8918	8,241.8918	0.4506		8,253.1560

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	831.60	831.60	831.60	2,841,704	1,989,192
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	147.03	147.03	147.03	318,003	222,602
Total	978.63	978.63	978.63	3,159,706	2,211,795

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

**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	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762
NaturalGas Unmitigated	0.0611	0.5226	0.2231	3.3400e-003		0.0422	0.0422		0.0422	0.0422		667.0125	667.0125	0.0128	0.0122	670.9762

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5652.08	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.5233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.65208	0.0610	0.5209	0.2217	3.3200e-003		0.0421	0.0421		0.0421	0.0421		664.9509	664.9509	0.0127	0.0122	668.9024
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.0175233	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		2.0616	2.0616	4.0000e-005	4.0000e-005	2.0738
<b>Total</b>		<b>0.0611</b>	<b>0.5226</b>	<b>0.2231</b>	<b>3.3300e-003</b>		<b>0.0422</b>	<b>0.0422</b>		<b>0.0422</b>	<b>0.0422</b>		<b>667.0125</b>	<b>667.0125</b>	<b>0.0128</b>	<b>0.0122</b>	<b>670.9762</b>

**6.0 Area Detail**



Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998
Unmitigated	4.1075	2.4464	13.7411	0.0154		0.2562	0.2562		0.2562	0.2562	0.0000	2,957.9998	2,957.9998	0.0786	0.0538	2,975.9998

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2691	2.2991	0.9784	0.0147		0.1859	0.1859		0.1859	0.1859	0.0000	2,935.0588	2,935.0588	0.0563	0.0538	2,952.5004
Landscaping	0.3886	0.1473	12.7627	6.7000e-004		0.0703	0.0703		0.0703	0.0703		22.9409	22.9409	0.0223		23.4994
<b>Total</b>	<b>4.1075</b>	<b>2.4464</b>	<b>13.7411</b>	<b>0.0154</b>		<b>0.2562</b>	<b>0.2562</b>		<b>0.2562</b>	<b>0.2562</b>	<b>0.0000</b>	<b>2,957.9998</b>	<b>2,957.9998</b>	<b>0.0786</b>	<b>0.0538</b>	<b>2,975.9998</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Avalong Bay - Proposed Project (Mitigated) - Los Angeles-South Coast County, Winter

**3.6 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1635	0.1160	1.2832	3.5600e-003	0.2799	2.9900e-003	0.2829	0.0758	2.7500e-003	0.0785		354.3745	354.3745	0.0112		354.6538
<b>Total</b>	<b>0.1635</b>	<b>0.1160</b>	<b>1.2832</b>	<b>3.5600e-003</b>	<b>0.2799</b>	<b>2.9900e-003</b>	<b>0.2829</b>	<b>0.0758</b>	<b>2.7500e-003</b>	<b>0.0785</b>		<b>354.3745</b>	<b>354.3745</b>	<b>0.0112</b>		<b>354.6538</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Density