APPENDIX B

Air Quality/Global Climate Change Data

Huntington Beach Center Avenue Skate Park Project

Appendix B

Air Quality and Greenhouse Gas Worksheets

Provided by PCR Services Corporation

December 2011

B-1 Project Construction Emissions

B-2 Project Operation Emissions

B-3 Greenhouse Gas Analysis

Appendix B-1

- Project Construction Emissions
  - CalEEMod Output Files

CalEEMod Version: CalEEMod.2011.1.1 Date: 12/28/2011

Huntington Beach- Center Avenue Vans Skate Park

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	2.7	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Retail component: Jack's Surfboards

Construction Phase - 5-month construction duration

Off-road Equipment -

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Trips and VMT - Site Prep VMT Assumption= 20 trips/day * 21 days= 420 trips total

Grading - Total Site Size: 2.714

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2012	16.33	73.50	40.03	0.07	16.12	4.35	18.43	3.33	4.35	6.79	0.00	7,577.05	0.00	0.91	0.00	7,596.13
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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					
2012	16.33	73.50	40.03	0.07	12.72	4.35	15.03	1.51	4.35	4.96	0.00	7,577.05	0.00	0.91	0.00	7,596.13
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	0.83	2.02	8.09	0.01	1.22	0.08	1.30	0.02	0.07	0.09		1,158.68		0.07		1,160.06
Total	**0.92**	**2.02**	**8.09**	**0.01**	**1.22**	**0.08**	**1.30**	**0.02**	**0.07**	**0.09**		**1,160.99**		**0.07**	**0.00**	**1,162.39**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.15		0.00	0.00	2.17
Mobile	0.82	1.99	7.97	0.01	1.20	0.07	1.27	0.02	0.07	0.09		1,137.61		0.06		1,138.97
Total	**0.91**	**1.99**	**7.97**	**0.01**	**1.20**	**0.07**	**1.27**	**0.02**	**0.07**	**0.09**		**1,139.76**		**0.06**	**0.00**	**1,141.14**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2012

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					6.16	0.00	6.16	3.31	0.00	3.31						0.00
Off-Road	8.80	73.44	39.38	0.07		3.47	3.47		3.47	3.47		7,474.10		0.79		7,490.66
Total	**8.80**	**73.44**	**39.38**	**0.07**	**6.16**	**3.47**	**9.63**	**3.31**	**3.47**	**6.78**		**7,474.10**		**0.79**		**7,490.66**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.06	0.65	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.95		0.01		103.08
Total	**0.05**	**0.06**	**0.65**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**102.95**		**0.01**		**103.08**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.77	0.00	2.77	1.49	0.00	1.49						0.00
Off-Road	8.80	73.44	39.38	0.07		3.47	3.47		3.47	3.47	0.00	7,474.10		0.79		7,490.66
Total	**8.80**	**73.44**	**39.38**	**0.07**	**2.77**	**3.47**	**6.24**	**1.49**	**3.47**	**4.96**	**0.00**	**7,474.10**		**0.79**		**7,490.66**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.06	0.65	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.95		0.01		103.08
Total	**0.05**	**0.06**	**0.65**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**102.95**		**0.01**		**103.08**

3.3 Grading - 2012

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					6.17	0.00	6.17	3.31	0.00	3.31						0.00
Off-Road	4.44	35.97	20.52	0.03		1.81	1.81		1.81	1.81		3,466.14		0.40		3,474.49
Total	**4.44**	**35.97**	**20.52**	**0.03**	**6.17**	**1.81**	**7.98**	**3.31**	**1.81**	**5.12**		**3,466.14**		**0.40**		**3,474.49**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.07	11.33	5.80	0.02	9.83	0.49	10.32	0.02	0.45	0.47		1,582.71		0.05		1,583.79
Vendor	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
Worker	0.05	0.06	0.65	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.95		0.01		103.08
Total	**1.12**	**11.39**	**6.45**	**0.02**	**9.95**	**0.49**	**10.45**	**0.02**	**0.45**	**0.48**		**1,685.66**		**0.06**		**1,686.87**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.78	0.00	2.78	1.49	0.00	1.49						0.00
Off-Road	4.44	35.97	20.52	0.03		1.81	1.81		1.81	1.81	0.00	3,466.14		0.40		3,474.49
Total	**4.44**	**35.97**	**20.52**	**0.03**	**2.78**	**1.81**	**4.59**	**1.49**	**1.81**	**3.30**	**0.00**	**3,466.14**		**0.40**		**3,474.49**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.07	11.33	5.80	0.02	9.83	0.49	10.32	0.02	0.45	0.47		1,582.71		0.05		1,583.79
Vendor	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
Worker	0.05	0.06	0.65	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.95		0.01		103.08
Total	**1.12**	**11.39**	**6.45**	**0.02**	**9.95**	**0.49**	**10.45**	**0.02**	**0.45**	**0.48**		**1,685.66**		**0.06**		**1,686.87**

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.90	29.17	19.53	0.03		2.12	2.12		2.12	2.12		2,966.86		0.53		2,978.01
Total	**5.90**	**29.17**	**19.53**	**0.03**		**2.12**	**2.12**		**2.12**	**2.12**		**2,966.86**		**0.53**		**2,978.01**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.18	0.11	0.00	0.01	0.01	0.02	0.00	0.01	0.01		27.52		0.00		27.53
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00		12.87		0.00		12.89
Total	**0.03**	**0.19**	**0.19**	**0.00**	**0.03**	**0.01**	**0.04**	**0.00**	**0.01**	**0.01**		**40.39**		**0.00**		**40.42**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.90	29.17	19.53	0.03		2.12	2.12		2.12	2.12	0.00	2,966.86		0.53		2,978.01
Total	**5.90**	**29.17**	**19.53**	**0.03**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**2,966.86**		**0.53**		**2,978.01**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.18	0.11	0.00	0.01	0.01	0.02	0.00	0.01	0.01		27.52		0.00		27.53
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00		12.87		0.00		12.89
Total	**0.03**	**0.19**	**0.19**	**0.00**	**0.03**	**0.01**	**0.04**	**0.00**	**0.01**	**0.01**		**40.39**		**0.00**		**40.42**

3.5 Paving - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.60	22.11	13.69	0.02		1.93	1.93		1.93	1.93		1,922.37		0.32		1,929.15
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**3.60**	**22.11**	**13.69**	**0.02**		**1.93**	**1.93**		**1.93**	**1.93**		**1,922.37**		**0.32**		**1,929.15**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.06	0.65	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.95		0.01		103.08
Total	**0.05**	**0.06**	**0.65**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**102.95**		**0.01**		**103.08**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.60	22.11	13.69	0.02		1.93	1.93		1.93	1.93	0.00	1,922.37		0.32		1,929.15
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**3.60**	**22.11**	**13.69**	**0.02**		**1.93**	**1.93**		**1.93**	**1.93**	**0.00**	**1,922.37**		**0.32**		**1,929.15**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.06	0.65	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.95		0.01		103.08
Total	**0.05**	**0.06**	**0.65**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**102.95**		**0.01**		**103.08**

3.6 Architectural Coating - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.52	3.16	1.96	0.00		0.29	0.29		0.29	0.29		281.19		0.05		282.18
Total	**6.75**	**3.16**	**1.96**	**0.00**		**0.29**	**0.29**		**0.29**	**0.29**		**281.19**		**0.05**		**282.18**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	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
Total	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.52	3.16	1.96	0.00		0.29	0.29		0.29	0.29	0.00	281.19		0.05		282.18
Total	**6.75**	**3.16**	**1.96**	**0.00**		**0.29**	**0.29**		**0.29**	**0.29**	**0.00**	**281.19**		**0.05**		**282.18**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	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
Total	**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**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Improve Walkability Design

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.82	1.99	7.97	0.01	1.20	0.07	1.27	0.02	0.07	0.09		1,137.61		0.06		1,138.97
Unmitigated	0.83	2.02	8.09	0.01	1.22	0.08	1.30	0.02	0.07	0.09		1,158.68		0.07		1,160.06
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	4.29	4.29	4.29	12,246	12,016
Strip Mall	155.12	147.14	71.51	326,321	320,178
Total	159.41	151.43	75.80	338,567	332,194

4.3 Trip Type Information

	Miles	Trip %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.15		0.00	0.00	2.17
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	CO
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.0
Strip Mall	19.6575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.3
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.3**

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	CO
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.0
Strip Mall	0.0183151	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.15		0.00	0.00	2.
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.15**		**0.00**	**0.00**	**2.**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

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

SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

CalEEMod Version: CalEEMod.2011.1.1 Date: 12/28/2011

Huntington Beach- Center Avenue Vans Skate Park

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	2.7	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Retail component: Jack's Surfboards

Construction Phase - 5-month construction duration

Off-road Equipment -

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Trips and VMT - Site Prep VMT Assumption= 20 trips/day * 21 days= 420 trips total

Grading - Total Site Size: 2.714

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2012	16.34	73.51	39.98	0.07	16.12	4.35	18.43	3.33	4.35	6.79	0.00	7,568.17	0.00	0.91	0.00	7,587.24
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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					
2012	16.34	73.51	39.98	0.07	12.72	4.35	15.04	1.51	4.35	4.96	0.00	7,568.17	0.00	0.91	0.00	7,587.24
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	0.86	2.19	7.99	0.01	1.22	0.08	1.30	0.02	0.07	0.09		1,076.22		0.06		1,077.50
Total	**0.95**	**2.19**	**7.99**	**0.01**	**1.22**	**0.08**	**1.30**	**0.02**	**0.07**	**0.09**		**1,078.53**		**0.06**	**0.00**	**1,079.83**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.15		0.00	0.00	2.17
Mobile	0.85	2.16	7.88	0.01	1.20	0.08	1.27	0.02	0.07	0.09		1,056.67		0.06		1,057.93
Total	**0.94**	**2.16**	**7.88**	**0.01**	**1.20**	**0.08**	**1.27**	**0.02**	**0.07**	**0.09**		**1,058.82**		**0.06**	**0.00**	**1,060.10**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2012

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					6.16	0.00	6.16	3.31	0.00	3.31						0.00
Off-Road	8.80	73.44	39.38	0.07		3.47	3.47		3.47	3.47		7,474.10		0.79		7,490.66
Total	**8.80**	**73.44**	**39.38**	**0.07**	**6.16**	**3.47**	**9.63**	**3.31**	**3.47**	**6.78**		**7,474.10**		**0.79**		**7,490.66**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.60	0.00	0.12	0.00	0.13	0.00	0.00	0.01		94.07		0.01		94.19
Total	**0.06**	**0.06**	**0.60**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**94.07**		**0.01**		**94.19**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.77	0.00	2.77	1.49	0.00	1.49						0.00
Off-Road	8.80	73.44	39.38	0.07		3.47	3.47		3.47	3.47	0.00	7,474.10		0.79		7,490.66
Total	**8.80**	**73.44**	**39.38**	**0.07**	**2.77**	**3.47**	**6.24**	**1.49**	**3.47**	**4.96**	**0.00**	**7,474.10**		**0.79**		**7,490.66**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.60	0.00	0.12	0.00	0.13	0.00	0.00	0.01		94.07		0.01		94.19
Total	**0.06**	**0.06**	**0.60**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**94.07**		**0.01**		**94.19**

3.3 Grading - 2012

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					6.17	0.00	6.17	3.31	0.00	3.31						0.00
Off-Road	4.44	35.97	20.52	0.03		1.81	1.81		1.81	1.81		3,466.14		0.40		3,474.49
Total	**4.44**	**35.97**	**20.52**	**0.03**	**6.17**	**1.81**	**7.98**	**3.31**	**1.81**	**5.12**		**3,466.14**		**0.40**		**3,474.49**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.09	11.94	6.21	0.02	9.83	0.50	10.32	0.02	0.46	0.47		1,574.70		0.05		1,575.82
Vendor	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
Worker	0.06	0.06	0.60	0.00	0.12	0.00	0.13	0.00	0.00	0.01		94.07		0.01		94.19
Total	**1.15**	**12.00**	**6.81**	**0.02**	**9.95**	**0.50**	**10.45**	**0.02**	**0.46**	**0.48**		**1,668.77**		**0.06**		**1,670.01**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.78	0.00	2.78	1.49	0.00	1.49						0.00
Off-Road	4.44	35.97	20.52	0.03		1.81	1.81		1.81	1.81	0.00	3,466.14		0.40		3,474.49
Total	**4.44**	**35.97**	**20.52**	**0.03**	**2.78**	**1.81**	**4.59**	**1.49**	**1.81**	**3.30**	**0.00**	**3,466.14**		**0.40**		**3,474.49**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.09	11.94	6.21	0.02	9.83	0.50	10.32	0.02	0.46	0.47		1,574.70		0.05		1,575.82
Vendor	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
Worker	0.06	0.06	0.60	0.00	0.12	0.00	0.13	0.00	0.00	0.01		94.07		0.01		94.19
Total	**1.15**	**12.00**	**6.81**	**0.02**	**9.95**	**0.50**	**10.45**	**0.02**	**0.46**	**0.48**		**1,668.77**		**0.06**		**1,670.01**

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.90	29.17	19.53	0.03		2.12	2.12		2.12	2.12		2,966.86		0.53		2,978.01
Total	**5.90**	**29.17**	**19.53**	**0.03**		**2.12**	**2.12**		**2.12**	**2.12**		**2,966.86**		**0.53**		**2,978.01**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.19	0.12	0.00	0.01	0.01	0.02	0.00	0.01	0.01		27.31		0.00		27.32
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00		11.76		0.00		11.77
Total	**0.03**	**0.20**	**0.20**	**0.00**	**0.03**	**0.01**	**0.04**	**0.00**	**0.01**	**0.01**		**39.07**		**0.00**		**39.09**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.90	29.17	19.53	0.03		2.12	2.12		2.12	2.12	0.00	2,966.86		0.53		2,978.01
Total	**5.90**	**29.17**	**19.53**	**0.03**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**2,966.86**		**0.53**		**2,978.01**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.19	0.12	0.00	0.01	0.01	0.02	0.00	0.01	0.01		27.31		0.00		27.32
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00		11.76		0.00		11.77
Total	**0.03**	**0.20**	**0.20**	**0.00**	**0.03**	**0.01**	**0.04**	**0.00**	**0.01**	**0.01**		**39.07**		**0.00**		**39.09**

3.5 Paving - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.60	22.11	13.69	0.02		1.93	1.93		1.93	1.93		1,922.37		0.32		1,929.15
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**3.60**	**22.11**	**13.69**	**0.02**		**1.93**	**1.93**		**1.93**	**1.93**		**1,922.37**		**0.32**		**1,929.15**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.60	0.00	0.12	0.00	0.13	0.00	0.00	0.01		94.07		0.01		94.19
Total	**0.06**	**0.06**	**0.60**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**94.07**		**0.01**		**94.19**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.60	22.11	13.69	0.02		1.93	1.93		1.93	1.93	0.00	1,922.37		0.32		1,929.15
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**3.60**	**22.11**	**13.69**	**0.02**		**1.93**	**1.93**		**1.93**	**1.93**	**0.00**	**1,922.37**		**0.32**		**1,929.15**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.60	0.00	0.12	0.00	0.13	0.00	0.00	0.01		94.07		0.01		94.19
Total	**0.06**	**0.06**	**0.60**	**0.00**	**0.12**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**94.07**		**0.01**		**94.19**

3.6 Architectural Coating - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.52	3.16	1.96	0.00		0.29	0.29		0.29	0.29		281.19		0.05		282.18
Total	**6.75**	**3.16**	**1.96**	**0.00**		**0.29**	**0.29**		**0.29**	**0.29**		**281.19**		**0.05**		**282.18**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	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
Total	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.52	3.16	1.96	0.00		0.29	0.29		0.29	0.29	0.00	281.19		0.05		282.18
Total	**6.75**	**3.16**	**1.96**	**0.00**		**0.29**	**0.29**		**0.29**	**0.29**	**0.00**	**281.19**		**0.05**		**282.18**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	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
Total	**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**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Improve Walkability Design

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.85	2.16	7.88	0.01	1.20	0.08	1.27	0.02	0.07	0.09		1,056.67		0.06		1,057.93
Unmitigated	0.86	2.19	7.99	0.01	1.22	0.08	1.30	0.02	0.07	0.09		1,076.22		0.06		1,077.50
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	4.29	4.29	4.29	12,246	12,016
Strip Mall	155.12	147.14	71.51	326,321	320,178
Total	159.41	151.43	75.80	338,567	332,194

4.3 Trip Type Information

	Miles	Trip %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.15		0.00	0.00	2.17
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	19.6575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.33**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.0183151	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.15		0.00	0.00	2.17
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.15**		**0.00**	**0.00**	**2.17**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

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

SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Appendix B-2

- Project Operations Emissions
  - Regional Emissions Calculations
  - CalEEMod Output Files
  - Special Event Emissions Calculations
  - CO Hotspots and CALINE4 Output Files
  - Emfac 2012 Output

Center Avenue Skate Park Project- Weekday+Weekend 2012

Regional and Localized Emissions Calculations (lbs/day)

	VOC	NOx	CO	SO2	PM10	PM2.5
Regional Project Emissions						
Mobile	4	11	44	<1	7	<1
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total Project	**5**	**11**	**44**	**<1**	**7**	**<1**
Net Project Emissions						
Net Mobile	4	11	44	<1	7	<1
Net Area	<1	<1	<1	<1	<1	<1
Net Energy	<1	<1	<1	<1	<1	<1
Total Net	5	11	44	<1	7	<1
SCAQMD Significance Threshold	55	55	550	150	150	55
Difference	**(51)**	**(44)**	**(506)**	**(150)**	**(143)**	**(55)**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Localized Project Emissions	VOC	NOx	CO	SO2	PM10	PM2.5
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
Localized Significance Threshold	N/A	92	647	N/A	1	1
Difference	N/A	**(92)**	**(647)**	N/A	**(1)**	**(1)**
Significant?	N/A	**No**	**No**	N/A	**No**	**No**

SRA #18: North Coastal Orange County- for a 2 acre site with sensitive receptors 25 meters from the site.

Huntington Beach- Center Avenue Vans Skate Park- 2012

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	0.96	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Retail component: Jack's Surfboards

Construction Phase - 5-month construction duration

Off-road Equipment -

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Trips and VMT - Site Prep VMT Assumption= 20 trips/day * 22 days= 440 trips total

Grading - Total Site Size: 2.714

Vehicle Trips - Trip Rates of 9.14 and 16.61 were obtained from the HB Skate Park TIA.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	4.46	11.22	44.80	0.07	7.01	0.43	7.44	0.10	0.41	0.50		6,611.68		0.37		6,619.44
Total	**4.55**	**11.22**	**44.80**	**0.07**	**7.01**	**0.43**	**7.44**	**0.10**	**0.41**	**0.50**		**6,613.99**		**0.37**	**0.00**	**6,621.77**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.14		0.00	0.00	2.16
Mobile	4.41	11.04	44.05	0.06	6.87	0.42	7.29	0.10	0.40	0.49		6,483.17		0.36		6,490.79
Total	**4.50**	**11.04**	**44.05**	**0.06**	**6.87**	**0.42**	**7.29**	**0.10**	**0.40**	**0.49**		**6,485.31**		**0.36**	**0.00**	**6,492.95**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.41	11.04	44.05	0.06	6.87	0.42	7.29	0.10	0.40	0.49		6,483.17		0.36		6,490.79
Unmitigated	4.46	11.22	44.80	0.07	7.01	0.43	7.44	0.10	0.41	0.50		6,611.68		0.37		6,619.44
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	382.08	695.04	695.04	1,344,975	1,318,076
Strip Mall	31.99	58.14	58.14	90,658	88,845
Total	414.07	753.18	753.18	1,435,633	1,406,921

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.14		0.00	0.00	2.16

NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	19.6575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.33**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.0182192	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.14		0.00	0.00	2.16
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.14**		**0.00**	**0.00**	**2.16**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

Use Low VOC Cleaning Supplies

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

Mitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Center Avenue Skate Park Project- Special Event Scenario

Regional and Localized Emissions Calculations (lbs/day)

	VOC	NOx	CO	SO2	PM10	PM2.5
Regional Project Emissions						
Mobile	10	20	98	<1	18	1
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Diesel Generators (Special Event)	<1	7	5	<1	<1	<1
Shuttle Buses (Special Event)	<1	17	1	<1	<1	<1
Total Project	**10**	**20**	**98**	**<1**	**18**	**1**
Net Project Emissions						
Net Mobile	10	20	98	<1	18	1
Net Area	<1	<1	<1	<1	<1	<1
Net Energy	<1	<1	<1	<1	<1	<1
Total Net	10	20	98	<1	18	1
SCAQMD Significance Threshold	55	55	550	150	150	55
Difference	**(45)**	**(35)**	**(453)**	**(150)**	**(132)**	**(54)**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Localized Project Emissions	VOC	NOx	CO	SO2	PM10	PM2.5
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
Localized Significance Threshold	N/A	92	647	N/A	1	1
Difference	N/A	**(92)**	**(647)**	N/A	**(1)**	**(1)**
Significant?	N/A	**No**	**No**	N/A	**No**	**No**

SRA #18: North Coastal Orange County- for a 2 acre site with sensitive receptors 25 meters from the site.

Huntington Beach Skate Park

Temporary Diesel Generator Emissions (Special Events)

Equipment List

No.	Equipment	Rating (kW)	Hours of Operation per Day	Load Factor[a]	Total HP-HR (Average)
1	Caterpillar XQ300 Diesel Generator Sets (Prime)	275	8	0.7	**2,065**

Emission Calculations

Pollutant	Emission Factor (lbs/hp-hr)[b]	Emissions (lbs/day)	
NOx	3.7	16.8	
CO	0.23	1.0	
SOx	0.07	0.3	**lbs/15 days/yr**
PM10	0.03	0.1	79
PM2.5	0.03	0.1	**MT/yr**
CO2	1.15	5.2	13

Notes:

[a]**http://www.cat.com/cda/files/301154/7/C9275ekwPrimeTier3_EMCP4.pdf**

[b]**Ibid**

*1 kilowatt hour = 1.341022108 horsepower hours

Huntington Beach Skate Park

Shuttle Bus Emissions (Special Events)

Shuttle Bus Trips

No. of Trips per Event[a]	Roundtrip Distance (mi.)[b]	Total Vehicle Miles Travelled (VMT)	Idle Time per Trip (min)
100	2	200	5

Running Emissions

Pollutant	Running Emission Factor (g/mi)[c]	Emissions per Day (lbs)	
VOC	1.533	0.7	
NOx	15.2	6.7	
CO	11.073	4.9	
SOx	0.021	0.0	**lbs/15 days/yr**
PM10	0.315	0.1	15,121
PM2.5	0.293	0.1	**MT/yr**
CO2	2214.197	976.4	7

Idling Emissions

Pollutant	Idle Emission Factor (g/hr)[d]	Emissions per Day (lbs)
VOC	3.556	0.1
NOx	3.739	0.1
CO	20.734	0.8
SOx	0.009	0.0
PM10	0.038	0.0
PM2.5	0.038	0.0
CO2	862.129	31.7

Notes:

[a] Center Avenue Skate Park Traffic Analysis. Austin Foust Associates. December 2011.

[b] Distance from parking lot to event area

[c] EMFAC2007 emission factors for Orange County, Year 2012, Speed 20 mph, urban bus category.

[d] EMFAC2007 emission factors for Orange County, Year 2012, Speed 0 mph (idle), medium duty truck category.

CalEEMod Version: CalEEMod.2011.1.1

Date: 12/28/2011

Huntington Skate Park - Special Event Only

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	1	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Anaheim Public Utilities
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			30		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Vehicle Trips - Special Event

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	9.46	18.37	97.82	0.15	16.91	0.72	17.63	0.57	0.72	1.29		14,797.77		0.77		14,813.87
Total	**9.55**	**18.37**	**97.82**	**0.15**	**16.91**	**0.72**	**17.63**	**0.57**	**0.72**	**1.29**		**14,800.08**		**0.77**	**0.00**	**14,816.20**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	9.46	18.37	97.82	0.15	16.91	0.72	17.63	0.57	0.72	1.29		14,797.77		0.77		14,813.87

Total	**9.55**	**18.37**	**97.82**	**0.15**	**16.91**	**0.72**	**17.63**	**0.57**	**0.72**	**1.29**		**14,800.08**		**0.77**	**0.00**	**14,816.20**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

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	9.46	18.37	97.82	0.15	16.91	0.72	17.63	0.57	0.72	1.29		14,797.77		0.77		14,813.87
Unmitigated	9.46	18.37	97.82	0.15	16.91	0.72	17.63	0.57	0.72	1.29		14,797.77		0.77		14,813.87
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.59	1,680.00	1.59	688,503	688,503
Strip Mall	71.51	140.00	71.51	186,761	186,761
Total	73.10	1,820.00	73.10	875,264	875,264

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	19.6575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.33**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.0196575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.33**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00

Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

CalEEMod Version: CalEEMod.2011.1.1

Date: 12/28/2011

Huntington Skate Park - Special Event Only

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	1	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Anaheim Public Utilities
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			30		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Vehicle Trips - Special Event

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	10.20	20.20	96.35	0.14	16.91	0.72	17.64	0.57	0.72	1.29		13,958.37		0.80		13,975.10
Total	**10.29**	**20.20**	**96.35**	**0.14**	**16.91**	**0.72**	**17.64**	**0.57**	**0.72**	**1.29**		**13,960.68**		**0.80**	**0.00**	**13,977.43**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Mobile	10.20	20.20	96.35	0.14	16.91	0.72	17.64	0.57	0.72	1.29		13,958.37		0.80		13,975.10

Total	**10.29**	**20.20**	**96.35**	**0.14**	**16.91**	**0.72**	**17.64**	**0.57**	**0.72**	**1.29**		**13,960.68**		**0.80**	**0.00**	**13,977.43**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

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	10.20	20.20	96.35	0.14	16.91	0.72	17.64	0.57	0.72	1.29		13,958.37		0.80		13,975.10
Unmitigated	10.20	20.20	96.35	0.14	16.91	0.72	17.64	0.57	0.72	1.29		13,958.37		0.80		13,975.10
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.59	1,680.00	1.59	688,503	688,503
Strip Mall	71.51	140.00	71.51	186,761	186,761
Total	73.10	1,820.00	73.10	875,264	875,264

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	19.6575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.33**

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	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.0196575	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.31		0.00	0.00	2.33
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**2.31**		**0.00**	**0.00**	**2.33**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.02					0.00	0.00		0.00	0.00						0.00

Consumer Products	0.07					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.09**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Huntington Beach Skate Park - LOS Analysis (December 2011)

Typical Operational Scenario

Intersection Level of Service Summary

	Typical Weekday		NP (2016)			WP (2016)							
No.	Intersection	Peak Hour	V/C	Delay	LOS	V/C	Delay	LOS	LOS Increase	LOS >=D?	Criteria 1 Analyze?	Criteria 2 Analyze?	Analyze?
8		AM	0.82		D	0.82		D	0.0%	Yes	No	No	No
	Goldenwest Street and Bolsa Avenue	PM	0.97		E	0.97		E	0.0%	Yes	No	No	**No**
15		AM	0.71		C	0.71		C	0.0%	No	No	No	No
	Goldenwest Street and McFadden Avenue	PM	0.75		C	0.75		C	0.0%	No	No	No	No
16		AM	0.57		A	0.57		A	0.0%	No	No	No	No
	Gothard Street and McFadden Avenue	PM	0.6		A	0.6		A	0.0%	No	No	No	No
17		AM	0.32		A	0.32		A	0.0%	No	No	No	No
	Gothard Street and Center Avenue	PM	0.52		A	0.53		A	1.9%	No	No	No	No
18		AM	0.47		A	0.47		A	0.0%	No	No	No	No
	I-405 SB Ramps and Center Avenue	PM	0.81		D	0.81		C	0.0%	Yes	No	No	No
19		AM	0.64		B	0.64		A	0.0%	No	No	No	No
	Beach Boulevard and Center Avenue	PM	0.71		C	0.71		A	0.0%	No	No	No	No
26		AM	0.62		B	0.62		A	0.0%	No	No	No	No
	Goldenwest Street and Edinger Avenue	PM	0.68		B	0.68		A	0.0%	No	No	No	No
27		AM	0.49		A	0.49		A	0.0%	No	No	No	No
	Gothard Street and Edinger Avenue	PM	0.58		A	0.61		A	5.2%	No	No	No	No
28		AM	0.8		C	0.8		C	0.0%	No	No	No	No
	Beach Boulevard and Edinger Agenue	PM	0.9		D	0.9		A	0.0%	Yes	No	No	No
29		AM	0.76		C	0.76		C	0.0%	No	No	No	No
	Newland Street and Edinger Avenue	PM	0.73		C	0.73		C	0.0%	No	No	No	No
203		AM	0.81		D	0.81		D	0.0%	Yes	No	No	No
	Beach Boulevard and McFadden Avenue	PM	0.86		D	0.86		D	0.0%	Yes	No	No	No

Notes:
[a] Stop-controlled intersection; analyzed using HCM 2000 methodology and results reported in seconds of delay.

Special Events Operational Scenario

	Typical Weekday		NP (2030)			WP (2030)							
No.	Intersection	Peak Hour	V/C	Delay	LOS	V/C	Delay	LOS	LOS Increase	LOS >=D?	Criteria 1 Analyze?	Criteria 2 Analyze?	Analyze?
15	Gothard Street and McFadden Avenue	Mid Day	0.8		C	0.81		D	1.3%	No	No	Yes	**Yes**
16	Gothard Street and McFadden Avenue	Mid Day	0.54		A	0.54		A	0.0%	No	No	No	No
26	Goldenwest Street and Edinger Avenue	Mid Day	0.83		D	0.83		A	0.0%	Yes	No	No	No
27	Gothard Street and Edinger Avenue	Mid Day	0.7		B	0.7		A	0.0%	No	No	No	No

The SCAQMD recommends performing a CO hotspots analysis if the volume to capacity ratio increases by two percent or more as a result of a proposed project for intersections rated D or worse or if the LOS declines from C to D.

Criteria 1 = LOS D + V/C increase >= 2%
Criteria 2 = LOS C to D

Source: SCAQMD CEQA Comment Letter for Proposed Tentative Tract Map SUBTT16909 for the City of Rancho Cucamonga.
http://www.aqmd.gov/ceqa/igr/2007/july/MNDTract16909.pdf

Huntington Beach Skate Park (Special Events)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm) [a]

Monitoring Station: Costa Mesa

Year	1-Hr Concentration
2012	5.8

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
GOLDEN WEST STREET AND MCFADDEN AVENUE					
NE	1.4	7.2	1.4	7.2	NO
SE	1.5	7.3	1.5	7.3	NO
SW	1.4	7.2	1.4	7.2	NO
NW	1.2	7.0	1.2	7.0	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Huntington Beach Skate Park (Special Events)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]	
Monitoring Station: Costa Mesa	Average Persistence Factor = 0.70
Year: 2012 — 8-Hr Concentration: 4.7	

Intersection and Receptor Locations	Future Without Project: Traffic CO Contribution [b]	Future Without Project: Estimated Local CO Concentration [c]	Future With Project: Traffic CO Contribution [b]	Future With Project: Estimated Local CO Concentration [c]	Future With Project: Exceedance of Significance Threshold [d]
GOLDEN WEST STREET AND MCFADDEN AVENUE					
NE	0.8	5.5	0.8	5.5	NO
SE	0.8	5.5	0.8	5.5	NO
SW	0.8	5.5	0.8	5.5	NO
NW	0.7	5.4	0.7	5.4	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

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

JOB: GOLDEN WEST STREET AND MCFADDEN AVENUE No Project
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (FT)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	30	-1500	30	-500	AG	2070	2.3	.0	65.0
B. NA	30	-500	30	0	AG	1970	3.3	.0	60.0
C. ND	30	0	30	500	AG	2090	2.6	.0	45.0
D. NE	30	500	30	1500	AG	2090	2.3	.0	65.0
E. SF	-30	1500	-30	500	AG	1900	2.3	.0	65.0
F. SA	-30	500	-30	0	AG	1620	3.2	.0	60.0
G. SD	-30	0	-30	-500	AG	1810	2.5	.0	45.0
H. SE	-30	-500	-30	-1500	AG	1810	2.3	.0	65.0
I. WF	1500	23	500	23	AG	680	2.3	.0	50.0
J. WA	500	23	0	23	AG	500	4.2	.0	45.0
K. WD	0	23	-500	23	AG	480	2.9	.0	33.0
L. WE	-500	23	-1500	23	AG	480	2.3	.0	50.0
M. EF	-1500	-23	-500	-23	AG	740	2.3	.0	50.0
N. EA	-500	-23	0	-23	AG	580	4.2	.0	45.0
O. ED	0	-23	500	-23	AG	1010	4.4	.0	33.0
P. EE	500	-23	1500	-23	AG	1010	2.3	.0	50.0
Q. NL	0	0	15	-500	AG	100	3.1	.0	33.0
R. SL	0	0	-15	500	AG	280	3.2	.0	33.0
S. WL	0	0	500	15	AG	180	4.2	.0	33.0
T. EL	0	0	-500	-15	AG	160	4.2	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	63	48	6.0
2. SE3	63	-48	6.0
3. SW3	-63	-48	6.0
4. NW3	-63	48	6.0
5. NE7	76	61	6.0
6. SE7	76	-61	6.0
7. SW7	-76	-61	6.0
8. NW7	-76	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	185.	1.4	.2	.7	.0	.0	.0	.0	.0	.2
2. SE3	352.	1.5	.0	.2	.6	.0	.2	.1	.0	.0
3. SW3	83.	1.4	.0	.2	.0	.0	.0	.0	.3	.0
4. NW3	172.	1.2	.2	.1	.0	.0	.0	.1	.5	.0
5. NE7	187.	1.2	.1	.5	.0	.0	.0	.0	.0	.2
6. SE7	351.	1.1	.0	.0	.4	.0	.2	.0	.0	.0
7. SW7	81.	1.1	.0	.2	.0	.0	.0	.0	.2	.0
8. NW7	99.	1.0	.0	.0	.1	.0	.0	.2	.0	.0

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

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.1	.6	.0	.0	.0	.0	.0
4. NW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
8. NW7	.0	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

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

JOB: GOLDEN WEST STREET AND MCFADDEN AVENUE with Project
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (FT)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	30	-1500	30	-500	AG	2077	2.3	.0	65.0
B. NA	30	-500	30	0	AG	1972	3.3	.0	60.0
C. ND	30	0	30	500	AG	2093	2.6	.0	45.0
D. NE	30	500	30	1500	AG	2093	2.3	.0	65.0
E. SF	-30	1500	-30	500	AG	1904	2.3	.0	65.0
F. SA	-30	500	-30	0	AG	1623	3.2	.0	60.0
G. SD	-30	0	-30	-500	AG	1815	2.5	.0	45.0
H. SE	-30	-500	-30	-1500	AG	1815	2.3	.0	65.0
I. WF	1500	23	500	23	AG	682	2.3	.0	50.0
J. WA	500	23	0	23	AG	502	4.2	.0	45.0
K. WD	0	23	-500	23	AG	486	2.9	.0	33.0
L. WE	-500	23	-1500	23	AG	486	2.3	.0	50.0
M. EF	-1500	-23	-500	-23	AG	743	2.3	.0	50.0
N. EA	-500	-23	0	-23	AG	583	4.2	.0	45.0
O. ED	0	-23	500	-23	AG	1012	4.4	.0	33.0
P. EE	500	-23	1500	-23	AG	1012	2.3	.0	50.0
Q. NL	0	0	15	-500	AG	105	3.1	.0	33.0
R. SL	0	0	-15	500	AG	281	3.2	.0	33.0
S. WL	0	0	500	15	AG	180	4.2	.0	33.0
T. EL	0	0	-500	-15	AG	160	4.2	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	63	48	6.0
2. SE3	63	-48	6.0
3. SW3	-63	-48	6.0
4. NW3	-63	48	6.0
5. NE7	76	61	6.0
6. SE7	76	-61	6.0
7. SW7	-76	-61	6.0
8. NW7	-76	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	185.	1.4	.2	.7	.0	.0	.0	.0	.0	.2
2. SE3	352.	1.5	.0	.2	.6	.0	.2	.1	.0	.0
3. SW3	83.	1.4	.0	.2	.0	.0	.0	.0	.3	.0
4. NW3	172.	1.2	.2	.1	.0	.0	.0	.1	.5	.0
5. NE7	187.	1.2	.1	.5	.0	.0	.0	.0	.0	.2
6. SE7	351.	1.1	.0	.0	.4	.0	.2	.0	.0	.0
7. SW7	81.	1.1	.0	.2	.0	.0	.0	.0	.2	.0
8. NW7	99.	1.0	.0	.0	.1	.0	.0	.2	.0	.0

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

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.1	.6	.0	.0	.0	.0	.0
4. NW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
8. NW7	.0	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

Title : Orange County Subarea Winter CYr 2016 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2011/12/27 14:25:27
Scen Year: 2012 -- All model years in the range 1968 to 2012 selected
Season : Winter
Area : Orange
****

Year: 2012 -- Model Years 1968 to 2012 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Orange County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
3	3.290	4.553	6.294	17.839	33.106	31.387	4.753
4	3.193	4.418	6.133	17.839	33.106	31.387	4.639
5	3.102	4.291	5.982	17.839	33.106	31.387	4.532
6	3.016	4.170	5.714	16.489	30.289	30.157	4.361
7	2.934	4.056	5.469	15.260	27.775	29.029	4.202
8	2.857	3.947	5.243	14.140	25.528	27.994	4.055
9	2.783	3.844	5.035	13.117	23.516	27.046	3.917
10	2.713	3.746	4.842	12.184	21.712	26.178	3.788
11	2.647	3.652	4.664	11.332	20.092	25.383	3.668
12	2.583	3.563	4.498	10.553	18.635	24.657	3.555
13	2.523	3.478	4.344	9.843	17.323	23.994	3.449
14	2.465	3.397	4.201	9.194	16.140	23.390	3.350
15	2.410	3.320	4.068	8.603	15.072	22.841	3.256
16	2.357	3.246	3.943	8.065	14.107	22.345	3.168
17	2.306	3.175	3.827	7.577	13.233	21.898	3.085
18	2.258	3.107	3.718	7.134	12.442	21.497	3.007
19	2.211	3.042	3.615	6.728	11.724	21.140	2.934
20	2.166	2.979	3.519	6.416	11.073	20.825	2.866
21	2.123	2.919	3.429	6.129	10.481	20.551	2.802
22	2.082	2.862	3.343	5.863	9.944	20.316	2.740
23	2.043	2.806	3.263	5.617	9.455	20.118	2.683
24	2.004	2.753	3.188	5.389	9.011	19.958	2.628
25	1.968	2.702	3.116	5.179	8.607	19.833	2.575
26	1.932	2.653	3.049	4.984	8.240	19.745	2.526
27	1.898	2.606	2.985	4.804	7.906	19.692	2.478
28	1.866	2.560	2.925	4.637	7.603	19.674	2.434
29	1.834	2.516	2.868	4.483	7.328	19.692	2.391
30	1.804	2.474	2.815	4.341	7.079	19.745	2.351
31	1.774	2.434	2.764	4.210	6.854	19.835	2.312
32	1.746	2.395	2.716	4.089	6.651	19.963	2.276
33	1.719	2.357	2.671	3.978	6.468	20.129	2.242
34	1.693	2.321	2.628	3.876	6.305	20.334	2.209
35	1.668	2.286	2.588	3.783	6.159	20.581	2.178
36	1.644	2.253	2.550	3.698	6.031	20.870	2.150
37	1.621	2.221	2.515	3.621	5.918	21.205	2.122
38	1.598	2.190	2.481	3.552	5.821	21.588	2.097
39	1.577	2.161	2.450	3.491	5.738	22.020	2.073
40	1.557	2.133	2.421	3.437	5.669	22.507	2.051

Appendix B-3

- Greenhouse Gas Analysis
  - CalEEMod Output Files

CalEEMod Version: CalEEMod.2011.1.1 Date: 12/28/2011

Huntington Beach- Center Avenue Vans Skate Park

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	2.7	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Retail component: Jack's Surfboards

Construction Phase - 5-month construction duration

Off-road Equipment -

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Trips and VMT - Site Prep VMT Assumption= 20 trips/day * 21 days= 420 trips total

Grading - Total Site Size: 2.714

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2012	0.44	2.54	1.55	0.00	0.23	0.16	0.39	0.07	0.16	0.23	0.00	236.10	236.10	0.03	0.00	236.76
Total	**0.44**	**2.54**	**1.55**	**0.00**	**0.23**	**0.16**	**0.39**	**0.07**	**0.16**	**0.23**	**0.00**	**236.10**	**236.10**	**0.03**	**0.00**	**236.76**

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					
2012	0.44	2.54	1.55	0.00	0.16	0.16	0.32	0.03	0.16	0.19	0.00	236.10	236.10	0.03	0.00	236.76
Total	**0.44**	**2.54**	**1.55**	**0.00**	**0.16**	**0.16**	**0.32**	**0.03**	**0.16**	**0.19**	**0.00**	**236.10**	**236.10**	**0.03**	**0.00**	**236.76**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.02	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
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	13.41	13.41	0.00	0.00	13.50
Mobile	0.13	0.34	1.35	0.00	0.18	0.01	0.20	0.00	0.01	0.01	0.00	166.95	166.95	0.01	0.00	167.15
Waste						0.00	0.00		0.00	0.00	0.79	0.00	0.79	0.05	0.00	1.78
Water						0.00	0.00		0.00	0.00	0.00	11.89	11.89	0.01	0.00	12.20
Total	**0.15**	**0.34**	**1.35**	**0.00**	**0.18**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**	**0.79**	**192.25**	**193.04**	**0.07**	**0.00**	**194.63**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.02	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
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	12.88	12.88	0.00	0.00	12.96
Mobile	0.13	0.34	1.33	0.00	0.18	0.01	0.19	0.00	0.01	0.01	0.00	163.91	163.91	0.01	0.00	164.12
Waste						0.00	0.00		0.00	0.00	0.79	0.00	0.79	0.05	0.00	1.78
Water						0.00	0.00		0.00	0.00	0.00	11.16	11.16	0.01	0.00	11.45
Total	**0.15**	**0.34**	**1.33**	**0.00**	**0.18**	**0.01**	**0.19**	**0.00**	**0.01**	**0.01**	**0.79**	**187.95**	**188.74**	**0.07**	**0.00**	**190.31**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.06	0.00	0.06	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.09	0.77	0.41	0.00		0.04	0.04		0.04	0.04	0.00	71.17	71.17	0.01	0.00	71.33
Total	**0.09**	**0.77**	**0.41**	**0.00**	**0.06**	**0.04**	**0.10**	**0.03**	**0.04**	**0.07**	**0.00**	**71.17**	**71.17**	**0.01**	**0.00**	**71.33**

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.92	0.00	0.00	0.92
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.92**	**0.92**	**0.00**	**0.00**	**0.92**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.09	0.77	0.41	0.00		0.04	0.04		0.04	0.04	0.00	71.17	71.17	0.01	0.00	71.33
Total	**0.09**	**0.77**	**0.41**	**0.00**	**0.03**	**0.04**	**0.07**	**0.02**	**0.04**	**0.06**	**0.00**	**71.17**	**71.17**	**0.01**	**0.00**	**71.33**

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.92	0.00	0.00	0.92
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.92**	**0.92**	**0.00**	**0.00**	**0.92**

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.07	0.00	0.07	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.40	0.23	0.00		0.02	0.02		0.02	0.02	0.00	34.58	34.58	0.00	0.00	34.66
Total	**0.05**	**0.40**	**0.23**	**0.00**	**0.07**	**0.02**	**0.09**	**0.04**	**0.02**	**0.06**	**0.00**	**34.58**	**34.58**	**0.00**	**0.00**	**34.66**

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	0.01	0.12	0.07	0.00	0.10	0.01	0.10	0.00	0.01	0.01	0.00	15.76	15.76	0.00	0.00	15.77
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.97	0.00	0.00	0.97
Total	**0.01**	**0.12**	**0.08**	**0.00**	**0.10**	**0.01**	**0.10**	**0.00**	**0.01**	**0.01**	**0.00**	**16.73**	**16.73**	**0.00**	**0.00**	**16.74**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.40	0.23	0.00		0.02	0.02		0.02	0.02	0.00	34.58	34.58	0.00	0.00	34.66
Total	**0.05**	**0.40**	**0.23**	**0.00**	**0.03**	**0.02**	**0.05**	**0.02**	**0.02**	**0.04**	**0.00**	**34.58**	**34.58**	**0.00**	**0.00**	**34.66**

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	0.01	0.12	0.07	0.00	0.10	0.01	0.10	0.00	0.01	0.01	0.00	15.76	15.76	0.00	0.00	15.77
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.97	0.00	0.00	0.97
Total	**0.01**	**0.12**	**0.08**	**0.00**	**0.10**	**0.01**	**0.10**	**0.00**	**0.01**	**0.01**	**0.00**	**16.73**	**16.73**	**0.00**	**0.00**	**16.74**

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.19	0.96	0.64	0.00		0.07	0.07		0.07	0.07	0.00	88.80	88.80	0.02	0.00	89.13
Total	**0.19**	**0.96**	**0.64**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**88.80**	**88.80**	**0.02**	**0.00**	**89.13**

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	0.00	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
Vendor	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.82	0.00	0.00	0.82
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.36
Total	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.18**	**1.18**	**0.00**	**0.00**	**1.18**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.19	0.96	0.64	0.00		0.07	0.07		0.07	0.07	0.00	88.80	88.80	0.02	0.00	89.13
Total	**0.19**	**0.96**	**0.64**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**88.80**	**88.80**	**0.02**	**0.00**	**89.13**

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	0.00	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
Vendor	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.82	0.00	0.00	0.82
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.36
Total	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.18**	**1.18**	**0.00**	**0.00**	**1.18**

3.5 Paving - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.04	0.25	0.16	0.00		0.02	0.02		0.02	0.02	0.00	20.05	20.05	0.00	0.00	20.12
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.04**	**0.25**	**0.16**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**20.05**	**20.05**	**0.00**	**0.00**	**20.12**

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	1.01	0.00	0.00	1.01
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.01**	**1.01**	**0.00**	**0.00**	**1.01**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.04	0.25	0.16	0.00		0.02	0.02		0.02	0.02	0.00	20.05	20.05	0.00	0.00	20.12
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.04**	**0.25**	**0.16**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**20.05**	**20.05**	**0.00**	**0.00**	**20.12**

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	1.01	0.00	0.00	1.01
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.01**	**1.01**	**0.00**	**0.00**	**1.01**

3.6 Architectural Coating - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.66	1.66	0.00	0.00	1.66
Total	**0.04**	**0.02**	**0.01**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**1.66**	**1.66**	**0.00**	**0.00**	**1.66**

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	0.00	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
Vendor	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
Worker	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
Total	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.66	1.66	0.00	0.00	1.66
Total	**0.04**	**0.02**	**0.01**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**1.66**	**1.66**	**0.00**	**0.00**	**1.66**

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	0.00	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
Vendor	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
Worker	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
Total	**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**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Improve Walkability Design

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.13	0.34	1.33	0.00	0.18	0.01	0.19	0.00	0.01	0.01	0.00	163.91	163.91	0.01	0.00	164.12
Unmitigated	0.13	0.34	1.35	0.00	0.18	0.01	0.20	0.00	0.01	0.01	0.00	166.95	166.95	0.01	0.00	167.15
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	4.29	4.29	4.29	12,246	12,016
Strip Mall	155.12	147.14	71.51	326,321	320,178
Total	159.41	151.43	75.80	338,567	332,194

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						0.00	0.00		0.00	0.00	0.00	12.52	12.52	0.00	0.00	12.60
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	13.03	13.03	0.00	0.00	13.11
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.36
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
City Park	0	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
Strip Mall	7175	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.38**	**0.38**	**0.00**	**0.00**	**0.39**

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	tons/yr										MT/yr					
City Park	0	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
Strip Mall	6685	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.36
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.36**	**0.36**	**0.00**	**0.00**	**0.36**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Strip Mall	44800					13.03	0.00	0.00	13.11
Total						**13.03**	**0.00**	**0.00**	**13.11**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Strip Mall	43045.8					12.52	0.00	0.00	12.60
Total						**12.52**	**0.00**	**0.00**	**12.60**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.02	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
Unmitigated	0.02	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
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	**0.01**	**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**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	**0.01**	**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**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					11.16	0.01	0.00	11.45
Unmitigated					11.89	0.01	0.00	12.20
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 3.217					10.40	0.00	0.00	10.46
Strip Mall	0.259254 / 0.158898					1.50	0.01	0.00	1.73
Total						**11.90**	**0.01**	**0.00**	**12.19**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 3.02076					9.76	0.00	0.00	9.82
Strip Mall	0.242143 / 0.149205					1.40	0.01	0.00	1.62
Total						**11.16**	**0.01**	**0.00**	**11.44**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.79	0.05	0.00	1.78
Unmitigated					0.79	0.05	0.00	1.78
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.23					0.05	0.00	0.00	0.10
Strip Mall	3.68					0.75	0.04	0.00	1.67
Total						**0.80**	**0.04**	**0.00**	**1.77**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.23					0.05	0.00	0.00	0.10
Strip Mall	3.68					0.75	0.04	0.00	1.67

Total						**0.80**	**0.04**	**0.00**	**1.77**

9.0 Vegetation

Huntington Beach- Center Avenue Vans Skate Park

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	0.96	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			31		

1.3 User Entered Comments

Project Characteristics -

Land Use - Retail component: Jack's Surfboards

Construction Phase - 5-month construction duration

Off-road Equipment -

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by the client

Off-road Equipment - Construction equipment mix provided by client

Trips and VMT - Site Prep VMT Assumption= 20 trips/day * 22 days= 440 trips total

Grading - Total Site Size: 2.714

Vehicle Trips - Trip Rates of 9.14 and 16.61 were obtained from the HB Skate Park TIA.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.02	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
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	13.41	13.41	0.00	0.00	13.50
Mobile	0.53	1.41	5.47	0.01	0.78	0.05	0.83	0.01	0.05	0.06	0.00	703.52	703.52	0.04	0.00	704.37
Waste						0.00	0.00		0.00	0.00	0.76	0.00	0.76	0.05	0.00	1.71
Water						0.00	0.00		0.00	0.00	0.00	5.19	5.19	0.01	0.00	5.45
Total	**0.55**	**1.41**	**5.47**	**0.01**	**0.78**	**0.05**	**0.83**	**0.01**	**0.05**	**0.06**	**0.76**	**722.12**	**722.88**	**0.10**	**0.00**	**725.03**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.02	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
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	12.84	12.84	0.00	0.00	12.92
Mobile	0.53	1.38	5.39	0.01	0.76	0.05	0.82	0.01	0.05	0.06	0.00	689.86	689.86	0.04	0.00	690.69
Waste						0.00	0.00		0.00	0.00	0.76	0.00	0.76	0.05	0.00	1.71
Water						0.00	0.00		0.00	0.00	0.00	4.87	4.87	0.01	0.00	5.12
Total	**0.55**	**1.38**	**5.39**	**0.01**	**0.76**	**0.05**	**0.82**	**0.01**	**0.05**	**0.06**	**0.76**	**707.57**	**708.33**	**0.10**	**0.00**	**710.44**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.53	1.38	5.39	0.01	0.76	0.05	0.82	0.01	0.05	0.06	0.00	689.86	689.86	0.04	0.00	690.69
Unmitigated	0.53	1.41	5.47	0.01	0.78	0.05	0.83	0.01	0.05	0.06	0.00	703.52	703.52	0.04	0.00	704.37
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	382.08	695.04	695.04	1,344,975	1,318,076
Strip Mall	31.99	58.14	58.14	90,658	88,845
Total	414.07	753.18	753.18	1,435,633	1,406,921

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						0.00	0.00		0.00	0.00	0.00	12.48	12.48	0.00	0.00	12.56
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	13.03	13.03	0.00	0.00	13.11
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.36
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
City Park	0	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
Strip Mall	7175	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.38**	**0.38**	**0.00**	**0.00**	**0.39**

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	tons/yr										MT/yr					
City Park	0	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
Strip Mall	6650	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.36
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.35**	**0.35**	**0.00**	**0.00**	**0.36**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Strip Mall	44800					13.03	0.00	0.00	13.11
Total						**13.03**	**0.00**	**0.00**	**13.11**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Strip Mall	42920.5					12.48	0.00	0.00	12.56
Total						**12.48**	**0.00**	**0.00**	**12.56**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.02	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
Unmitigated	0.02	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
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	**0.01**	**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**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	**0.01**	**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**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					4.87	0.01	0.00	5.12

Unmitigated					5.19	0.01	0.00	5.45
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 1.14382					3.70	0.00	0.00	3.72
Strip Mall	0.259254 / 0.158898					1.50	0.01	0.00	1.73
Total						**5.20**	**0.01**	**0.00**	**5.45**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 1.07405					3.47	0.00	0.00	3.49
Strip Mall	0.242143 / 0.149205					1.40	0.01	0.00	1.62
Total						**4.87**	**0.01**	**0.00**	**5.11**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.76	0.05	0.00	1.71

Unmitigated					0.76	0.05	0.00	1.71
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.08					0.02	0.00	0.00	0.04
Strip Mall	3.68					0.75	0.04	0.00	1.67
Total						**0.77**	**0.04**	**0.00**	**1.71**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.08					0.02	0.00	0.00	0.04
Strip Mall	3.68					0.75	0.04	0.00	1.67
Total						**0.77**	**0.04**	**0.00**	**1.71**

9.0 Vegetation

CalEEMod Version: CalEEMod.2011.1.1 Date: 12/28/2011

Huntington Skate Park - Special Event Only

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	1	Acre
Strip Mall	3.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Anaheim Public Utilities
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			30		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Vehicle Trips - Special Event

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.02	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
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	29.17	29.17	0.00	0.00	29.26
Mobile	0.30	0.58	3.07	0.00	0.48	0.02	0.50	0.02	0.02	0.04	0.00	402.33	402.33	0.02	0.00	402.79
Waste						0.00	0.00		0.00	0.00	0.77	0.00	0.77	0.05	0.00	1.72
Water						0.00	0.00		0.00	0.00	0.00	11.81	11.81	0.01	0.00	12.07
Total	**0.32**	**0.58**	**3.07**	**0.00**	**0.48**	**0.02**	**0.50**	**0.02**	**0.02**	**0.04**	**0.77**	**443.31**	**444.08**	**0.08**	**0.00**	**445.84**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.02	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

Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	29.17	29.17	0.00	0.00	29.26
Mobile	0.30	0.58	3.07	0.00	0.48	0.02	0.50	0.02	0.02	0.04	0.00	402.33	402.33	0.02	0.00	402.79
Waste						0.00	0.00		0.00	0.00	0.77	0.00	0.77	0.05	0.00	1.72
Water						0.00	0.00		0.00	0.00	0.00	11.81	11.81	0.01	0.00	12.07
Total	**0.32**	**0.58**	**3.07**	**0.00**	**0.48**	**0.02**	**0.50**	**0.02**	**0.02**	**0.04**	**0.77**	**443.31**	**444.08**	**0.08**	**0.00**	**445.84**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.30	0.58	3.07	0.00	0.48	0.02	0.50	0.02	0.02	0.04	0.00	402.33	402.33	0.02	0.00	402.79
Unmitigated	0.30	0.58	3.07	0.00	0.48	0.02	0.50	0.02	0.02	0.04	0.00	402.33	402.33	0.02	0.00	402.79
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.59	1,680.00	1.59	688,503	688,503
Strip Mall	71.51	140.00	71.51	186,761	186,761
Total	73.10	1,820.00	73.10	875,264	875,264

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	8.90	13.30	7.40	33.00	48.00	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

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						0.00	0.00		0.00	0.00	0.00	28.79	28.79	0.00	0.00	28.87
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	28.79	28.79	0.00	0.00	28.87
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
City Park	0	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
Strip Mall	7175	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.38**	**0.38**	**0.00**	**0.00**	**0.39**

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	tons/yr										MT/yr					
City Park	0	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

Strip Mall	7175	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.39
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.38**	**0.38**	**0.00**	**0.00**	**0.39**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Strip Mall	44800					28.79	0.00	0.00	28.87
Total						**28.79**	**0.00**	**0.00**	**28.87**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Strip Mall	44800					28.79	0.00	0.00	28.87
Total						**28.79**	**0.00**	**0.00**	**28.87**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.02	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
Unmitigated	0.02	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
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	**0.01**	**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**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	**0.01**	**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**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					11.81	0.01	0.00	12.07
Unmitigated					11.81	0.01	0.00	12.07
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 1.19148					8.51	0.00	0.00	8.53
Strip Mall	0.259254 / 0.158898					3.31	0.01	0.00	3.54
Total						**11.82**	**0.01**	**0.00**	**12.07**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 1.19148					8.51	0.00	0.00	8.53
Strip Mall	0.259254 / 0.158898					3.31	0.01	0.00	3.54
Total						**11.82**	**0.01**	**0.00**	**12.07**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.77	0.05	0.00	1.72
Unmitigated					0.77	0.05	0.00	1.72
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.09					0.02	0.00	0.00	0.04

Strip Mall	3.68					0.75	0.04	0.00	1.67
Total						**0.77**	**0.04**	**0.00**	**1.71**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.09					0.02	0.00	0.00	0.04
Strip Mall	3.68					0.75	0.04	0.00	1.67
Total						**0.77**	**0.04**	**0.00**	**1.71**

9.0 Vegetation