

Appendix D Air Quality and Greenhouse Gas Emissions Data

Rancho Santa Margarita - Existing Conditions

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3,821.00	1000sqft	314.80	3,821,000.00	0
Government Office Building	1,185.00	1000sqft	219.40	1,185,000.00	0
City Park	4,388.30	Acre	4,388.30	191,154,348.00	0
Golf Course	457.10	Acre	457.10	67,026.00	0
Apartments Low Rise	9,475.00	Dwelling Unit	592.19	9,475,000.00	27099
Condo/Townhouse	2,259.00	Dwelling Unit	141.19	2,259,000.00	6461
Single Family Housing	6,032.00	Dwelling Unit	1,958.44	10,857,600.00	17252
Regional Shopping Center	962.00	1000sqft	22.08	962,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Existing

Construction Phase - Existing and only looking at operational emissions

Vehicle Trips - The total existing daily trips for all of RSM were put into a single land-use

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6,000.00	1.00
tblLandUse	LandUseSquareFeet	19,911,276.00	67,026.00
tblLandUse	LotAcreage	87.72	314.80
tblLandUse	LotAcreage	27.20	219.40
tblVehicleTrips	ST_TR	7.16	19.25
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	6.07	19.25
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.59	19.25
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	5.04	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	2.3200e-003	0.0241	0.0116	2.0000e-005	9.1300e-003	1.2900e-003	0.0104	4.9900e-003	1.1900e-003	6.1800e-003	0.0000	1.8287	1.8287	5.4000e-004	0.0000	1.8423
Maximum	**2.3200e-003**	**0.0241**	**0.0116**	**2.0000e-005**	**9.1300e-003**	**1.2900e-003**	**0.0104**	**4.9900e-003**	**1.1900e-003**	**6.1800e-003**	**0.0000**	**1.8287**	**1.8287**	**5.4000e-004**	**0.0000**	**1.8423**

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	2.3200e-003	0.0241	0.0116	2.0000e-005	9.1300e-003	1.2900e-003	0.0104	4.9900e-003	1.1900e-003	6.1800e-003	0.0000	1.8287	1.8287	5.4000e-004	0.0000	1.8423
Maximum	**2.3200e-003**	**0.0241**	**0.0116**	**2.0000e-005**	**9.1300e-003**	**1.2900e-003**	**0.0104**	**4.9900e-003**	**1.1900e-003**	**6.1800e-003**	**0.0000**	**1.8287**	**1.8287**	**5.4000e-004**	**0.0000**	**1.8423**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	**7-25-2018**	**9-30-2018**	0.0189	0.0189
		Highest	0.0189	0.0189

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	178.7250	6.7506	297.5869	0.2978		17.9715	17.9715		17.9715	17.9715	1,887.0880	3,925.8813	5,812.9692	5.9250	0.1281	5,999.2625
Energy	1.9632	16.9171	8.1674	0.1071		1.3564	1.3564		1.3564	1.3564	0.0000	76,796.5753	76,796.5753	2.7408	0.8462	77,117.2672
Mobile	64.3791	285.5717	891.7275	2.8525	236.3467	3.3611	239.7078	63.2943	3.1671	66.4614	0.0000	261,887.6112	261,887.6112	12.0835	0.0000	262,189.6995
Waste						0.0000	0.0000		0.0000	0.0000	3,844.4722	0.0000	3,844.4722	227.2018	0.0000	9,524.5172
Water						0.0000	0.0000		0.0000	0.0000	679.9755	34,050.5871	34,730.5626	71.2458	1.9399	37,089.8036
Total	**245.0673**	**309.2393**	**1,197.4818**	**3.2574**	**236.3467**	**22.6890**	**259.0357**	**63.2943**	**22.4950**	**85.7893**	**6,411.5357**	**376,660.6549**	**383,072.1906**	**319.1969**	**2.9142**	**391,920.5500**

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	178.7250	6.7506	297.5869	0.2978		17.9715	17.9715		17.9715	17.9715	1,887.0880	3,925.8813	5,812.9692	5.9250	0.1281	5,999.2625
Energy	1.9632	16.9171	8.1674	0.1071		1.3564	1.3564		1.3564	1.3564	0.0000	76,796.5753	76,796.5753	2.7408	0.8462	77,117.2672
Mobile	64.3791	285.5717	891.7275	2.8525	236.3467	3.3611	239.7078	63.2943	3.1671	66.4614	0.0000	261,887.6112	261,887.6112	12.0835	0.0000	262,189.6995
Waste						0.0000	0.0000		0.0000	0.0000	3,844.4722	0.0000	3,844.4722	227.2018	0.0000	9,524.5172
Water						0.0000	0.0000		0.0000	0.0000	679.9755	34,050.5871	34,730.5626	71.2458	1.9399	37,089.8036
Total	**245.0673**	**309.2393**	**1,197.4818**	**3.2574**	**236.3467**	**22.6890**	**259.0357**	**63.2943**	**22.4950**	**85.7893**	**6,411.5357**	**376,660.6549**	**383,072.1906**	**319.1969**	**2.9142**	**391,920.5500**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/25/2018	7/25/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.0300e-003	0.0000	9.0300e-003	4.9700e-003	0.0000	4.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2800e-003	0.0241	0.0112	2.0000e-005		1.2900e-003	1.2900e-003		1.1900e-003	1.1900e-003	0.0000	1.7380	1.7380	5.4000e-004	0.0000	1.7515
Total	**2.2800e-003**	**0.0241**	**0.0112**	**2.0000e-005**	**9.0300e-003**	**1.2900e-003**	**0.0103**	**4.9700e-003**	**1.1900e-003**	**6.1600e-003**	**0.0000**	**1.7380**	**1.7380**	**5.4000e-004**	**0.0000**	**1.7515**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0908	0.0908	0.0000	0.0000	0.0908
Total	**4.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0908**	**0.0908**	**0.0000**	**0.0000**	**0.0908**

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					9.0300e-003	0.0000	9.0300e-003	4.9700e-003	0.0000	4.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2800e-003	0.0241	0.0112	2.0000e-005		1.2900e-003	1.2900e-003		1.1900e-003	1.1900e-003	0.0000	1.7380	1.7380	5.4000e-004	0.0000	1.7515

Total	**2.2800e-003**	**0.0241**	**0.0112**	**2.0000e-005**	**9.0300e-003**	**1.2900e-003**	**0.0103**	**4.9700e-003**	**1.1900e-003**	**6.1600e-003**	**0.0000**	**1.7380**	**1.7380**	**5.4000e-004**	**0.0000**	**1.7515**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0908	0.0908	0.0000	0.0000	0.0908
Total	**4.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0908**	**0.0908**	**0.0000**	**0.0000**	**0.0908**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	64.3791	285.5717	891.7275	2.8525	236.3467	3.3611	239.7078	63.2943	3.1671	66.4614	0.0000	261,887.6112	261,887.6112	12.0835	0.0000	262,189.6995
Unmitigated	64.3791	285.5717	891.7275	2.8525	236.3467	3.3611	239.7078	63.2943	3.1671	66.4614	0.0000	261,887.6112	261,887.6112	12.0835	0.0000	262,189.6995

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	182,393.75	182,393.75	182393.75	623,267,153	623,267,153
City Park	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	182,393.75	182,393.75	182,393.75	623,267,153	623,267,153

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
City Park	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
Condo/Townhouse	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
General Office Building	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
Golf Course	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
Government Office Building	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
Regional Shopping Center	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085
Single Family Housing	0.548103	0.044682	0.212159	0.122193	0.018321	0.005803	0.023836	0.015181	0.001595	0.001677	0.004786	0.000580	0.001085

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	57,367.2049	57,367.2049	2.3684	0.4900	57,572.4378
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	57,367.2049	57,367.2049	2.3684	0.4900	57,572.4378
NaturalGas Mitigated	1.9632	16.9171	8.1674	0.1071		1.3564	1.3564		1.3564	1.3564	0.0000	19,429.3704	19,429.3704	0.3724	0.3562	19,544.8294
NaturalGas Unmitigated	1.9632	16.9171	8.1674	0.1071		1.3564	1.3564		1.3564	1.3564	0.0000	19,429.3704	19,429.3704	0.3724	0.3562	19,544.8294

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 Low Rise	1.20897e+008	0.6519	5.5708	2.3705	0.0356		0.4504	0.4504		0.4504	0.4504	0.0000	6,451.5305	6,451.5305	0.1237	0.1183	6,489.8687
City Park	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
Condo/Townhouse	3.98615e+007	0.2149	1.8368	0.7816	0.0117		0.1485	0.1485		0.1485	0.1485	0.0000	2,127.1603	2,127.1603	0.0408	0.0390	2,139.8009
General Office Building	3.49239e+007	0.1883	1.7120	1.4380	0.0103		0.1301	0.1301		0.1301	0.1301	0.0000	1,863.6744	1,863.6744	0.0357	0.0342	1,874.7493
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.08309e+007	0.0584	0.5309	0.4460	3.1900e-003		0.0404	0.0404		0.0404	0.0404	0.0000	577.9781	577.9781	0.0111	0.0106	581.4127

Regional Shopping Center	1.924e+006	0.0104	0.0943	0.0792	5.7000e-004		7.1700e-003	7.1700e-003		7.1700e-003	7.1700e-003	0.0000	102.6720	102.6720	1.9700e-003	1.8800e-003	103.2821
Single Family Housing	1.55655e+008	0.8393	7.1724	3.0521	0.0458		0.5799	0.5799		0.5799	0.5799	0.0000	8,306.3552	8,306.3552	0.1592	0.1523	8,355.7157
Total		**1.9633**	**16.9171**	**8.1674**	**0.1071**		**1.3564**	**1.3564**		**1.3564**	**1.3564**	**0.0000**	**19,429.3704**	**19,429.3704**	**0.3724**	**0.3562**	**19,544.8294**

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 Low Rise	1.20897e+008	0.6519	5.5708	2.3705	0.0356		0.4504	0.4504		0.4504	0.4504	0.0000	6,451.5305	6,451.5305	0.1237	0.1183	6,489.8687
City Park	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
Condo/Townhouse	3.98615e+007	0.2149	1.8368	0.7816	0.0117		0.1485	0.1485		0.1485	0.1485	0.0000	2,127.1603	2,127.1603	0.0408	0.0390	2,139.8009
General Office Building	3.49239e+007	0.1883	1.7120	1.4380	0.0103		0.1301	0.1301		0.1301	0.1301	0.0000	1,863.6744	1,863.6744	0.0357	0.0342	1,874.7493
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.08309e+007	0.0584	0.5309	0.4460	3.1900e-003		0.0404	0.0404		0.0404	0.0404	0.0000	577.9781	577.9781	0.0111	0.0106	581.4127
Regional Shopping Center	1.924e+006	0.0104	0.0943	0.0792	5.7000e-004		7.1700e-003	7.1700e-003		7.1700e-003	7.1700e-003	0.0000	102.6720	102.6720	1.9700e-003	1.8800e-003	103.2821
Single Family Housing	1.55655e+008	0.8393	7.1724	3.0521	0.0458		0.5799	0.5799		0.5799	0.5799	0.0000	8,306.3552	8,306.3552	0.1592	0.1523	8,355.7157
Total		**1.9633**	**16.9171**	**8.1674**	**0.1071**		**1.3564**	**1.3564**		**1.3564**	**1.3564**	**0.0000**	**19,429.3704**	**19,429.3704**	**0.3724**	**0.3562**	**19,544.8294**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Low Rise	3.94172e+007	12,559.1745	0.5185	0.1073	12,604.1054
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.12239e+007	3,576.1708	0.1476	0.0306	3,588.9646
General Office Building	5.34558e+007	17,032.1600	0.7032	0.1455	17,093.0930
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.65782e+007	5,282.1538	0.2181	0.0451	5,301.0508
Regional Shopping Center	1.10053e+007	3,506.5180	0.1448	0.0300	3,519.0627
Single Family Housing	4.83678e+007	15,411.0279	0.6362	0.1316	15,466.1613
Total		**57,367.2049**	**2.3684**	**0.4900**	**57,572.4378**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.94172e+007	12,559.1745	0.5185	0.1073	12,604.1054
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.12239e+007	3,576.1708	0.1476	0.0306	3,588.9646
General Office Building	5.34558e+007	17,032.1600	0.7032	0.1455	17,093.0930
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.65782e+007	5,282.1538	0.2181	0.0451	5,301.0508
Regional Shopping Center	1.10053e+007	3,506.5180	0.1448	0.0300	3,519.0627
Single Family Housing	4.83678e+007	15,411.0279	0.6362	0.1316	15,466.1613

Total		**57,367.2049**	**2.3684**	**0.4900**	**57,572.4378**

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	178.7250	6.7506	297.5869	0.2978		17.9715	17.9715		17.9715	17.9715	1,887.0880	3,925.8813	5,812.9692	5.9250	0.1281	5,999.2625
Unmitigated	178.7250	6.7506	297.5869	0.2978		17.9715	17.9715		17.9715	17.9715	1,887.0880	3,925.8813	5,812.9692	5.9250	0.1281	5,999.2625

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	9.8342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	104.9981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	58.1916	4.6077	112.9367	0.2881		16.9639	16.9639		16.9639	16.9639	1,887.0880	3,626.3349	5,513.4229	5.6277	0.1281	5,692.2829
Landscaping	5.7011	2.1429	184.6503	9.6800e-003		1.0075	1.0075		1.0075	1.0075	0.0000	299.5464	299.5464	0.2973	0.0000	306.9796
Total	**178.7250**	**6.7506**	**297.5869**	**0.2978**		**17.9715**	**17.9715**		**17.9715**	**17.9715**	**1,887.0880**	**3,925.8813**	**5,812.9692**	**5.9250**	**0.1281**	**5,999.2625**

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	9.8342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	104.9981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	58.1916	4.6077	112.9367	0.2881		16.9639	16.9639		16.9639	16.9639	1,887.0880	3,626.3349	5,513.4229	5.6277	0.1281	5,692.2829
Landscaping	5.7011	2.1429	184.6503	9.6800e-003		1.0075	1.0075		1.0075	1.0075	0.0000	299.5464	299.5464	0.2973	0.0000	306.9796
Total	**178.7250**	**6.7506**	**297.5869**	**0.2978**		**17.9715**	**17.9715**		**17.9715**	**17.9715**	**1,887.0880**	**3,925.8813**	**5,812.9692**	**5.9250**	**0.1281**	**5,999.2625**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	34,730.5626	71.2458	1.9399	37,089.8036
Unmitigated	34,730.5626	71.2458	1.9399	37,089.8036

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	617.334 / 389.189	4,134.7141	20.2785	0.5086	4,793.2454
City Park	0 / 5228.58	18,508.5583	0.7641	0.1581	18,574.7733
Condo/Townhouse	147.183 / 92.7892	985.7857	4.8347	0.1213	1,142.7906
General Office Building	679.121 / 416.235	4,506.3932	22.3063	0.5592	5,230.6832
Golf Course	0 / 544.626	1,927.9133	0.0796	0.0165	1,934.8105
Government Office Building	235.412 / 144.285	1,562.1051	7.7323	0.1938	1,813.1744
Regional Shopping Center	71.2578 / 43.6741	472.8402	2.3405	0.0587	548.8374
Single Family Housing	393.009 / 247.767	2,632.2528	12.9097	0.3238	3,051.4888
Total		**34,730.5626**	**71.2458**	**1.9399**	**37,089.8036**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	617.334 / 389.189	4,134.7141	20.2785	0.5086	4,793.2454
City Park	0 / 5228.58	18,508.5583	0.7641	0.1581	18,574.7733
Condo/Townhouse	147.183 / 92.7892	985.7857	4.8347	0.1213	1,142.7906
General Office Building	679.121 / 416.235	4,506.3932	22.3063	0.5592	5,230.6832
Golf Course	0 / 544.626	1,927.9133	0.0796	0.0165	1,934.8105

Government Office Building	235.412 / 144.285	1,562.1051	7.7323	0.1938	1,813.1744
Regional Shopping Center	71.2578 / 43.6741	472.8402	2.3405	0.0587	548.8374
Single Family Housing	393.009 / 247.767	2,632.2528	12.9097	0.3238	3,051.4888
Total		**34,730.5626**	**71.2458**	**1.9399**	**37,089.8036**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3,844.4722	227.2018	0.0000	9,524.5172
Unmitigated	3,844.4722	227.2018	0.0000	9,524.5172

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4358.5	884.7361	52.2864	0.0000	2,191.8963
City Park	377.39	76.6068	4.5273	0.0000	189.7900

Condo/Townhouse	1039.14	210.9360	12.4660	0.0000	522.5851
General Office Building	3553.53	721.3345	42.6297	0.0000	1,787.0756
Golf Course	425.1	86.2915	5.0997	0.0000	213.7834
Government Office Building	1102.05	223.7062	13.2207	0.0000	554.2226
Regional Shopping Center	1010.1	205.0412	12.1176	0.0000	507.9808
Single Family Housing	7073.32	1,435.8200	84.8545	0.0000	3,557.1834
Total		**3,844.4722**	**227.2018**	**0.0000**	**9,524.5172**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4358.5	884.7361	52.2864	0.0000	2,191.8963
City Park	377.39	76.6068	4.5273	0.0000	189.7900
Condo/Townhouse	1039.14	210.9360	12.4660	0.0000	522.5851
General Office Building	3553.53	721.3345	42.6297	0.0000	1,787.0756
Golf Course	425.1	86.2915	5.0997	0.0000	213.7834
Government Office Building	1102.05	223.7062	13.2207	0.0000	554.2226
Regional Shopping Center	1010.1	205.0412	12.1176	0.0000	507.9808
Single Family Housing	7073.32	1,435.8200	84.8545	0.0000	3,557.1834
Total		**3,844.4722**	**227.2018**	**0.0000**	**9,524.5172**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Rancho Santa Margarita - 2040 General Plan Update - Orange County, Annual

Rancho Santa Margarita - 2040 General Plan Update

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,697.23	1000sqft	314.80	5,697,230.00	0
Government Office Building	1,433.72	1000sqft	219.40	1,433,720.00	0
City Park	4,480.30	Acre	4,480.30	523,872.00	0
Golf Course	457.10	Acre	457.10	67,026.00	0
Apartments Low Rise	9,744.00	Dwelling Unit	514.70	9,744,000.00	27868
Condo/Townhouse	2,282.00	Dwelling Unit	228.20	2,282,000.00	6527
Single Family Housing	6,268.00	Dwelling Unit	895.50	11,282,400.00	17926
Regional Shopping Center	1,480.73	1000sqft	33.99	1,480,730.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per 2040 General Plan Update buildout

Construction Phase - Future 2040 General Plan Update is only looking at operational emissions

Vehicle Trips - The total daily trips from traffic study. All trips for RSM were put into a single land-use.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6,000.00	1.00
tblLandUse	LandUseSquareFeet	195,161,868.00	523,872.00
tblLandUse	LandUseSquareFeet	19,911,276.00	67,026.00
tblLandUse	LotAcreage	130.79	314.80
tblLandUse	LotAcreage	32.91	219.40
tblLandUse	LotAcreage	609.00	514.70
tblLandUse	LotAcreage	142.63	228.20
tblLandUse	LotAcreage	2,035.06	895.50
tblVehicleTrips	ST_TR	7.16	19.71
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	6.07	19.71
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.59	19.71
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	5.04	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	0.00

tblVehicleTrips	WD_TR	9.52	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2056	9.8000e-004	4.0000e-003	7.8900e-003	2.0000e-005	9.1200e-003	1.0000e-004	9.2200e-003	4.9900e-003	1.0000e-004	5.0900e-003	0.0000	2.0002	2.0002	8.0000e-005	0.0000	2.0022
Maximum	**9.8000e-004**	**4.0000e-003**	**7.8900e-003**	**2.0000e-005**	**9.1200e-003**	**1.0000e-004**	**9.2200e-003**	**4.9900e-003**	**1.0000e-004**	**5.0900e-003**	**0.0000**	**2.0002**	**2.0002**	**8.0000e-005**	**0.0000**	**2.0022**

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					
2056	9.8000e-004	4.0000e-003	7.8900e-003	2.0000e-005	9.1200e-003	1.0000e-004	9.2200e-003	4.9900e-003	1.0000e-004	5.0900e-003	0.0000	2.0002	2.0002	8.0000e-005	0.0000	2.0022
Maximum	**9.8000e-004**	**4.0000e-003**	**7.8900e-003**	**2.0000e-005**	**9.1200e-003**	**1.0000e-004**	**9.2200e-003**	**4.9900e-003**	**1.0000e-004**	**5.0900e-003**	**0.0000**	**2.0002**	**2.0002**	**8.0000e-005**	**0.0000**	**2.0022**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

		Highest	

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	192.1873	6.9142	304.2959	0.3067		18.5149	18.5149		18.5149	18.5149	1,943.1716	4,042.6172	5,985.7888	6.0891	0.1319	6,177.3194
Energy	2.1271	18.3774	9.2046	0.1160		1.4696	1.4696		1.4696	1.4696	0.0000	90,776.8787	90,776.8787	3.2821	0.9815	91,151.4206
Mobile	25.4712	131.7801	357.5708	1.9832	249.1301	0.8136	249.9437	66.7345	0.7566	67.4911	0.0000	184,990.2467	184,990.2467	6.6917	0.0000	185,157.5388
Waste						0.0000	0.0000		0.0000	0.0000	4,441.1540	0.0000	4,441.1540	262.4647	0.0000	11,002.7711
Water						0.0000	0.0000		0.0000	0.0000	824.5496	37,320.0664	38,144.6161	86.2299	2.3185	40,991.2675
Total	**219.7856**	**157.0718**	**671.0713**	**2.4059**	**249.1301**	**20.7982**	**269.9283**	**66.7345**	**20.7412**	**87.4757**	**7,208.8753**	**317,129.8090**	**324,338.6843**	**364.7575**	**3.4319**	**334,480.3173**

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	192.1873	6.9142	304.2959	0.3067		18.5149	18.5149		18.5149	18.5149	1,943.1716	4,042.6172	5,985.7888	6.0891	0.1319	6,177.3194
Energy	2.1271	18.3774	9.2046	0.1160		1.4696	1.4696		1.4696	1.4696	0.0000	90,776.8787	90,776.8787	3.2821	0.9815	91,151.4206
Mobile	25.4712	131.7801	357.5708	1.9832	249.1301	0.8136	249.9437	66.7345	0.7566	67.4911	0.0000	184,990.2467	184,990.2467	6.6917	0.0000	185,157.5388
Waste						0.0000	0.0000		0.0000	0.0000	4,441.1540	0.0000	4,441.1540	262.4647	0.0000	11,002.7711
Water						0.0000	0.0000		0.0000	0.0000	824.5496	37,320.0664	38,144.6161	86.2299	2.3185	40,991.2675

Total	219.7856	157.0718	671.0713	2.4059	249.1301	20.7982	269.9283	66.7345	20.7412	87.4757	7,208.8753	317,129.8090	324,338.6843	364.7575	3.4319	334,480.3173

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/22/2056	11/22/2056	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2056

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.0300e-003	0.0000	9.0300e-003	4.9700e-003	0.0000	4.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-004	4.0000e-003	7.8900e-003	2.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	2.0002	2.0002	8.0000e-005	0.0000	2.0022
Total	**9.8000e-004**	**4.0000e-003**	**7.8900e-003**	**2.0000e-005**	**9.0300e-003**	**1.0000e-004**	**9.1300e-003**	**4.9700e-003**	**1.0000e-004**	**5.0700e-003**	**0.0000**	**2.0002**	**2.0002**	**8.0000e-005**	**0.0000**	**2.0022**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					9.0300e-003	0.0000	9.0300e-003	4.9700e-003	0.0000	4.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	9.8000e-004	4.0000e-003	7.8900e-003	2.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	2.0002	2.0002	8.0000e-005	0.0000	2.0022
Total	**9.8000e-004**	**4.0000e-003**	**7.8900e-003**	**2.0000e-005**	**9.0300e-003**	**1.0000e-004**	**9.1300e-003**	**4.9700e-003**	**1.0000e-004**	**5.0700e-003**	**0.0000**	**2.0002**	**2.0002**	**8.0000e-005**	**0.0000**	**2.0022**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	25.4712	131.7801	357.5708	1.9832	249.1301	0.8136	249.9437	66.7345	0.7566	67.4911	0.0000	184,990.2467	184,990.2467	6.6917	0.0000	185,157.5388
Unmitigated	25.4712	131.7801	357.5708	1.9832	249.1301	0.8136	249.9437	66.7345	0.7566	67.4911	0.0000	184,990.2467	184,990.2467	6.6917	0.0000	185,157.5388

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	192,054.24	192,054.24	192054.24	656,278,515	656,278,515
City Park	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	192,054.24	192,054.24	192,054.24	656,278,515	656,278,515

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
City Park	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Condo/Townhouse	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
General Office Building	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Golf Course	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Government Office Building	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Regional Shopping Center	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741

Single Family Housing	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741

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	69,725.9081	69,725.9081	2.8786	0.5956	69,975.3546
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	69,725.9081	69,725.9081	2.8786	0.5956	69,975.3546
NaturalGas Mitigated	2.1271	18.3774	9.2046	0.1160		1.4696	1.4696		1.4696	1.4696	0.0000	21,050.9706	21,050.9706	0.4035	0.3859	21,176.0660
NaturalGas Unmitigated	2.1271	18.3774	9.2046	0.1160		1.4696	1.4696		1.4696	1.4696	0.0000	21,050.9706	21,050.9706	0.4035	0.3859	21,176.0660

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 Low Rise	1.24329e+008	0.6704	5.7289	2.4378	0.0366		0.4632	0.4632		0.4632	0.4632	0.0000	6,634.6927	6,634.6927	0.1272	0.1216	6,674.1193
City Park	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
Condo/Townhouse	4.02673e+007	0.2171	1.8555	0.7896	0.0118		0.1500	0.1500		0.1500	0.1500	0.0000	2,148.8180	2,148.8180	0.0412	0.0394	2,161.5873
General Office Building	5.20727e+007	0.2808	2.5526	2.1442	0.0153		0.1940	0.1940		0.1940	0.1940	0.0000	2,778.7966	2,778.7966	0.0533	0.0509	2,795.3096

Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.31042e+007	0.0707	0.6424	0.5396	3.8500e-003		0.0488	0.0488		0.0488	0.0488	0.0000	699.2901	699.2901	0.0134	0.0128	703.4456
Regional Shopping Center	2.96146e+006	0.0160	0.1452	0.1219	8.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	158.0348	158.0348	3.0300e-003	2.9000e-003	158.9739
Single Family Housing	1.61745e+008	0.8722	7.4530	3.1715	0.0476		0.6026	0.6026		0.6026	0.6026	0.0000	8,631.3386	8,631.3386	0.1654	0.1582	8,682.6303
Total		**2.1271**	**18.3774**	**9.2046**	**0.1160**		**1.4696**	**1.4696**		**1.4696**	**1.4696**	**0.0000**	**21,050.9706**	**21,050.9706**	**0.4035**	**0.3859**	**21,176.0660**

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 Low Rise	1.24329e+008	0.6704	5.7289	2.4378	0.0366		0.4632	0.4632		0.4632	0.4632	0.0000	6,634.6927	6,634.6927	0.1272	0.1216	6,674.1193
City Park	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
Condo/Townhouse	4.02673e+007	0.2171	1.8555	0.7896	0.0118		0.1500	0.1500		0.1500	0.1500	0.0000	2,148.8180	2,148.8180	0.0412	0.0394	2,161.5873
General Office Building	5.20727e+007	0.2808	2.5526	2.1442	0.0153		0.1940	0.1940		0.1940	0.1940	0.0000	2,778.7966	2,778.7966	0.0533	0.0509	2,795.3096
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	1.31042e+007	0.0707	0.6424	0.5396	3.8500e-003		0.0488	0.0488		0.0488	0.0488	0.0000	699.2901	699.2901	0.0134	0.0128	703.4456
Regional Shopping Center	2.96146e+006	0.0160	0.1452	0.1219	8.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	158.0348	158.0348	3.0300e-003	2.9000e-003	158.9739
Single Family Housing	1.61745e+008	0.8722	7.4530	3.1715	0.0476		0.6026	0.6026		0.6026	0.6026	0.0000	8,631.3386	8,631.3386	0.1654	0.1582	8,682.6303
Total		**2.1271**	**18.3774**	**9.2046**	**0.1160**		**1.4696**	**1.4696**		**1.4696**	**1.4696**	**0.0000**	**21,050.9706**	**21,050.9706**	**0.4035**	**0.3859**	**21,176.0660**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.05363e+007	12,915.7358	0.5332	0.1103	12,961.9422
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.13382e+007	3,612.5815	0.1491	0.0309	3,625.5057
General Office Building	7.97042e+007	25,395.4809	1.0484	0.2169	25,486.3340
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	2.00577e+007	6,390.8266	0.2638	0.0546	6,413.6900
Regional Shopping Center	1.69396e+007	5,397.3039	0.2228	0.0461	5,416.6130
Single Family Housing	5.02602e+007	16,013.9793	0.6611	0.1368	16,071.2698
Total		**69,725.9081**	**2.8786**	**0.5956**	**69,975.3546**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.05363e+007	12,915.7358	0.5332	0.1103	12,961.9422
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.13382e+007	3,612.5815	0.1491	0.0309	3,625.5057
General Office Building	7.97042e+007	25,395.4809	1.0484	0.2169	25,486.3340
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	2.00577e+007	6,390.8266	0.2638	0.0546	6,413.6900

Regional Shopping Center	1.69396e+007	5,397.3039	0.2228	0.0461	5,416.6130
Single Family Housing	5.02602e+007	16,013.9793	0.6611	0.1368	16,071.2698
Total		**69,725.9081**	**2.8786**	**0.5956**	**69,975.3546**

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	192.1873	6.9142	304.2959	0.3067		18.5149	18.5149		18.5149	18.5149	1,943.1716	4,042.6172	5,985.7888	6.0891	0.1319	6,177.3194
Unmitigated	192.1873	6.9142	304.2959	0.3067		18.5149	18.5149		18.5149	18.5149	1,943.1716	4,042.6172	5,985.7888	6.0891	0.1319	6,177.3194

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	11.2838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	115.3488					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	59.9211	4.7446	116.2931	0.2967		17.4681	17.4681		17.4681	17.4681	1,943.1716	3,734.1085	5,677.2801	5.7949	0.1319	5,861.4558

Landscaping	5.6336	2.1696	188.0028	9.9800e-003		1.0468	1.0468		1.0468	1.0468	0.0000	308.5087	308.5087	0.2942	0.0000	315.8636
Total	**192.1873**	**6.9142**	**304.2959**	**0.3067**		**18.5149**	**18.5149**		**18.5149**	**18.5149**	**1,943.1716**	**4,042.6172**	**5,985.7888**	**6.0891**	**0.1319**	**6,177.3194**

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	11.2838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	115.3488					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	59.9211	4.7446	116.2931	0.2967		17.4681	17.4681		17.4681	17.4681	1,943.1716	3,734.1085	5,677.2801	5.7949	0.1319	5,861.4558
Landscaping	5.6336	2.1696	188.0028	9.9800e-003		1.0468	1.0468		1.0468	1.0468	0.0000	308.5087	308.5087	0.2942	0.0000	315.8636
Total	**192.1873**	**6.9142**	**304.2959**	**0.3067**		**18.5149**	**18.5149**		**18.5149**	**18.5149**	**1,943.1716**	**4,042.6172**	**5,985.7888**	**6.0891**	**0.1319**	**6,177.3194**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	38,144.6161	86.2299	2.3185	40,991.2675
Unmitigated	38,144.6161	86.2299	2.3185	40,991.2675

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	634.861 / 400.238	4,252.1007	20.8542	0.5231	4,929.3280
City Park	0 / 5338.19	18,896.5873	0.7801	0.1614	18,964.1904
Condo/Townhouse	148.681 / 93.734	995.8224	4.8840	0.1225	1,154.4260
General Office Building	1012.59 / 620.62	6,719.1726	33.2594	0.8337	7,799.1116
Golf Course	0 / 544.626	1,927.9133	0.0796	0.0165	1,934.8105
Government Office Building	284.822 / 174.569	1,889.9758	9.3552	0.2345	2,193.7421
Regional Shopping Center	109.681 / 67.2241	727.8052	3.6026	0.0903	844.7817
Single Family Housing	408.385 / 257.46	2,735.2388	13.4148	0.3365	3,170.8773
Total		**38,144.6160**	**86.2299**	**2.3185**	**40,991.2675**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	634.861 / 400.238	4,252.1007	20.8542	0.5231	4,929.3280
City Park	0 / 5338.19	18,896.5873	0.7801	0.1614	18,964.1904
Condo/Townhouse	148.681 / 93.734	995.8224	4.8840	0.1225	1,154.4260

General Office Building	1012.59 / 620.62	6,719.1726	33.2594	0.8337	7,799.1116
Golf Course	0 / 544.626	1,927.9133	0.0796	0.0165	1,934.8105
Government Office Building	284.822 / 174.569	1,889.9758	9.3552	0.2345	2,193.7421
Regional Shopping Center	109.681 / 67.2241	727.8052	3.6026	0.0903	844.7817
Single Family Housing	408.385 / 257.46	2,735.2388	13.4148	0.3365	3,170.8773
Total		**38,144.6160**	**86.2299**	**2.3185**	**40,991.2675**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4,441.1540	262.4647	0.0000	11,002.7711
Unmitigated	4,441.1540	262.4647	0.0000	11,002.7711

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Apartments Low Rise	4482.24	909.8542	53.7708	0.0000	2,254.1253
City Park	385.31	78.2145	4.6223	0.0000	193.7730
Condo/Townhouse	1049.72	213.0837	12.5929	0.0000	527.9058
General Office Building	5298.42	1,075.5314	63.5621	0.0000	2,664.5835
Golf Course	425.1	86.2915	5.0997	0.0000	213.7834
Government Office Building	1333.36	270.6600	15.9956	0.0000	670.5488
Regional Shopping Center	1554.77	315.6043	18.6517	0.0000	781.8962
Single Family Housing	7349.66	1,491.9146	88.1696	0.0000	3,696.1552
Total		**4,441.1540**	**262.4647**	**0.0000**	**11,002.7711**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4482.24	909.8542	53.7708	0.0000	2,254.1253
City Park	385.31	78.2145	4.6223	0.0000	193.7730
Condo/Townhouse	1049.72	213.0837	12.5929	0.0000	527.9058
General Office Building	5298.42	1,075.5314	63.5621	0.0000	2,664.5835
Golf Course	425.1	86.2915	5.0997	0.0000	213.7834
Government Office Building	1333.36	270.6600	15.9956	0.0000	670.5488
Regional Shopping Center	1554.77	315.6043	18.6517	0.0000	781.8962
Single Family Housing	7349.66	1,491.9146	88.1696	0.0000	3,696.1552

Total		**4,441.1540 262.4647**	**0.0000**	**11,002.7711**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Rancho Santa Margarita - 2040 General Plan Update - Orange County, Summer

Rancho Santa Margarita - 2040 General Plan Update

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,697.23	1000sqft	314.80	5,697,230.00	0
Government Office Building	1,433.72	1000sqft	219.40	1,433,720.00	0
City Park	4,480.30	Acre	4,480.30	523,872.00	0
Golf Course	457.10	Acre	457.10	67,026.00	0
Apartments Low Rise	9,744.00	Dwelling Unit	514.70	9,744,000.00	27868
Single Family Housing	6,268.00	Dwelling Unit	895.50	11,282,400.00	17926
Condo/Townhouse	2,282.00	Dwelling Unit	228.20	2,282,000.00	6527
Regional Shopping Center	1,480.73	1000sqft	33.99	1,480,730.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per 2040 General Plan Update buildout

Construction Phase - Future 2040 General Plan Update is only looking at operational emissions

Vehicle Trips - The total daily trips for all of RSM were put into a single land-use

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6,000.00	1.00
tblConstructionPhase	PhaseEndDate	11/21/2079	11/22/2056
tblLandUse	LandUseSquareFeet	195,161,868.00	523,872.00
tblLandUse	LandUseSquareFeet	19,911,276.00	67,026.00
tblLandUse	LotAcreage	130.79	314.80
tblLandUse	LotAcreage	32.91	219.40
tblLandUse	LotAcreage	609.00	514.70
tblLandUse	LotAcreage	2,035.06	895.50
tblLandUse	LotAcreage	142.63	228.20
tblVehicleTrips	ST_TR	7.16	30.69
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	6.07	30.69
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.59	30.69
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	5.04	0.00
tblVehicleTrips	WD_TR	68.93	0.00

tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00

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					
2056	1.9657	7.9943	15.7797	0.0466	18.2412	0.2026	18.4438	9.9736	0.2026	10.1762	0.0000	4,409.7537	4,409.7537	0.1707	0.0000	4,414.0214
Maximum	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.2412**	**0.2026**	**18.4438**	**9.9736**	**0.2026**	**10.1762**	**0.0000**	**4,409.7537**	**4,409.7537**	**0.1707**	**0.0000**	**4,414.0214**

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					
2056	1.9657	7.9943	15.7797	0.0466	18.2412	0.2026	18.4438	9.9736	0.2026	10.1762	0.0000	4,409.7537	4,409.7537	0.1707	0.0000	4,414.0214
Maximum	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.2412**	**0.2026**	**18.4438**	**9.9736**	**0.2026**	**10.1762**	**0.0000**	**4,409.7537**	**4,409.7537**	**0.1707**	**0.0000**	**4,414.0214**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589
Energy	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512
Mobile	227.5039	1,098.0661	3,163.3751	17.5001	2,169.5341	6.9645	2,176.4986	580.2987	6.4766	586.7752		1,798,071.4009	1,798,071.4009	63.0880		1,799,648.6012
Total	**5,771.7918**	**1,595.6910**	**14,021.2809**	**41.9495**	**2,169.5341**	**1,420.8398**	**3,590.3740**	**580.2987**	**1,420.3519**	**2,000.6505**	**171,358.4052**	**2,257,233.1492**	**2,428,591.5544**	**579.1433**	**13.9617**	**2,447,230.7112**

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	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589
Energy	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512
Mobile	227.5039	1,098.0661	3,163.3751	17.5001	2,169.5341	6.9645	2,176.4986	580.2987	6.4766	586.7752		1,798,071.4009	1,798,071.4009	63.0880		1,799,648.6012
Total	**5,771.7918**	**1,595.6910**	**14,021.2809**	**41.9495**	**2,169.5341**	**1,420.8398**	**3,590.3740**	**580.2987**	**1,420.3519**	**2,000.6505**	**171,358.4052**	**2,257,233.1492**	**2,428,591.5544**	**579.1433**	**13.9617**	**2,447,230.7112**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/22/2056	11/22/2056	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2056

Unmitigated Construction On-Site

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

Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026		4,409.7537	4,409.7537	0.1707		4,414.0214
Total	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.0663**	**0.2026**	**18.2688**	**9.9307**	**0.2026**	**10.1333**		**4,409.7537**	**4,409.7537**	**0.1707**		**4,414.0214**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1749	0.0000	0.1749	0.0429	0.0000	0.0429			0.0000			0.0000
Total					**0.1749**	**0.0000**	**0.1749**	**0.0429**	**0.0000**	**0.0429**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026	0.0000	4,409.7537	4,409.7537	0.1707		4,414.0214
Total	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.0663**	**0.2026**	**18.2688**	**9.9307**	**0.2026**	**10.1333**	**0.0000**	**4,409.7537**	**4,409.7537**	**0.1707**		**4,414.0214**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1749	0.0000	0.1749	0.0429	0.0000	0.0429			0.0000			0.0000
Total					**0.1749**	**0.0000**	**0.1749**	**0.0429**	**0.0000**	**0.0429**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	227.5039	1,098.0661	3,163.3751	17.5001	2,169.5341	6.9645	2,176.4986	580.2987	6.4766	586.7752		1,798,071.4009	1,798,071.4009	63.0880		1,799,648.6012
Unmitigated	227.5039	1,098.0661	3,163.3751	17.5001	2,169.5341	6.9645	2,176.4986	580.2987	6.4766	586.7752		1,798,071.4009	1,798,071.4009	63.0880		1,799,648.6012

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	299,043.36	299,043.36	299043.36	1,021,876,592	1,021,876,592

City Park	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	299,043.36	299,043.36	299,043.36	1,021,876,592	1,021,876,592

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
City Park	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Condo/Townhouse	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
General Office Building	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Golf Course	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Government Office Building	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Regional Shopping Center	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Single Family Housing	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741

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	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512
NaturalGas Unmitigated	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512

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 Low Rise	340629	3.6735	31.3913	13.3580	0.2004		2.5380	2.5380		2.5380	2.5380		40,073.9549	40,073.9549	0.7681	0.7347	40,312.0943
City Park	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
Condo/Townhouse	110321	1.1897	10.1669	4.3263	0.0649		0.8220	0.8220		0.8220	0.8220		12,978.9936	12,978.9936	0.2488	0.2380	13,056.1213
General Office Building	142665	1.5385	13.9868	11.7489	0.0839		1.0630	1.0630		1.0630	1.0630		16,784.1039	16,784.1039	0.3217	0.3077	16,883.8434
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	35901.9	0.3872	3.5198	2.9566	0.0211		0.2675	0.2675		0.2675	0.2675		4,223.7553	4,223.7553	0.0810	0.0774	4,248.8550
Regional Shopping Center	8113.59	0.0875	0.7955	0.6682	4.7700e-003		0.0605	0.0605		0.0605	0.0605		954.5399	954.5399	0.0183	0.0175	960.2122
Single Family Housing	443137	4.7789	40.8382	17.3779	0.2607		3.3018	3.3018		3.3018	3.3018		52,133.8198	52,133.8198	0.9992	0.9558	52,443.6250

Total		**11.6553**	**100.6983**	**50.4359**	**0.6357**		**8.0528**	**8.0528**		**8.0528**	**8.0528**		**127,149.1673**	**127,149.1673**	**2.4370**	**2.3311**	**127,904.7512**

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 Low Rise	340.629	3.6735	31.3913	13.3580	0.2004		2.5380	2.5380		2.5380	2.5380		40,073.9549	40,073.9549	0.7681	0.7347	40,312.0943
City Park	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
Condo/Townhouse	110.321	1.1897	10.1669	4.3263	0.0649		0.8220	0.8220		0.8220	0.8220		12,978.9936	12,978.9936	0.2488	0.2380	13,056.1213
General Office Building	142.665	1.5385	13.9868	11.7489	0.0839		1.0630	1.0630		1.0630	1.0630		16,784.1039	16,784.1039	0.3217	0.3077	16,883.8434
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	35.9019	0.3872	3.5198	2.9566	0.0211		0.2675	0.2675		0.2675	0.2675		4,223.7553	4,223.7553	0.0810	0.0774	4,248.8550
Regional Shopping Center	8.11359	0.0875	0.7955	0.6682	4.7700e-003		0.0605	0.0605		0.0605	0.0605		954.5399	954.5399	0.0183	0.0175	960.2122
Single Family Housing	443.137	4.7789	40.8382	17.3779	0.2607		3.3018	3.3018		3.3018	3.3018		52,133.8198	52,133.8198	0.9992	0.9558	52,443.6250
Total		**11.6553**	**100.6983**	**50.4359**	**0.6357**		**8.0528**	**8.0528**		**8.0528**	**8.0528**		**127,149.1673**	**127,149.1673**	**2.4370**	**2.3311**	**127,904.7512**

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	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589
Unmitigated	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589

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	61.8293					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	632.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,793.6866	379.5698	9,303.4474	23.7339		1,397.4479	1,397.4479		1,397.4479	1,397.4479	171,358.4052	329,292.0000	500,650.4052	511.0239	11.6306	516,891.9187
Landscaping	45.0687	17.3568	1,504.0225	0.0798		8.3746	8.3746		8.3746	8.3746		2,720.5810	2,720.5810	2.5944		2,785.4402
Total	**5,532.6326**	**396.9266**	**10,807.4699**	**23.8137**		**1,405.8226**	**1,405.8226**		**1,405.8226**	**1,405.8226**	**171,358.4052**	**332,012.5810**	**503,370.9862**	**513.6182**	**11.6306**	**519,677.3588**

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	61.8293					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	632.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,793.6866	379.5698	9,303.4474	23.7339		1,397.4479	1,397.4479		1,397.4479	1,397.4479	171,358.4052	329,292.0000	500,650.4052	511.0239	11.6306	516,891.9187

Landscaping	45.0687	17.3568	1,504.0225	0.0798		8.3746	8.3746		8.3746	8.3746		2,720.5810	2,720.5810	2.5944		2,785.4402
Total	**5,532.6326**	**396.9266**	**10,807.4699**	**23.8137**		**1,405.8226**	**1,405.8226**		**1,405.8226**	**1,405.8226**	**171,358.4052**	**332,012.5810**	**503,370.9862**	**513.6182**	**11.6306**	**519,677.3588**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Rancho Santa Margarita - 2040 General Plan Update - Orange County, Winter

Rancho Santa Margarita - 2040 General Plan Update

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,697.23	1000sqft	314.80	5,697,230.00	0
Government Office Building	1,433.72	1000sqft	219.40	1,433,720.00	0
City Park	4,480.30	Acre	4,480.30	523,872.00	0
Golf Course	457.10	Acre	457.10	67,026.00	0
Apartments Low Rise	9,744.00	Dwelling Unit	514.70	9,744,000.00	27868
Single Family Housing	6,268.00	Dwelling Unit	895.50	11,282,400.00	17926
Condo/Townhouse	2,282.00	Dwelling Unit	228.20	2,282,000.00	6527
Regional Shopping Center	1,480.73	1000sqft	33.99	1,480,730.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per 2040 General Plan Update buildout

Construction Phase - Future 2040 General Plan Update is only looking at operational emissions

Vehicle Trips - The total daily trips for all of RSM were put into a single land-use

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6,000.00	1.00
tblConstructionPhase	PhaseEndDate	11/21/2079	11/22/2056
tblLandUse	LandUseSquareFeet	195,161,868.00	523,872.00
tblLandUse	LandUseSquareFeet	19,911,276.00	67,026.00
tblLandUse	LotAcreage	130.79	314.80
tblLandUse	LotAcreage	32.91	219.40
tblLandUse	LotAcreage	609.00	514.70
tblLandUse	LotAcreage	2,035.06	895.50
tblLandUse	LotAcreage	142.63	228.20
tblVehicleTrips	ST_TR	7.16	30.69
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	6.07	30.69
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.59	30.69
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	5.04	0.00
tblVehicleTrips	WD_TR	68.93	0.00

tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00

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					
2056	1.9657	7.9943	15.7797	0.0466	18.2412	0.2026	18.4438	9.9736	0.2026	10.1762	0.0000	4,409.7537	4,409.7537	0.1707	0.0000	4,414.0214
Maximum	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.2412**	**0.2026**	**18.4438**	**9.9736**	**0.2026**	**10.1762**	**0.0000**	**4,409.7537**	**4,409.7537**	**0.1707**	**0.0000**	**4,414.0214**

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					
2056	1.9657	7.9943	15.7797	0.0466	18.2412	0.2026	18.4438	9.9736	0.2026	10.1762	0.0000	4,409.7537	4,409.7537	0.1707	0.0000	4,414.0214
Maximum	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.2412**	**0.2026**	**18.4438**	**9.9736**	**0.2026**	**10.1762**	**0.0000**	**4,409.7537**	**4,409.7537**	**0.1707**	**0.0000**	**4,414.0214**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589
Energy	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512
Mobile	223.8996	1,112.2498	3,021.0855	16.7697	2,169.5341	6.9748	2,176.5089	580.2987	6.4864	586.7850		1,724,417.2296	1,724,417.2296	63.4149		1,726,002.6019
Total	**5,768.1876**	**1,609.8747**	**13,878.9913**	**41.2192**	**2,169.5341**	**1,420.8501**	**3,590.3843**	**580.2987**	**1,420.3617**	**2,000.6604**	**171,358.4052**	**2,183,578.9779**	**2,354,937.3831**	**579.4702**	**13.9617**	**2,373,584.7119**

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	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589
Energy	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512
Mobile	223.8996	1,112.2498	3,021.0855	16.7697	2,169.5341	6.9748	2,176.5089	580.2987	6.4864	586.7850		1,724,417.2296	1,724,417.2296	63.4149		1,726,002.6019
Total	**5,768.1876**	**1,609.8747**	**13,878.9913**	**41.2192**	**2,169.5341**	**1,420.8501**	**3,590.3843**	**580.2987**	**1,420.3617**	**2,000.6604**	**171,358.4052**	**2,183,578.9779**	**2,354,937.3831**	**579.4702**	**13.9617**	**2,373,584.7119**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/22/2056	11/22/2056	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2056

Unmitigated Construction On-Site

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

Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026		4,409.7537	4,409.7537	0.1707		4,414.0214
Total	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.0663**	**0.2026**	**18.2688**	**9.9307**	**0.2026**	**10.1333**		**4,409.7537**	**4,409.7537**	**0.1707**		**4,414.0214**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1749	0.0000	0.1749	0.0429	0.0000	0.0429			0.0000			0.0000
Total					**0.1749**	**0.0000**	**0.1749**	**0.0429**	**0.0000**	**0.0429**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	1.9657	7.9943	15.7797	0.0466		0.2026	0.2026		0.2026	0.2026	0.0000	4,409.7537	4,409.7537	0.1707		4,414.0214
Total	**1.9657**	**7.9943**	**15.7797**	**0.0466**	**18.0663**	**0.2026**	**18.2688**	**9.9307**	**0.2026**	**10.1333**	**0.0000**	**4,409.7537**	**4,409.7537**	**0.1707**		**4,414.0214**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1749	0.0000	0.1749	0.0429	0.0000	0.0429			0.0000			0.0000
Total					**0.1749**	**0.0000**	**0.1749**	**0.0429**	**0.0000**	**0.0429**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	223.8996	1,112.2498	3,021.0855	16.7697	2,169.5341	6.9748	2,176.5089	580.2987	6.4864	586.7850		1,724,417.2296	1,724,417.2296	63.4149		1,726,002.6019
Unmitigated	223.8996	1,112.2498	3,021.0855	16.7697	2,169.5341	6.9748	2,176.5089	580.2987	6.4864	586.7850		1,724,417.2296	1,724,417.2296	63.4149		1,726,002.6019

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	299,043.36	299,043.36	299043.36	1,021,876,592	1,021,876,592

City Park	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	299,043.36	299,043.36	299,043.36	1,021,876,592	1,021,876,592

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
City Park	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Condo/Townhouse	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
General Office Building	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Golf Course	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Government Office Building	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Regional Shopping Center	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741
Single Family Housing	0.568908	0.042250	0.208291	0.102433	0.012079	0.005826	0.028362	0.022028	0.001968	0.001428	0.005032	0.000655	0.000741

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	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512
NaturalGas Unmitigated	11.6553	100.6983	50.4359	0.6358		8.0528	8.0528		8.0528	8.0528		127,149.1673	127,149.1673	2.4370	2.3311	127,904.7512

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 Low Rise	340629	3.6735	31.3913	13.3580	0.2004		2.5380	2.5380		2.5380	2.5380		40,073.9549	40,073.9549	0.7681	0.7347	40,312.0943
City Park	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
Condo/Townhouse	110321	1.1897	10.1669	4.3263	0.0649		0.8220	0.8220		0.8220	0.8220		12,978.9936	12,978.9936	0.2488	0.2380	13,056.1213
General Office Building	142665	1.5385	13.9868	11.7489	0.0839		1.0630	1.0630		1.0630	1.0630		16,784.1039	16,784.1039	0.3217	0.3077	16,883.8434
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	35901.9	0.3872	3.5198	2.9566	0.0211		0.2675	0.2675		0.2675	0.2675		4,223.7553	4,223.7553	0.0810	0.0774	4,248.8550
Regional Shopping Center	8113.59	0.0875	0.7955	0.6682	4.7700e-003		0.0605	0.0605		0.0605	0.0605		954.5399	954.5399	0.0183	0.0175	960.2122
Single Family Housing	443137	4.7789	40.8382	17.3779	0.2607		3.3018	3.3018		3.3018	3.3018		52,133.8198	52,133.8198	0.9992	0.9558	52,443.6250

Total		**11.6553**	**100.6983**	**50.4359**	**0.6357**		**8.0528**	**8.0528**		**8.0528**	**8.0528**		**127,149.1673**	**127,149.1673**	**2.4370**	**2.3311**	**127,904.7512**

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 Low Rise	340.629	3.6735	31.3913	13.3580	0.2004		2.5380	2.5380		2.5380	2.5380		40,073.9549	40,073.9549	0.7681	0.7347	40,312.0943
City Park	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
Condo/Townhouse	110.321	1.1897	10.1669	4.3263	0.0649		0.8220	0.8220		0.8220	0.8220		12,978.9936	12,978.9936	0.2488	0.2380	13,056.1213
General Office Building	142.665	1.5385	13.9868	11.7489	0.0839		1.0630	1.0630		1.0630	1.0630		16,784.1039	16,784.1039	0.3217	0.3077	16,883.8434
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	35.9019	0.3872	3.5198	2.9566	0.0211		0.2675	0.2675		0.2675	0.2675		4,223.7553	4,223.7553	0.0810	0.0774	4,248.8550
Regional Shopping Center	8.11359	0.0875	0.7955	0.6682	4.7700e-003		0.0605	0.0605		0.0605	0.0605		954.5399	954.5399	0.0183	0.0175	960.2122
Single Family Housing	443.137	4.7789	40.8382	17.3779	0.2607		3.3018	3.3018		3.3018	3.3018		52,133.8198	52,133.8198	0.9992	0.9558	52,443.6250
Total		**11.6553**	**100.6983**	**50.4359**	**0.6357**		**8.0528**	**8.0528**		**8.0528**	**8.0528**		**127,149.1673**	**127,149.1673**	**2.4370**	**2.3311**	**127,904.7512**

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	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589
Unmitigated	5,532.6326	396.9266	10,807.4699	23.8137		1,405.8226	1,405.8226		1,405.8226	1,405.8226	171,358.4052	332,012.5810	503,370.9862	513.6182	11.6306	519,677.3589

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	61.8293					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	632.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,793.6866	379.5698	9,303.4474	23.7339		1,397.4479	1,397.4479		1,397.4479	1,397.4479	171,358.4052	329,292.0000	500,650.4052	511.0239	11.6306	516,891.9187
Landscaping	45.0687	17.3568	1,504.0225	0.0798		8.3746	8.3746		8.3746	8.3746		2,720.5810	2,720.5810	2.5944		2,785.4402
Total	**5,532.6326**	**396.9266**	**10,807.4699**	**23.8137**		**1,405.8226**	**1,405.8226**		**1,405.8226**	**1,405.8226**	**171,358.4052**	**332,012.5810**	**503,370.9862**	**513.6182**	**11.6306**	**519,677.3588**

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	61.8293					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	632.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,793.6866	379.5698	9,303.4474	23.7339		1,397.4479	1,397.4479		1,397.4479	1,397.4479	171,358.4052	329,292.0000	500,650.4052	511.0239	11.6306	516,891.9187

Landscaping	45.0687	17.3568	1,504.0225	0.0798		8.3746	8.3746		8.3746	8.3746		2,720.5810	2,720.5810	2.5944		2,785.4402
Total	**5,532.6326**	**396.9266**	**10,807.4699**	**23.8137**		**1,405.8226**	**1,405.8226**		**1,405.8226**	**1,405.8226**	**171,358.4052**	**332,012.5810**	**503,370.9862**	**513.6182**	**11.6306**	**519,677.3588**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Land Use	Natural Gas Use (kBTU/yr)	Electricity Use (kWh/yr)	Electricity Use (MWh/yr)
Apartments Low Rise	124,329,000	40,536,300	40,536
City Park	-	-	0
Condo/Townhouse	40,267,300	11,338,200	11,338
General Office Building	52,072,700	79,704,200	79,704
Golf Course	-	-	0
Government Office Building	13,104,200	20,057,700	20,058
Regional Shopping Center	2,961,460	16,939,600	16,940
Single Family Housing	161,745,000	50,260,200	50,260
Total	**394,479,660**	**218,836,200**	**218,836**
Total Therms	3,944,797		

1 kBTU = 0.01 therms

Energy Type	Project Annual Energy Consumption	Orange County Annual Energy Consumption	Percentage Increase Countywide
Electricity	218,836	20,391,000	1.07%
Natural Gas	3,944,797	569,000,000	0.69%

Vehicle Type	Percent of Vehicle Trips[1]	Daily Trips[2]	Annual Vehicle Miles Traveled[3]	Average Fuel Economy (miles per gallon)[4]	Total Annual Fuel Consumption (gallons)[5]
Passenger Cars	0.57		230,185,064	22	10,462,957
Light/Medium Trucks	0.397		160,321,878	17.3	9,267,161
Heavy Trucks/Other	0.0316		12,761,137	6.4	1,993,928
TOTAL [6]	***1.00***		***403,833,445***	**--**	***21,724,046***

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips calculated by multiplying the total daily trips by percent vehicle trips (i.e., Daily Trips x percent of Vehicle Trips).
3. Daily Vehicle Miles Traveled (VMT) calculated by multiplying percent vehicle trips by total VMT (i.e., VMT x percent of Vehicle Trips).
4. Average fuel economy derived from the Department of Transportation.
5. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
6. Values may be slightly off due to rounding.

Source: Refer to Appendix D, *Air Quality Data* , for CalEEMod assumptions used in this analysis.

Countywide

1,248,703,310 1.74%

1.76

Annual VMT

656,278,515

Year	Season	Sub Area	Vehicle Class		Pollutant	Gallons/Day (000)	Gallons/Year (000)	
2006	Annual	Orange (SC)	LDA		Fuel	1613.468229	588915.9037	
2006	Annual	Orange (SC)	LDT1		Fuel	219.7291504	80201.13989	
2006	Annual	Orange (SC)	LDT2		Fuel	876.7319215	320007.1513	
2006	Annual	Orange (SC)	LHD1		Fuel	213.1968429	77816.84766	
2006	Annual	Orange (SC)	LHD2		Fuel	37.87695014	13825.0868	
2006	Annual	Orange (SC)	MCY		Fuel	8.470332718	3091.671442	
2006	Annual	Orange (SC)	MDV		Fuel	892.4171601	325732.2634	
2006	Annual	Orange (SC)	MH		Fuel	18.37779145	6707.89388	
2006	Annual	Orange (SC)	PTO		Fuel	6.697831835	2444.70862	
2006	Annual	Orange (SC)	SBUS		Fuel	5.442796903	1986.62087	
2006	Annual	Orange (SC)	UBUS		Fuel	27.43306764	10013.06969	
2006	Annual	Orange (SC)	Motor Coach		Fuel	3.398695139	1240.523726	
2006	Annual	Orange (SC)	OBUS		Fuel	5.996449589	2188.7041	
2006	Annual	Orange (SC)	All Other Buses		Fuel	3.53608786	1290.672069	
				2006 Total		**3932.773307**	**1435462.257**	1,435,462,257
2007	Annual	Orange (SC)	LDA		Fuel	1595.396503	582319.7237	
2007	Annual	Orange (SC)	LDT1		Fuel	207.405286	75702.92938	
2007	Annual	Orange (SC)	LDT2		Fuel	874.8849352	319333.0014	
2007	Annual	Orange (SC)	LHD1		Fuel	210.4829951	76826.29321	
2007	Annual	Orange (SC)	LHD2		Fuel	36.39215348	13283.13602	
2007	Annual	Orange (SC)	MCY		Fuel	8.949619043	3266.610951	
2007	Annual	Orange (SC)	MDV		Fuel	896.038027	327053.8798	
2007	Annual	Orange (SC)	MH		Fuel	17.62840274	6434.367001	
2007	Annual	Orange (SC)	PTO		Fuel	6.896637732	2517.272772	
2007	Annual	Orange (SC)	SBUS		Fuel	5.486385275	2002.530625	
2007	Annual	Orange (SC)	UBUS		Fuel	27.76874615	10135.59235	
2007	Annual	Orange (SC)	Motor Coach		Fuel	3.501259208	1277.959611	
2007	Annual	Orange (SC)	OBUS		Fuel	6.449514257	2354.072704	
2007	Annual	Orange (SC)	All Other Buses		Fuel	3.481993503	1270.927629	
				2007 Total		**3900.762458**	**1423778.297**	1,423,778,297
2008	Annual	Orange (SC)	LDA		Fuel	1522.694421	555783.4638	
2008	Annual	Orange (SC)	LDT1		Fuel	207.0760473	75582.75725	
2008	Annual	Orange (SC)	LDT2		Fuel	839.0789377	306263.8123	
2008	Annual	Orange (SC)	LHD1		Fuel	192.9662749	70432.69036	
2008	Annual	Orange (SC)	LHD2		Fuel	37.45174935	13669.88851	
2008	Annual	Orange (SC)	MCY		Fuel	9.372447201	3420.943228	
2008	Annual	Orange (SC)	MDV		Fuel	856.5229666	312630.8828	
2008	Annual	Orange (SC)	MH		Fuel	16.21197772	5917.371869	
2008	Annual	Orange (SC)	PTO		Fuel	6.181867427	2256.381611	
2008	Annual	Orange (SC)	SBUS		Fuel	5.095595263	1859.892271	
2008	Annual	Orange (SC)	UBUS		Fuel	34.37539031	12547.01746	
2008	Annual	Orange (SC)	Motor Coach		Fuel	3.212835079	1172.684804	
2008	Annual	Orange (SC)	OBUS		Fuel	6.472294007	2362.387312	
2008	Annual	Orange (SC)	All Other Buses		Fuel	3.224124658	1176.8055	
				2008 Total		**3739.936929**	**1365076.979**	1,365,076,979

2009	Annual	Orange (SC)	LDA		Fuel	1538.853997	561681.7089	
2009	Annual	Orange (SC)	LDT1		Fuel	205.8895232	75149.67598	
2009	Annual	Orange (SC)	LDT2		Fuel	845.7114818	308684.6908	
2009	Annual	Orange (SC)	LHD1		Fuel	179.4108707	65484.96782	
2009	Annual	Orange (SC)	LHD2		Fuel	34.75787456	12686.62421	
2009	Annual	Orange (SC)	MCY		Fuel	9.454674057	3450.956031	
2009	Annual	Orange (SC)	MDV		Fuel	830.241367	303038.0989	
2009	Annual	Orange (SC)	MH		Fuel	15.93929144	5817.841374	
2009	Annual	Orange (SC)	PTO		Fuel	6.032220021	2201.760308	
2009	Annual	Orange (SC)	SBUS		Fuel	4.802733591	1752.997761	
2009	Annual	Orange (SC)	UBUS		Fuel	33.35230149	12173.59004	
2009	Annual	Orange (SC)	Motor Coach		Fuel	2.943485703	1074.372282	
2009	Annual	Orange (SC)	OBUS		Fuel	7.849339479	2865.00891	
2009	Annual	Orange (SC)	All Other Buses		Fuel	2.979059255	1087.356628	
				2009 Total		**3718.218219**	**1357149.65**	1,357,149,650
2010	Annual	Orange (SC)	LDA		Fuel	1558.202575	568743.9398	
2010	Annual	Orange (SC)	LDT1		Fuel	202.8079973	74024.91903	
2010	Annual	Orange (SC)	LDT2		Fuel	872.2231278	318361.4416	
2010	Annual	Orange (SC)	LHD1		Fuel	169.6720601	61930.30193	
2010	Annual	Orange (SC)	LHD2		Fuel	34.31805278	12526.08926	
2010	Annual	Orange (SC)	MCY		Fuel	9.197174279	3356.968612	
2010	Annual	Orange (SC)	MDV		Fuel	818.40558	298718.0367	
2010	Annual	Orange (SC)	MH		Fuel	15.37983388	5613.639367	
2010	Annual	Orange (SC)	PTO		Fuel	5.872735308	2143.548387	
2010	Annual	Orange (SC)	SBUS		Fuel	4.826999424	1761.85479	
2010	Annual	Orange (SC)	UBUS		Fuel	30.95856352	11299.87568	
2010	Annual	Orange (SC)	Motor Coach		Fuel	2.968413384	1083.470885	
2010	Annual	Orange (SC)	OBUS		Fuel	8.144461145	2972.728318	
2010	Annual	Orange (SC)	All Other Buses		Fuel	3.12263764	1139.762738	
				2010 Total		**3736.100211**	**1363676.577**	1,363,676,577
2011	Annual	Orange (SC)	LDA		Fuel	1550.769354	566030.8141	
2011	Annual	Orange (SC)	LDT1		Fuel	185.6300442	67754.96614	
2011	Annual	Orange (SC)	LDT2		Fuel	896.0254495	327049.2891	
2011	Annual	Orange (SC)	LHD1		Fuel	157.0979546	57340.75342	
2011	Annual	Orange (SC)	LHD2		Fuel	34.12260509	12454.75086	
2011	Annual	Orange (SC)	MCY		Fuel	9.042688666	3300.581363	
2011	Annual	Orange (SC)	MDV		Fuel	795.9216988	290511.4201	
2011	Annual	Orange (SC)	MH		Fuel	14.41835154	5262.698312	
2011	Annual	Orange (SC)	PTO		Fuel	5.905132415	2155.373331	
2011	Annual	Orange (SC)	SBUS		Fuel	4.896272958	1787.13963	
2011	Annual	Orange (SC)	UBUS		Fuel	29.96827731	10938.42122	
2011	Annual	Orange (SC)	Motor Coach		Fuel	3.003012311	1096.099494	
2011	Annual	Orange (SC)	OBUS		Fuel	7.922043174	2891.545758	
2011	Annual	Orange (SC)	All Other Buses		Fuel	3.061947904	1117.610985	
				2011 Total		**3697.784832**	**1349691.464**	1,349,691,464

2012	Annual	Orange (SC)	LDA		Fuel	1543.981474	563553.2381	
2012	Annual	Orange (SC)	LDT1		Fuel	176.9469824	64585.64857	
2012	Annual	Orange (SC)	LDT2		Fuel	884.6942688	322913.4081	
2012	Annual	Orange (SC)	LHD1		Fuel	143.705033	52452.33705	
2012	Annual	Orange (SC)	LHD2		Fuel	32.89522814	12006.75827	
2012	Annual	Orange (SC)	MCY		Fuel	9.067174743	3309.518781	
2012	Annual	Orange (SC)	MDV		Fuel	767.2048952	280029.7868	
2012	Annual	Orange (SC)	MH		Fuel	13.51479551	4932.900362	
2012	Annual	Orange (SC)	PTO		Fuel	5.85598563	2137.434755	
2012	Annual	Orange (SC)	SBUS		Fuel	4.828699826	1762.475437	
2012	Annual	Orange (SC)	UBUS		Fuel	29.23627336	10671.23977	
2012	Annual	Orange (SC)	Motor Coach		Fuel	3.00582523	1097.126209	
2012	Annual	Orange (SC)	OBUS		Fuel	7.798129923	2846.317422	
2012	Annual	Orange (SC)	All Other Buses		Fuel	3.196272195	1166.639351	
				2012 Total		**3625.931038**	**1323464.829**	1,323,464,829
2013	Annual	Orange (SC)	LDA		Fuel	1552.440515	566640.788	
2013	Annual	Orange (SC)	LDT1		Fuel	171.5916397	62630.9485	
2013	Annual	Orange (SC)	LDT2		Fuel	874.4401237	319170.6452	
2013	Annual	Orange (SC)	LHD1		Fuel	135.8764669	49594.91041	
2013	Annual	Orange (SC)	LHD2		Fuel	32.74850408	11953.20399	
2013	Annual	Orange (SC)	MCY		Fuel	9.151178774	3340.180252	
2013	Annual	Orange (SC)	MDV		Fuel	743.1921371	271265.13	
2013	Annual	Orange (SC)	MH		Fuel	12.9471937	4725.725701	
2013	Annual	Orange (SC)	PTO		Fuel	6.168595091	2251.537208	
2013	Annual	Orange (SC)	SBUS		Fuel	4.836462548	1765.30883	
2013	Annual	Orange (SC)	UBUS		Fuel	28.86270167	10534.88611	
2013	Annual	Orange (SC)	Motor Coach		Fuel	3.119633689	1138.666296	
2013	Annual	Orange (SC)	OBUS		Fuel	7.991968032	2917.068332	
2013	Annual	Orange (SC)	All Other Buses		Fuel	3.400093104	1241.033983	
				2013 Total		**3586.767213**	**1309170.033**	1,309,170,033
2014	Annual	Orange (SC)	LDA		Fuel	1579.054235	576354.7958	
2014	Annual	Orange (SC)	LDT1		Fuel	168.1413014	61371.57502	
2014	Annual	Orange (SC)	LDT2		Fuel	875.2956923	319482.9277	
2014	Annual	Orange (SC)	LHD1		Fuel	129.5774927	47295.78484	
2014	Annual	Orange (SC)	LHD2		Fuel	33.08358858	12075.50983	
2014	Annual	Orange (SC)	MCY		Fuel	9.414068654	3436.135059	
2014	Annual	Orange (SC)	MDV		Fuel	728.1704207	265782.2036	
2014	Annual	Orange (SC)	MH		Fuel	12.58244214	4592.59138	
2014	Annual	Orange (SC)	PTO		Fuel	6.405167081	2337.885984	
2014	Annual	Orange (SC)	SBUS		Fuel	5.001385404	1825.505673	
2014	Annual	Orange (SC)	UBUS		Fuel	28.62515056	10448.17995	
2014	Annual	Orange (SC)	Motor Coach		Fuel	3.20969198	1171.537573	
2014	Annual	Orange (SC)	OBUS		Fuel	8.305468033	3031.495832	
2014	Annual	Orange (SC)	All Other Buses		Fuel	3.543762873	1293.473449	
				2014 Total		**3590.409868**	**1310499.602**	1,310,499,602

2015	Annual	Orange (SC)	LDA		Fuel	1592.180192	581145.77	
2015	Annual	Orange (SC)	LDT1		Fuel	164.0358699	59873.09251	
2015	Annual	Orange (SC)	LDT2		Fuel	868.6054833	317041.0014	
2015	Annual	Orange (SC)	LHD1		Fuel	123.2546281	44987.93926	
2015	Annual	Orange (SC)	LHD2		Fuel	33.25691494	12138.77395	
2015	Annual	Orange (SC)	MCY		Fuel	9.668731865	3529.087131	
2015	Annual	Orange (SC)	MDV		Fuel	708.4842596	258596.7548	
2015	Annual	Orange (SC)	MH		Fuel	12.15640157	4437.086574	
2015	Annual	Orange (SC)	PTO		Fuel	6.768086176	2470.351454	
2015	Annual	Orange (SC)	SBUS		Fuel	5.273661983	1924.886624	
2015	Annual	Orange (SC)	UBUS		Fuel	28.25477422	10312.99259	
2015	Annual	Orange (SC)	Motor Coach		Fuel	3.36260201	1227.349734	
2015	Annual	Orange (SC)	OBUS		Fuel	8.609843066	3142.592719	
2015	Annual	Orange (SC)	All Other Buses		Fuel	3.816248598	1392.930738	
				2015 Total		**3567.727697**	**1302220.609**	1,302,220,609
2016	Annual	Orange (SC)	LDA		Fuel	1606.670759	586434.827	
2016	Annual	Orange (SC)	LDT1		Fuel	160.8324694	58703.85132	
2016	Annual	Orange (SC)	LDT2		Fuel	861.7752949	314547.9826	
2016	Annual	Orange (SC)	LHD1		Fuel	117.5609222	42909.73662	
2016	Annual	Orange (SC)	LHD2		Fuel	33.51626741	12233.4376	
2016	Annual	Orange (SC)	MCY		Fuel	9.988416484	3645.772017	
2016	Annual	Orange (SC)	MDV		Fuel	689.9082447	251816.5093	
2016	Annual	Orange (SC)	MH		Fuel	11.80088264	4307.322162	
2016	Annual	Orange (SC)	PTO		Fuel	7.130872832	2602.768584	
2016	Annual	Orange (SC)	SBUS		Fuel	5.520650803	2015.037543	
2016	Annual	Orange (SC)	UBUS		Fuel	28.13791025	10270.33724	
2016	Annual	Orange (SC)	Motor Coach		Fuel	3.507786447	1280.342053	
2016	Annual	Orange (SC)	OBUS		Fuel	8.967194318	3273.025926	
2016	Annual	Orange (SC)	All Other Buses		Fuel	4.044732794	1476.32747	
				2016 Total		**3549.362404**	**1295517.278**	1,295,517,278
2017	Annual	Orange (SC)	LDA		Fuel	1603.7455	585367.1075	
2017	Annual	Orange (SC)	LDT1		Fuel	157.7037208	57561.85808	
2017	Annual	Orange (SC)	LDT2		Fuel	851.3608008	310746.6923	
2017	Annual	Orange (SC)	LHD1		Fuel	111.955861	40863.88926	
2017	Annual	Orange (SC)	LHD2		Fuel	33.57660795	12255.4619	
2017	Annual	Orange (SC)	MCY		Fuel	10.28199914	3752.929688	
2017	Annual	Orange (SC)	MDV		Fuel	669.3692683	244319.7829	
2017	Annual	Orange (SC)	MH		Fuel	11.41978148	4168.220238	
2017	Annual	Orange (SC)	PTO		Fuel	7.360240025	2686.487609	
2017	Annual	Orange (SC)	SBUS		Fuel	5.706645768	2082.925705	
2017	Annual	Orange (SC)	UBUS		Fuel	27.7430517	10126.21387	
2017	Annual	Orange (SC)	Motor Coach		Fuel	3.590662502	1310.591813	
2017	Annual	Orange (SC)	OBUS		Fuel	9.261927379	3380.603493	
2017	Annual	Orange (SC)	All Other Buses		Fuel	4.240243628	1547.688924	
				2017 Total		**3507.316311**	**1280170.453**	1,280,170,453

2018	Annual	Orange (SC)	LDA		Fuel	1577.57989	575816.6598	
2018	Annual	Orange (SC)	LDT1		Fuel	153.0796521	55874.07302	
2018	Annual	Orange (SC)	LDT2		Fuel	830.6512879	303187.7201	
2018	Annual	Orange (SC)	LHD1		Fuel	105.5521374	38526.53016	
2018	Annual	Orange (SC)	LHD2		Fuel	33.15528974	12101.68076	
2018	Annual	Orange (SC)	MCY		Fuel	10.47372	3822.9078	
2018	Annual	Orange (SC)	MDV		Fuel	642.388285	234471.724	
2018	Annual	Orange (SC)	MH		Fuel	10.47372384	3822.909202	
2018	Annual	Orange (SC)	PTO		Fuel	7.609392525	2777.428272	
2018	Annual	Orange (SC)	SBUS		Fuel	5.743284765	2096.298939	
2018	Annual	Orange (SC)	UBUS		Fuel	26.82633325	9791.611636	
2018	Annual	Orange (SC)	Motor Coach		Fuel	3.681347491	1343.691834	
2018	Annual	Orange (SC)	OBUS		Fuel	9.470833269	3456.854143	
2018	Annual	Orange (SC)	All Other Buses		Fuel	4.419784385	1613.221301	
				2018 Total		**3421.104962**	**1248703.311**	1,248,703,310

Year	Season	Sub Area	Vehicle Class	Pollutant	Gallons/Day (000)	Gallons/Year (000)	
2006	Annual	Orange (SC)	T6 Ag	Fuel	0.106087113	38.72179611	
2006	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.209262274	76.38073013	
2006	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.638971684	233.2246648	
2006	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	2.114692405	771.8627276	
2006	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	11.40004845	4161.017684	
2006	Annual	Orange (SC)	T6 Instate Heavy	Fuel	33.70269138	12301.48235	
2006	Annual	Orange (SC)	T6 Instate Small	Fuel	91.02461882	33223.98587	
2006	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.119899419	43.76328785	
2006	Annual	Orange (SC)	T6 OOS Small	Fuel	0.366106762	133.628968	
2006	Annual	Orange (SC)	T6 Public	Fuel	1.520672791	555.0455689	
2006	Annual	Orange (SC)	T6 Utility	Fuel	0.540674631	197.3462405	
2006	Annual	Orange (SC)	T6TS	Fuel	34.33074551	12530.72211	
2006	Annual	Orange (SC)	T7 Ag	Fuel	0.063461139	23.16331568	
2006	Annual	Orange (SC)	T7 CAIRP	Fuel	25.43445957	9283.577741	
2006	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.421735451	883.9334397	
2006	Annual	Orange (SC)	T7 NNOOS	Fuel	31.83356258	11619.25034	
2006	Annual	Orange (SC)	T7 NOOS	Fuel	10.21675807	3729.116696	
2006	Annual	Orange (SC)	T7 POLA	Fuel	28.54832075	10420.13707	
2006	Annual	Orange (SC)	T7 Public	Fuel	4.223241578	1541.483176	
2006	Annual	Orange (SC)	T7 Single	Fuel	26.42522117	9645.205727	
2006	Annual	Orange (SC)	T7 Single Construction	Fuel	5.974894525	2180.836502	
2006	Annual	Orange (SC)	T7 SWCV	Fuel	27.20944422	9931.447141	
2006	Annual	Orange (SC)	T7 Tractor	Fuel	34.25187042	12501.9327	
2006	Annual	Orange (SC)	T7 Tractor Construction	Fuel	4.453451914	1625.509949	
2006	Annual	Orange (SC)	T7 Utility	Fuel	0.252920646	92.3160357	
2006	Annual	Orange (SC)	T7IS	Fuel	3.590703493	1310.606775	
			2006 Total		**380.9745168**	**139055.6986**	139,055,699
2007	Annual	Orange (SC)	T6 Ag	Fuel	0.106338319	38.81348628	
2007	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.215543675	78.6734412	
2007	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.658456527	240.3366324	
2007	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.633376482	596.182416	
2007	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	8.821919583	3220.000648	
2007	Annual	Orange (SC)	T6 Instate Heavy	Fuel	35.39432024	12918.92689	
2007	Annual	Orange (SC)	T6 Instate Small	Fuel	95.54275612	34873.10598	
2007	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.123498425	45.07692513	
2007	Annual	Orange (SC)	T6 OOS Small	Fuel	0.377270844	137.7038581	
2007	Annual	Orange (SC)	T6 Public	Fuel	1.518417493	554.2223848	
2007	Annual	Orange (SC)	T6 Utility	Fuel	0.547288299	199.760229	
2007	Annual	Orange (SC)	T6TS	Fuel	36.0798296	13169.1378	
2007	Annual	Orange (SC)	T7 Ag	Fuel	0.063583542	23.20799299	
2007	Annual	Orange (SC)	T7 CAIRP	Fuel	26.20204748	9563.747329	
2007	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	1.875951092	684.7221484	
2007	Annual	Orange (SC)	T7 NNOOS	Fuel	32.79679788	11970.83123	
2007	Annual	Orange (SC)	T7 NOOS	Fuel	10.52479369	3841.549696	
2007	Annual	Orange (SC)	T7 POLA	Fuel	28.31378311	10334.53083	
2007	Annual	Orange (SC)	T7 Public	Fuel	4.27338139	1559.784207	
2007	Annual	Orange (SC)	T7 Single	Fuel	27.20200157	9928.730572	
2007	Annual	Orange (SC)	T7 Single Construction	Fuel	4.615915766	1684.809255	
2007	Annual	Orange (SC)	T7 SWCV	Fuel	26.87030819	9807.66249	
2007	Annual	Orange (SC)	T7 Tractor	Fuel	35.24013205	12862.6482	
2007	Annual	Orange (SC)	T7 Tractor Construction	Fuel	3.444252362	1257.152112	
2007	Annual	Orange (SC)	T7 Utility	Fuel	0.258783495	94.45597582	
2007	Annual	Orange (SC)	T7IS	Fuel	3.499153622	1277.191072	
			2007 Total		**386.1999008**	**140962.9638**	140,962,964

2008	Annual	Orange (SC)	T6 Ag	Fuel	0.106374735	38.82677821	
2008	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.197824187	72.20582834	
2008	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.605330113	220.9454911	
2008	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.40555964	513.0292686	
2008	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	7.612375937	2778.517217	
2008	Annual	Orange (SC)	T6 Instate Heavy	Fuel	33.29796247	12153.7563	
2008	Annual	Orange (SC)	T6 Instate Small	Fuel	90.91281048	33183.17582	
2008	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.113345825	41.37122603	
2008	Annual	Orange (SC)	T6 OOS Small	Fuel	0.346831405	126.5934629	
2008	Annual	Orange (SC)	T6 Public	Fuel	1.481819427	540.8640908	
2008	Annual	Orange (SC)	T6 Utility	Fuel	0.559697108	204.2894446	
2008	Annual	Orange (SC)	T6TS	Fuel	34.09756738	12445.61209	
2008	Annual	Orange (SC)	T7 Ag	Fuel	0.06202716	22.63991336	
2008	Annual	Orange (SC)	T7 CAIRP	Fuel	23.16891569	8456.654225	
2008	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	1.545868567	564.242027	
2008	Annual	Orange (SC)	T7 NNOOS	Fuel	28.98504889	10579.54284	
2008	Annual	Orange (SC)	T7 NOOS	Fuel	9.209925697	3361.622879	
2008	Annual	Orange (SC)	T7 POLA	Fuel	25.70628119	9382.792634	
2008	Annual	Orange (SC)	T7 Public	Fuel	4.364103616	1592.89782	
2008	Annual	Orange (SC)	T7 Single	Fuel	24.32605219	8879.00905	
2008	Annual	Orange (SC)	T7 Single Construction	Fuel	3.962013472	1446.134917	
2008	Annual	Orange (SC)	T7 SWCV	Fuel	26.32063549	9607.031955	
2008	Annual	Orange (SC)	T7 Tractor	Fuel	32.33088085	11800.77151	
2008	Annual	Orange (SC)	T7 Tractor Construction	Fuel	2.956973234	1079.29523	
2008	Annual	Orange (SC)	T7 Utility	Fuel	0.273429595	99.80180234	
2008	Annual	Orange (SC)	T7IS	Fuel	3.658053721	1335.189608	
			2008 Total		**357.6077081**	**130526.8134**	130,526,813
2009	Annual	Orange (SC)	T6 Ag	Fuel	0.105784425	38.61131522	
2009	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.180899652	66.028373	
2009	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.554353786	202.3391318	
2009	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.015580315	370.6868151	
2009	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	5.512197334	2011.952027	
2009	Annual	Orange (SC)	T6 Instate Heavy	Fuel	30.43464968	11108.64713	
2009	Annual	Orange (SC)	T6 Instate Small	Fuel	82.35170098	30058.37086	
2009	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.103648702	37.83177628	
2009	Annual	Orange (SC)	T6 OOS Small	Fuel	0.317623886	115.9327183	
2009	Annual	Orange (SC)	T6 Public	Fuel	1.427307934	520.9673959	
2009	Annual	Orange (SC)	T6 Utility	Fuel	0.567266589	207.0523049	
2009	Annual	Orange (SC)	T6TS	Fuel	31.30464431	11426.19517	
2009	Annual	Orange (SC)	T7 Ag	Fuel	0.061790206	22.55342528	
2009	Annual	Orange (SC)	T7 CAIRP	Fuel	21.26306768	7761.019705	
2009	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	1.118853037	408.3813585	
2009	Annual	Orange (SC)	T7 NNOOS	Fuel	26.70466507	9747.202749	
2009	Annual	Orange (SC)	T7 NOOS	Fuel	8.456419504	3086.593119	
2009	Annual	Orange (SC)	T7 POLA	Fuel	21.19528104	7736.277578	
2009	Annual	Orange (SC)	T7 Public	Fuel	4.301551748	1570.066388	
2009	Annual	Orange (SC)	T7 Single	Fuel	23.75392268	8670.18178	
2009	Annual	Orange (SC)	T7 Single Construction	Fuel	2.863743796	1045.266486	
2009	Annual	Orange (SC)	T7 SWCV	Fuel	26.27894564	9591.815158	
2009	Annual	Orange (SC)	T7 Tractor	Fuel	29.72179239	10848.45422	
2009	Annual	Orange (SC)	T7 Tractor Construction	Fuel	2.136279646	779.7420708	
2009	Annual	Orange (SC)	T7 Utility	Fuel	0.270261675	98.64551124	
2009	Annual	Orange (SC)	T7IS	Fuel	2.854280862	1041.812515	
			2009 Total		**324.8565126**	**118572.6271**	118,572,627

2010	Annual	Orange (SC)	T6 Ag	Fuel	0.104965153	38.3122807	
2010	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.182246381	66.51992896	
2010	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.558982724	204.0286943	
2010	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.213919063	443.0804579	
2010	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	6.604255559	2410.553279	
2010	Annual	Orange (SC)	T6 Instate Heavy	Fuel	31.29715944	11423.4632	
2010	Annual	Orange (SC)	T6 Instate Small	Fuel	84.0324125	30671.83056	
2010	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.104420327	38.11341937	
2010	Annual	Orange (SC)	T6 OOS Small	Fuel	0.320276094	116.9007741	
2010	Annual	Orange (SC)	T6 Public	Fuel	1.499410497	547.2848316	
2010	Annual	Orange (SC)	T6 Utility	Fuel	0.571371268	208.5505127	
2010	Annual	Orange (SC)	T6TS	Fuel	30.43668129	11109.38867	
2010	Annual	Orange (SC)	T7 Ag	Fuel	0.061292668	22.37182365	
2010	Annual	Orange (SC)	T7 CAIRP	Fuel	21.49657935	7846.251462	
2010	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	1.341042146	489.4803831	
2010	Annual	Orange (SC)	T7 NNOOS	Fuel	27.04861436	9872.744241	
2010	Annual	Orange (SC)	T7 NOOS	Fuel	8.560038634	3124.414102	
2010	Annual	Orange (SC)	T7 POLA	Fuel	25.94359752	9469.413093	
2010	Annual	Orange (SC)	T7 Public	Fuel	4.430705985	1617.207685	
2010	Annual	Orange (SC)	T7 Single	Fuel	23.12170109	8439.420898	
2010	Annual	Orange (SC)	T7 Single Construction	Fuel	3.422638851	1249.263181	
2010	Annual	Orange (SC)	T7 SWCV	Fuel	26.40626715	9638.28751	
2010	Annual	Orange (SC)	T7 Tractor	Fuel	29.73474536	10853.18206	
2010	Annual	Orange (SC)	T7 Tractor Construction	Fuel	2.551515173	931.3030383	
2010	Annual	Orange (SC)	T7 Utility	Fuel	0.260538485	95.09654716	
2010	Annual	Orange (SC)	T7IS	Fuel	2.794329778	1019.930369	
			2010 Total		**334.0997068**	**121946.393**	121,946,393
2011	Annual	Orange (SC)	T6 Ag	Fuel	0.104130472	38.00762238	
2011	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.184829683	67.46283415	
2011	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.569759204	207.9621095	
2011	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.64697964	601.1475688	
2011	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	8.988360395	3280.751544	
2011	Annual	Orange (SC)	T6 Instate Heavy	Fuel	33.6743287	12291.12997	
2011	Annual	Orange (SC)	T6 Instate Small	Fuel	91.86505123	33530.7437	
2011	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.105900462	38.65366861	
2011	Annual	Orange (SC)	T6 OOS Small	Fuel	0.326450611	119.1544732	
2011	Annual	Orange (SC)	T6 Public	Fuel	1.519420462	554.5884687	
2011	Annual	Orange (SC)	T6 Utility	Fuel	0.584160096	213.218435	
2011	Annual	Orange (SC)	T6TS	Fuel	32.74645131	11952.45473	
2011	Annual	Orange (SC)	T7 Ag	Fuel	0.060755613	22.17579873	
2011	Annual	Orange (SC)	T7 CAIRP	Fuel	21.80016626	7957.060684	
2011	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	1.822851414	665.3407662	
2011	Annual	Orange (SC)	T7 NNOOS	Fuel	27.33175405	9976.090229	
2011	Annual	Orange (SC)	T7 NOOS	Fuel	8.687002293	3170.755837	
2011	Annual	Orange (SC)	T7 POLA	Fuel	25.68192888	9373.90404	
2011	Annual	Orange (SC)	T7 Public	Fuel	4.456695191	1626.693745	
2011	Annual	Orange (SC)	T7 Single	Fuel	23.22740172	8478.001628	
2011	Annual	Orange (SC)	T7 Single Construction	Fuel	4.629262911	1689.680963	
2011	Annual	Orange (SC)	T7 SWCV	Fuel	26.51247244	9677.052439	
2011	Annual	Orange (SC)	T7 Tractor	Fuel	30.03287556	10961.99958	
2011	Annual	Orange (SC)	T7 Tractor Construction	Fuel	3.451359796	1259.746326	
2011	Annual	Orange (SC)	T7 Utility	Fuel	0.265490736	96.90411882	
2011	Annual	Orange (SC)	T7IS	Fuel	2.412642766	880.6146095	
			2011 Total		**352.6884819**	**128731.2959**	128,731,296

2012	Annual	Orange (SC)	T6 Ag	Fuel	0.103140662	37.64634165	
2012	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.185007126	67.52760097	
2012	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.568666975	207.5634458	
2012	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.816499078	663.0221636	
2012	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	9.945467887	3630.095779	
2012	Annual	Orange (SC)	T6 Instate Heavy	Fuel	34.5010483	12592.88263	
2012	Annual	Orange (SC)	T6 Instate Small	Fuel	96.62929906	35269.69416	
2012	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.106394162	38.83386924	
2012	Annual	Orange (SC)	T6 OOS Small	Fuel	0.325824805	118.9260539	
2012	Annual	Orange (SC)	T6 Public	Fuel	1.548180307	565.0858119	
2012	Annual	Orange (SC)	T6 Utility	Fuel	0.593580219	216.6567798	
2012	Annual	Orange (SC)	T6TS	Fuel	34.33780439	12533.2986	
2012	Annual	Orange (SC)	T7 Ag	Fuel	0.060181794	21.96635489	
2012	Annual	Orange (SC)	T7 CAIRP	Fuel	21.92681759	8003.288421	
2012	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.016249042	735.9309002	
2012	Annual	Orange (SC)	T7 NNOOS	Fuel	27.29260071	9961.79926	
2012	Annual	Orange (SC)	T7 NOOS	Fuel	8.795818786	3210.473857	
2012	Annual	Orange (SC)	T7 POLA	Fuel	25.93195693	9465.16428	
2012	Annual	Orange (SC)	T7 Public	Fuel	4.437478042	1619.679485	
2012	Annual	Orange (SC)	T7 Single	Fuel	23.09512429	8429.720365	
2012	Annual	Orange (SC)	T7 Single Construction	Fuel	5.094896308	1859.637153	
2012	Annual	Orange (SC)	T7 SWCV	Fuel	27.09753509	9890.600309	
2012	Annual	Orange (SC)	T7 Tractor	Fuel	30.01157317	10954.22421	
2012	Annual	Orange (SC)	T7 Tractor Construction	Fuel	3.798474276	1386.443111	
2012	Annual	Orange (SC)	T7 Utility	Fuel	0.265788883	97.01294221	
2012	Annual	Orange (SC)	T7IS	Fuel	2.232120799	814.7240918	
			2012 Total		**362.7175287**	**132391.898**	132,391,898
2013	Annual	Orange (SC)	T6 Ag	Fuel	0.102747453	37.50282029	
2013	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.190240243	69.43768885	
2013	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.59469748	217.0645802	
2013	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.897719132	692.6674833	
2013	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	10.39789691	3795.232372	
2013	Annual	Orange (SC)	T6 Instate Heavy	Fuel	36.34438982	13265.70228	
2013	Annual	Orange (SC)	T6 Instate Small	Fuel	102.5971423	37447.95694	
2013	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.109591635	40.00094662	
2013	Annual	Orange (SC)	T6 OOS Small	Fuel	0.340739306	124.3698468	
2013	Annual	Orange (SC)	T6 Public	Fuel	1.535980442	560.6328613	
2013	Annual	Orange (SC)	T6 Utility	Fuel	0.600259543	219.0947333	
2013	Annual	Orange (SC)	T6TS	Fuel	33.69760465	12299.6257	
2013	Annual	Orange (SC)	T7 Ag	Fuel	0.05996657	21.88779788	
2013	Annual	Orange (SC)	T7 CAIRP	Fuel	22.30845653	8142.586633	
2013	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.103699049	767.8501528	
2013	Annual	Orange (SC)	T7 NNOOS	Fuel	27.66473427	10097.62801	
2013	Annual	Orange (SC)	T7 NOOS	Fuel	8.950637145	3266.982558	
2013	Annual	Orange (SC)	T7 POLA	Fuel	26.75950538	9767.219463	
2013	Annual	Orange (SC)	T7 Public	Fuel	4.470215462	1631.628644	
2013	Annual	Orange (SC)	T7 Single	Fuel	24.27864676	8861.706068	
2013	Annual	Orange (SC)	T7 Single Construction	Fuel	5.293182639	1932.011663	
2013	Annual	Orange (SC)	T7 SWCV	Fuel	26.73576627	9758.554687	
2013	Annual	Orange (SC)	T7 Tractor	Fuel	30.42431262	11104.87411	
2013	Annual	Orange (SC)	T7 Tractor Construction	Fuel	3.946399461	1440.435803	
2013	Annual	Orange (SC)	T7 Utility	Fuel	0.264438275	96.51997032	
2013	Annual	Orange (SC)	T7IS	Fuel	2.320351264	846.9282115	
			2013 Total		**373.9893206**	**136506.102**	136,506,102

2014	Annual	Orange (SC)	T6 Ag	Fuel	0.102741893	37.50079106	
2014	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.197767496	72.18513597	
2014	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.613242272	223.8334293	
2014	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	1.987362192	725.3872001	
2014	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	10.84595542	3958.773727	
2014	Annual	Orange (SC)	T6 Instate Heavy	Fuel	38.74996097	14143.73575	
2014	Annual	Orange (SC)	T6 Instate Small	Fuel	106.3629074	38822.46121	
2014	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.113821925	41.54500256	
2014	Annual	Orange (SC)	T6 OOS Small	Fuel	0.351364775	128.248143	
2014	Annual	Orange (SC)	T6 Public	Fuel	1.505269383	549.4233247	
2014	Annual	Orange (SC)	T6 Utility	Fuel	0.615623151	224.70245	
2014	Annual	Orange (SC)	T6TS	Fuel	33.02300062	12053.39523	
2014	Annual	Orange (SC)	T7 Ag	Fuel	0.059958587	21.88488425	
2014	Annual	Orange (SC)	T7 CAIRP	Fuel	22.99724641	8393.994938	
2014	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.21292014	807.7158512	
2014	Annual	Orange (SC)	T7 NNOOS	Fuel	28.09805828	10255.79127	
2014	Annual	Orange (SC)	T7 NOOS	Fuel	9.242031464	3373.341484	
2014	Annual	Orange (SC)	T7 POLA	Fuel	27.47583655	10028.68034	
2014	Annual	Orange (SC)	T7 Public	Fuel	4.437160274	1619.5635	
2014	Annual	Orange (SC)	T7 Single	Fuel	25.24119283	9213.035382	
2014	Annual	Orange (SC)	T7 Single Construction	Fuel	5.490921746	2004.186437	
2014	Annual	Orange (SC)	T7 SWCV	Fuel	26.15900258	9548.035942	
2014	Annual	Orange (SC)	T7 Tractor	Fuel	31.22492507	11397.09765	
2014	Annual	Orange (SC)	T7 Tractor Construction	Fuel	4.108647338	1499.656278	
2014	Annual	Orange (SC)	T7 Utility	Fuel	0.263981665	96.3533079	
2014	Annual	Orange (SC)	T7IS	Fuel	2.428271173	886.3189783	
			2014 Total		**383.9091716**	**140126.8476**	140,126,848
2015	Annual	Orange (SC)	T6 Ag	Fuel	0.102572196	37.43885167	
2015	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.209290764	76.39112877	
2015	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.649035357	236.8979054	
2015	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	2.062127314	752.6764696	
2015	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	11.28714683	4119.808593	
2015	Annual	Orange (SC)	T6 Instate Heavy	Fuel	41.85948133	15278.71069	
2015	Annual	Orange (SC)	T6 Instate Small	Fuel	113.4507165	41409.51153	
2015	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.120415397	43.95161973	
2015	Annual	Orange (SC)	T6 OOS Small	Fuel	0.371872868	135.7335968	
2015	Annual	Orange (SC)	T6 Public	Fuel	1.472568055	537.48734	
2015	Annual	Orange (SC)	T6 Utility	Fuel	0.619835777	226.2400585	
2015	Annual	Orange (SC)	T6TS	Fuel	32.1009728	11716.85507	
2015	Annual	Orange (SC)	T7 Ag	Fuel	0.059876515	21.85492802	
2015	Annual	Orange (SC)	T7 CAIRP	Fuel	24.14828607	8814.124415	
2015	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.272455149	829.4461294	
2015	Annual	Orange (SC)	T7 NNOOS	Fuel	29.09865986	10621.01085	
2015	Annual	Orange (SC)	T7 NOOS	Fuel	9.720084315	3547.830775	
2015	Annual	Orange (SC)	T7 POLA	Fuel	28.38046896	10358.87117	
2015	Annual	Orange (SC)	T7 Public	Fuel	4.398702526	1605.526422	
2015	Annual	Orange (SC)	T7 Single	Fuel	26.75165108	9764.352643	
2015	Annual	Orange (SC)	T7 Single Construction	Fuel	5.631293233	2055.42203	
2015	Annual	Orange (SC)	T7 SWCV	Fuel	25.76095934	9402.750158	
2015	Annual	Orange (SC)	T7 Tractor	Fuel	32.64187188	11914.28324	
2015	Annual	Orange (SC)	T7 Tractor Construction	Fuel	4.219776014	1540.218245	
2015	Annual	Orange (SC)	T7 Utility	Fuel	0.264014233	96.36519488	
2015	Annual	Orange (SC)	T7IS	Fuel	2.551636619	931.347366	
			2015 Total		**400.205771**	**146075.1064**	146,075,106

2016	Annual	Orange (SC)	T6 Ag	Fuel	0.102567484	37.4371318	
2016	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.219387707	80.07651292	
2016	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.679245984	247.9247842	
2016	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	2.149296738	784.4933092	
2016	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	11.72112225	4278.209623	
2016	Annual	Orange (SC)	T6 Instate Heavy	Fuel	44.68553853	16310.22156	
2016	Annual	Orange (SC)	T6 Instate Small	Fuel	119.0913203	43468.33191	
2016	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.126199683	46.06288426	
2016	Annual	Orange (SC)	T6 OOS Small	Fuel	0.389182422	142.0515839	
2016	Annual	Orange (SC)	T6 Public	Fuel	1.4463037	527.9008506	
2016	Annual	Orange (SC)	T6 Utility	Fuel	0.624157693	227.817558	
2016	Annual	Orange (SC)	T6TS	Fuel	31.45593605	11481.41666	
2016	Annual	Orange (SC)	T7 Ag	Fuel	0.059870353	21.85267875	
2016	Annual	Orange (SC)	T7 CAIRP	Fuel	25.16389758	9184.822615	
2016	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.337720803	853.2680929	
2016	Annual	Orange (SC)	T7 NNOOS	Fuel	29.9314063	10924.9633	
2016	Annual	Orange (SC)	T7 NOOS	Fuel	10.14336458	3702.328072	
2016	Annual	Orange (SC)	T7 POLA	Fuel	29.80246556	10877.89993	
2016	Annual	Orange (SC)	T7 Public	Fuel	4.37098384	1595.409102	
2016	Annual	Orange (SC)	T7 Single	Fuel	28.26819065	10317.88959	
2016	Annual	Orange (SC)	T7 Single Construction	Fuel	5.813060346	2121.767026	
2016	Annual	Orange (SC)	T7 SWCV	Fuel	25.51155307	9311.716871	
2016	Annual	Orange (SC)	T7 Tractor	Fuel	33.96315898	12396.55303	
2016	Annual	Orange (SC)	T7 Tractor Construction	Fuel	4.364223439	1592.941555	
2016	Annual	Orange (SC)	T7 Utility	Fuel	0.264347121	96.48669926	
2016	Annual	Orange (SC)	T7IS	Fuel	2.693130633	982.992681	
			2016 Total		**415.3776318**	**151612.8356**	151,612,836
2017	Annual	Orange (SC)	T6 Ag	Fuel	0.104407979	38.10891219	
2017	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.226284889	82.59398431	
2017	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.699566552	255.3417916	
2017	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	2.231238897	814.4021975	
2017	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	12.12409282	4425.29388	
2017	Annual	Orange (SC)	T6 Instate Heavy	Fuel	46.94750128	17135.83797	
2017	Annual	Orange (SC)	T6 Instate Small	Fuel	123.0359935	44908.13764	
2017	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.129919388	47.42057664	
2017	Annual	Orange (SC)	T6 OOS Small	Fuel	0.400825344	146.3012504	
2017	Annual	Orange (SC)	T6 Public	Fuel	1.420098746	518.3360421	
2017	Annual	Orange (SC)	T6 Utility	Fuel	0.63408351	231.440481	
2017	Annual	Orange (SC)	T6TS	Fuel	30.69873704	11205.03902	
2017	Annual	Orange (SC)	T7 Ag	Fuel	0.059949283	21.88148819	
2017	Annual	Orange (SC)	T7 CAIRP	Fuel	25.85538947	9437.217155	
2017	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.394267099	873.9074913	
2017	Annual	Orange (SC)	T7 NNOOS	Fuel	30.37547904	11087.04985	
2017	Annual	Orange (SC)	T7 NOOS	Fuel	10.42205283	3804.049282	
2017	Annual	Orange (SC)	T7 POLA	Fuel	31.08624181	11346.47826	
2017	Annual	Orange (SC)	T7 Public	Fuel	4.350793912	1588.039778	
2017	Annual	Orange (SC)	T7 Single	Fuel	29.27187228	10684.23338	
2017	Annual	Orange (SC)	T7 Single Construction	Fuel	5.954962091	2173.561163	
2017	Annual	Orange (SC)	T7 SWCV	Fuel	25.20208556	9198.761228	
2017	Annual	Orange (SC)	T7 Tractor	Fuel	34.84363881	12717.92817	
2017	Annual	Orange (SC)	T7 Tractor Construction	Fuel	4.479171459	1634.897583	
2017	Annual	Orange (SC)	T7 Utility	Fuel	0.257659051	94.04555364	
2017	Annual	Orange (SC)	T7IS	Fuel	2.824720612	1031.023023	
			2017 Total		**426.0310333**	**155501.3271**	155,501,327

2018	Annual	Orange (SC)	T6 Ag	Fuel	0.104875094	38.27940934	
2018	Annual	Orange (SC)	T6 CAIRP Heavy	Fuel	0.233160079	85.10342899	
2018	Annual	Orange (SC)	T6 CAIRP Small	Fuel	0.718796953	262.3608878	
2018	Annual	Orange (SC)	T6 Instate Construction Heavy	Fuel	2.308976838	842.7765457	
2018	Annual	Orange (SC)	T6 Instate Construction Small	Fuel	12.50971094	4566.044493	
2018	Annual	Orange (SC)	T6 Instate Heavy	Fuel	49.241096	17973.00004	
2018	Annual	Orange (SC)	T6 Instate Small	Fuel	126.8803294	46311.32024	
2018	Annual	Orange (SC)	T6 OOS Heavy	Fuel	0.133701509	48.80105078	
2018	Annual	Orange (SC)	T6 OOS Small	Fuel	0.41184364	150.3229287	
2018	Annual	Orange (SC)	T6 Public	Fuel	1.397306075	510.0167175	
2018	Annual	Orange (SC)	T6 Utility	Fuel	0.6376124	232.7285259	
2018	Annual	Orange (SC)	T6TS	Fuel	29.78919261	10873.0553	
2018	Annual	Orange (SC)	T7 Ag	Fuel	0.059971557	21.88961823	
2018	Annual	Orange (SC)	T7 CAIRP	Fuel	26.50950228	9675.968333	
2018	Annual	Orange (SC)	T7 CAIRP Construction	Fuel	2.440163958	890.6598447	
2018	Annual	Orange (SC)	T7 NNOOS	Fuel	30.85558315	11262.28785	
2018	Annual	Orange (SC)	T7 NOOS	Fuel	10.69023872	3901.937133	
2018	Annual	Orange (SC)	T7 POLA	Fuel	32.52595923	11871.97512	
2018	Annual	Orange (SC)	T7 Public	Fuel	4.319462424	1576.603785	
2018	Annual	Orange (SC)	T7 Single	Fuel	30.34640782	11076.43885	
2018	Annual	Orange (SC)	T7 Single Construction	Fuel	6.088219567	2222.200142	
2018	Annual	Orange (SC)	T7 SWCV	Fuel	25.00311465	9126.136846	
2018	Annual	Orange (SC)	T7 Tractor	Fuel	35.81263108	13071.61034	
2018	Annual	Orange (SC)	T7 Tractor Construction	Fuel	4.585024835	1673.534065	
2018	Annual	Orange (SC)	T7 Utility	Fuel	0.258816096	94.46787516	
2018	Annual	Orange (SC)	T7IS	Fuel	2.937062541	1072.027828	
			2018 Total		**436.7987594**	**159431.5472**	159,431,547

Year	On-Road Automotive Fuel Consumption (Gallons)	Off-Road Automotive Fuel Consumption (Construction Equipment) (Gallons)
2007	1,423,778,297	140,962,964
2008	1,365,076,979	130,526,813
2009	1,357,149,650	118,572,627
2010	1,363,676,577	121,946,393
2011	1,349,691,464	128,731,296
2012	1,323,464,829	132,391,898
2013	1,309,170,033	136,506,102
2014	1,310,499,602	140,126,848
2015	1,302,220,609	146,075,106
2016	1,295,517,278	151,612,836
2017	1,280,170,453	155,501,327
2018 (projected)	1,248,703,310	159,431,547

Source: California Air Resources Board, EMFAC2014.