Appendix B
Air Quality Worksheets

Golden Shore

Draft Environmental Impact Report

Appendix B

Air Quality Assessment Files

Provided by PCR Services Corporation

October 2009

- B-1 Project Construction Emissions
- B-2 SCAQMD Rule 403 (Fugitive Dust) Control Requirements
- B-3 Project Operation Emissions
- B-4 Greenhouse Gas Emissions

Appendix B-1

- Construction Emissions
    - Regional Construction Emissions
        - URBEMIS 2007 Outputs

Phasing Schedule

Construction Phasing Schedule	Overall	Phase 1 - Office Tower	Phase 2 - Residential/ Retail	Phase 3 - Residential/ Retail
Overall Start Date	**6/1/2011**	**6/1/2011**	**10/1/2013**	**2/1/2016**
Overall End Date	**6/1/2018**	**10/1/2013**	**2/1/2016**	**6/1/2018**

It is anticipated that construction will commence with Phase One, the office tower located west of Golden Shore at Ocean Boulevard. Construction activities are expected to commence in mid-2011. Phase Two will encompass the balance of the site west of Golden Shore and Phase Three will be east of Golden Shore. It is anticipated that all construction will not be completed prior to 2018.Construction activities would be phased and include demolition of the existing structures, grading and excavation activities, building construction, and building finishes and interior work. Construction is expected to require soil excavation and export of approximately **12,000 to 15,000** cubic yards.

Phase Breakdown

Existing Uses

Parcel	Retail	Net Office Floor Area
Parcels 1 and 2	131,636	4,705
Parcel 3	150,507	7,155
Total	282,143	11,860

4.31 acres west of Golden Shore in Parcels 1 and 2 1.56 acres in Parcel 3 east of Golden Shore Total of 5.87 acres

Residential Option

	Residential (DU)	Office (KSF)	Retail (KSF)
Phase 1 - Office Tower		260,000	6,000
Phase 2 - Residential	720		14,000
Phase 3 - Office/Residential	452	80,000	8,000
Total	**1,172**	**340,000**	**28,000**

Hotel Option A and B

	Residential (DU)	Office (KSF)	Retail (KSF)	Hotel (Rooms)	Banquet / Restaurant (KSF)
Phase 1 - Office Tower		260,000	6,000		
Phase 2 - Residential/Hotel	460		13,000	400	27,000
Phase 3 - Office/Residential	536	80,000	8,000		
Total	**996**	**340,000**	**27,000**	**400**	**27,000**

Demolition

Parameters	Phase 1	Phase 2	Phase 3
Start Date	6/1/2011	N/A	2/1/2016
End Date	8/1/2011	N/A	4/1/2016
Duration (months)	2		2
Duration (days)	44		44
Amount (KSF)	136,341		157,662
Height (ft)	10		10
Amount (ft3)	1,363,410		1,576,620
Amount (yd3)	50,497		58,393
Debris Amount (yd3)	12,624		14,598
Truck Capacity (yd)	20		20
Truck Trips	631		730
Truck Trips per Day	**15**		**17**

Assumptions:

-Assume each phase will take 3 years. Phases will overlap one another by one year.

-Assume Demolition will occur at the beginning of each phase. The entire site will not be demolished in one phase

-Total excavation of 15,000 CY. Divided evenly between the three phases (5,000 CY each)

Excavation

Parameters	Phase 1	Phase 2	Phase 3
Start Date	8/1/2011	10/1/2013	4/1/2016
End Date	10/1/2011	12/1/2013	6/1/2016
Duration (months)	2	2	2
Duration (days)	44	44	44
Amount (CY)	5,000	5,000	5,000
Truck Capacity (yd)	12	12	12
Truck Trips	417	417	417
Truck Trips per Day	**10**	**10**	**10**

fine site gr	1 month
bldg constr	the rest
arch coating	6 mos of last date
paving-	2mos

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase1.urb924

Project Name: Golden Shore- Phase 1 Office Tower

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 6/1/2011-8/1/2011 Active	4.78	47.58	21.98	**0.04**	**57.41**	2.32	**59.72**	**11.96**	2.13	**14.09**	6,460.34
Demolition 06/01/2011-08/01/2011	4.78	47.58	21.98	0.04	57.41	2.32	59.72	11.96	2.13	14.09	6,460.34
Fugitive Dust	0.00	0.00	0.00	0.00	57.26	0.00	57.26	11.91	0.00	11.91	0.00
Demo Off Road Diesel	2.49	20.35	9.50	0.00	0.00	1.18	1.18	0.00	1.09	1.09	2,260.89
Demo On Road Diesel	2.23	27.14	10.96	0.04	0.13	1.13	1.26	0.04	1.04	1.08	4,012.97
Demo Worker Trips	0.05	0.09	1.52	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.47
Time Slice 8/2/2011-9/30/2011 Active	6.97	**61.11**	31.27	0.01	9.05	3.01	12.06	1.90	2.77	4.66	7,752.09
Mass Grading 08/02/2011-	6.97	61.11	31.27	0.01	9.05	3.01	12.06	1.90	2.77	4.66	7,752.09
Mass Grading Dust	0.00	0.00	0.00	0.00	9.00	0.00	9.00	1.88	0.00	1.88	0.00
Mass Grading Off Road Diesel	6.34	54.17	26.00	0.00	0.00	2.72	2.72	0.00	2.50	2.50	6,437.89
Mass Grading On Road Diesel	0.56	6.79	2.74	0.01	0.03	0.28	0.32	0.01	0.26	0.27	1,003.41
Mass Grading Worker Trips	0.08	0.15	2.54	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Time Slice 10/3/2011-11/1/2011	2.71	21.19	11.93	0.00	0.01	1.22	1.24	0.00	1.13	1.13	2,582.55
Fine Grading 10/02/2011-	2.71	21.19	11.93	0.00	0.01	1.22	1.24	0.00	1.13	1.13	2,582.55
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.65	21.07	9.90	0.00	0.00	1.22	1.22	0.00	1.12	1.12	2,333.92
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63
Time Slice 11/2/2011-12/30/2011	6.81	41.16	41.05	0.03	0.12	2.54	2.66	0.04	2.33	2.38	6,818.09
Building 11/02/2011-10/01/2013	6.81	41.16	41.05	0.03	0.12	2.54	2.66	0.04	2.33	2.38	6,818.09
Building Off Road Diesel	6.02	37.51	21.52	0.00	0.00	2.37	2.37	0.00	2.18	2.18	4,156.79
Building Vendor Trips	0.25	2.64	2.26	0.01	0.02	0.11	0.13	0.01	0.10	0.11	544.94
Building Worker Trips	0.54	1.01	17.27	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,116.37
Time Slice 1/2/2012-12/31/2012	6.33	38.37	39.21	0.03	0.12	2.37	2.49	0.04	2.18	2.22	6,817.72
Building 11/02/2011-10/01/2013	6.33	38.37	39.21	0.03	0.12	2.37	2.49	0.04	2.18	2.22	6,817.72
Building Off Road Diesel	5.61	35.07	21.02	0.00	0.00	2.21	2.21	0.00	2.04	2.04	4,156.79
Building Vendor Trips	0.23	2.36	2.10	0.01	0.02	0.10	0.12	0.01	0.09	0.10	544.94
Building Worker Trips	0.49	0.93	16.09	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.99
Time Slice 1/1/2013-3/29/2013 Active	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building 11/02/2011-10/01/2013	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building Off Road Diesel	5.19	32.71	20.59	0.00	0.00	1.98	1.98	0.00	1.82	1.82	4,156.79
Building Vendor Trips	0.21	2.10	1.94	0.01	0.02	0.09	0.11	0.01	0.08	0.09	544.95
Building Worker Trips	0.45	0.85	14.98	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.72
Time Slice 4/1/2013-7/31/2013 Active	49.03	35.68	37.96	0.03	0.12	2.13	2.25	0.04	1.95	2.00	6,880.07
Building 11/02/2011-10/01/2013	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building Off Road Diesel	5.19	32.71	20.59	0.00	0.00	1.98	1.98	0.00	1.82	1.82	4,156.79
Building Vendor Trips	0.21	2.10	1.94	0.01	0.02	0.09	0.11	0.01	0.08	0.09	544.95
Building Worker Trips	0.45	0.85	14.98	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.72
Coating 04/01/2013-10/01/2013	43.18	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61
Time Slice 8/1/2013-10/1/2013 Active	**51.73**	51.35	**49.42**	0.03	0.14	**3.44**	3.58	0.05	**3.16**	3.21	**8,574.66**
Asphalt 08/01/2013-10/01/2013	2.71	15.67	11.46	0.00	0.01	1.31	1.33	0.00	1.21	1.21	1,694.59
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.43	15.01	9.69	0.00	0.00	1.28	1.28	0.00	1.18	1.18	1,371.29
Paving On Road Diesel	0.05	0.57	0.23	0.00	0.00	0.02	0.03	0.00	0.02	0.02	105.81
Paving Worker Trips	0.05	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.49
Building 11/02/2011-10/01/2013	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building Off Road Diesel	5.19	32.71	20.59	0.00	0.00	1.98	1.98	0.00	1.82	1.82	4,156.79
Building Vendor Trips	0.21	2.10	1.94	0.01	0.02	0.09	0.11	0.01	0.08	0.09	544.95
Building Worker Trips	0.45	0.85	14.98	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.72
Coating 04/01/2013-10/01/2013	43.18	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 8/2/2011 - 10/1/2011 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

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Phase Assumptions

Phase: Demolition 6/1/2011 - 8/1/2011 - Default Demolition Description
Building Volume Total (cubic feet): 1366410
Building Volume Daily (cubic feet): 136341
On Road Truck Travel (VMT): 946.81
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 10/2/2011 - 11/1/2011 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 0
Maximum Daily Acreage Disturbed: 0
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 8/2/2011 - 10/1/2011 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 236.74
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Bore/Drill Rigs (291 hp) operating at a 0.75 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 8/1/2013 - 10/1/2013 - Default Paving Description
Acres to be Paved: 3.06
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/2/2011 - 10/1/2013 - Default Building Construction Description
Off-Road Equipment:
1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day
1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
2 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/1/2013 - 10/1/2013 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase1.urb924

Project Name: Golden Shore- Phase 1 Office Tower

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 6/1/2011-8/1/2011 Active	4.78	47.58	21.98	**0.04**	**57.41**	2.32	**59.72**	**11.96**	2.13	**14.09**	6,460.34
Demolition 06/01/2011-08/01/2011	4.78	47.58	21.98	0.04	57.41	2.32	59.72	11.96	2.13	14.09	6,460.34
Fugitive Dust	0.00	0.00	0.00	0.00	57.26	0.00	57.26	11.91	0.00	11.91	0.00
Demo Off Road Diesel	2.49	20.35	9.50	0.00	0.00	1.18	1.18	0.00	1.09	1.09	2,260.89
Demo On Road Diesel	2.23	27.14	10.96	0.04	0.13	1.13	1.26	0.04	1.04	1.08	4,012.97
Demo Worker Trips	0.05	0.09	1.52	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.47
Time Slice 8/2/2011-9/30/2011 Active	6.97	**61.11**	31.27	0.01	7.85	3.01	10.86	1.65	2.77	4.41	7,752.09
Mass Grading 08/02/2011-	6.97	61.11	31.27	0.01	7.85	3.01	10.86	1.65	2.77	4.41	7,752.09
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	6.34	54.17	26.00	0.00	0.00	2.72	2.72	0.00	2.50	2.50	6,437.89
Mass Grading On Road Diesel	0.56	6.79	2.74	0.01	0.03	0.28	0.32	0.01	0.26	0.27	1,003.41
Mass Grading Worker Trips	0.08	0.15	2.54	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Time Slice 10/3/2011-11/1/2011	2.71	21.19	11.93	0.00	0.01	1.22	1.24	0.00	1.13	1.13	2,582.55
Fine Grading 10/02/2011-	2.71	21.19	11.93	0.00	0.01	1.22	1.24	0.00	1.13	1.13	2,582.55
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.65	21.07	9.90	0.00	0.00	1.22	1.22	0.00	1.12	1.12	2,333.92
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63
Time Slice 11/2/2011-12/30/2011	6.81	41.16	41.05	0.03	0.12	2.54	2.66	0.04	2.33	2.38	6,818.09
Building 11/02/2011-10/01/2013	6.81	41.16	41.05	0.03	0.12	2.54	2.66	0.04	2.33	2.38	6,818.09
Building Off Road Diesel	6.02	37.51	21.52	0.00	0.00	2.37	2.37	0.00	2.18	2.18	4,156.79
Building Vendor Trips	0.25	2.64	2.26	0.01	0.02	0.11	0.13	0.01	0.10	0.11	544.94
Building Worker Trips	0.54	1.01	17.27	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,116.37
Time Slice 1/2/2012-12/31/2012	6.33	38.37	39.21	0.03	0.12	2.37	2.49	0.04	2.18	2.22	6,817.72
Building 11/02/2011-10/01/2013	6.33	38.37	39.21	0.03	0.12	2.37	2.49	0.04	2.18	2.22	6,817.72
Building Off Road Diesel	5.61	35.07	21.02	0.00	0.00	2.21	2.21	0.00	2.04	2.04	4,156.79
Building Vendor Trips	0.23	2.36	2.10	0.01	0.02	0.10	0.12	0.01	0.09	0.10	544.94
Building Worker Trips	0.49	0.93	16.09	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.99
Time Slice 1/1/2013-3/29/2013 Active	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building 11/02/2011-10/01/2013	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building Off Road Diesel	5.19	32.71	20.59	0.00	0.00	1.98	1.98	0.00	1.82	1.82	4,156.79
Building Vendor Trips	0.21	2.10	1.94	0.01	0.02	0.09	0.11	0.01	0.08	0.09	544.95
Building Worker Trips	0.45	0.85	14.98	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.72
Time Slice 4/1/2013-7/31/2013 Active	49.03	35.68	37.96	0.03	0.12	2.13	2.25	0.04	1.95	2.00	6,880.07
Building 11/02/2011-10/01/2013	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building Off Road Diesel	5.19	32.71	20.59	0.00	0.00	1.98	1.98	0.00	1.82	1.82	4,156.79
Building Vendor Trips	0.21	2.10	1.94	0.01	0.02	0.09	0.11	0.01	0.08	0.09	544.95
Building Worker Trips	0.45	0.85	14.98	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.72
Coating 04/01/2013-10/01/2013	43.18	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61
Time Slice 8/1/2013-10/1/2013 Active	**51.73**	51.35	**49.42**	0.03	0.14	**3.44**	3.58	0.05	**3.16**	3.21	**8,574.66**
Asphalt 08/01/2013-10/01/2013	2.71	15.67	11.46	0.00	0.01	1.31	1.33	0.00	1.21	1.21	1,694.59
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.43	15.01	9.69	0.00	0.00	1.28	1.28	0.00	1.18	1.18	1,371.29
Paving On Road Diesel	0.05	0.57	0.23	0.00	0.00	0.02	0.03	0.00	0.02	0.02	105.81
Paving Worker Trips	0.05	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.49
Building 11/02/2011-10/01/2013	5.85	35.66	37.51	0.03	0.12	2.13	2.24	0.04	1.95	1.99	6,817.46
Building Off Road Diesel	5.19	32.71	20.59	0.00	0.00	1.98	1.98	0.00	1.82	1.82	4,156.79
Building Vendor Trips	0.21	2.10	1.94	0.01	0.02	0.09	0.11	0.01	0.08	0.09	544.95
Building Worker Trips	0.45	0.85	14.98	0.02	0.10	0.06	0.16	0.04	0.05	0.08	2,115.72
Coating 04/01/2013-10/01/2013	43.18	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.61

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 8/2/2011 - 10/1/2011 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

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Phase Assumptions

Phase: Demolition 6/1/2011 - 8/1/2011 - Default Demolition Description
Building Volume Total (cubic feet): 1366410
Building Volume Daily (cubic feet): 136341
On Road Truck Travel (VMT): 946.81
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 10/2/2011 - 11/1/2011 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 0
Maximum Daily Acreage Disturbed: 0
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 8/2/2011 - 10/1/2011 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 236.74
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Bore/Drill Rigs (291 hp) operating at a 0.75 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 8/1/2013 - 10/1/2013 - Default Paving Description
Acres to be Paved: 3.06
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/2/2011 - 10/1/2013 - Default Building Construction Description
Off-Road Equipment:
1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day
1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
2 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/1/2013 - 10/1/2013 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase2.urb924

Project Name: Golden Shore- Phase 2 Residential and Retail

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 10/1/2013-11/29/2013	6.10	50.71	28.33	0.01	9.04	2.40	11.44	1.89	2.21	4.10	7,551.44
Mass Grading 10/01/2013-	6.10	50.71	28.33	0.01	9.04	2.40	11.44	1.89	2.21	4.10	7,551.44
Mass Grading Dust	0.00	0.00	0.00	0.00	9.00	0.00	9.00	1.88	0.00	1.88	0.00
Mass Grading Off Road Diesel	5.69	46.42	24.61	0.00	0.00	2.23	2.23	0.00	2.05	2.05	6,437.89
Mass Grading On Road Diesel	0.34	4.17	1.62	0.01	0.03	0.16	0.19	0.01	0.15	0.16	802.73
Mass Grading Worker Trips	0.06	0.12	2.11	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.83
Time Slice 12/2/2013-12/31/2013	2.40	18.53	11.54	0.00	0.01	1.06	1.07	0.00	0.97	0.98	2,623.51
Fine Grading 12/01/2013-	2.40	18.53	11.54	0.00	0.01	1.06	1.07	0.00	0.97	0.98	2,623.51
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.35	18.43	9.86	0.00	0.00	1.05	1.05	0.00	0.97	0.97	2,374.85
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.05	0.09	1.69	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.66
Time Slice 1/1/2014-12/31/2014	7.10	44.03	71.96	0.10	0.43	2.42	2.85	0.15	2.21	2.36	14,127.05
Building 01/01/2014-02/01/2016	7.10	44.03	71.96	0.10	0.43	2.42	2.85	0.15	2.21	2.36	14,127.05
Building Off Road Diesel	4.79	30.20	20.16	0.00	0.00	1.76	1.76	0.00	1.62	1.62	4,156.79
Building Vendor Trips	1.11	11.54	10.36	0.03	0.12	0.47	0.59	0.04	0.43	0.47	3,414.18
Building Worker Trips	1.20	2.29	41.44	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,556.09
Time Slice 1/1/2015-7/31/2015 Active	6.50	39.75	67.95	0.10	0.43	2.20	2.63	0.15	2.00	2.16	14,126.63
Building 01/01/2014-02/01/2016	6.50	39.75	67.95	0.10	0.43	2.20	2.63	0.15	2.00	2.16	14,126.63
Building Off Road Diesel	4.40	27.55	19.83	0.00	0.00	1.60	1.60	0.00	1.47	1.47	4,156.79
Building Vendor Trips	1.00	10.10	9.53	0.03	0.12	0.41	0.53	0.04	0.37	0.41	3,414.31
Building Worker Trips	1.10	2.10	38.58	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,555.53
Time Slice 8/3/2015-12/31/2015	42.87	39.82	69.11	0.10	0.44	2.20	2.64	0.16	2.01	2.16	14,324.44
Building 01/01/2014-02/01/2016	6.50	39.75	67.95	0.10	0.43	2.20	2.63	0.15	2.00	2.16	14,126.63
Building Off Road Diesel	4.40	27.55	19.83	0.00	0.00	1.60	1.60	0.00	1.47	1.47	4,156.79
Building Vendor Trips	1.00	10.10	9.53	0.03	0.12	0.41	0.53	0.04	0.37	0.41	3,414.31
Building Worker Trips	1.10	2.10	38.58	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,555.53
Coating 08/01/2015-02/01/2016	36.37	0.06	1.16	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.81
Architectural Coating	36.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	1.16	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.81
Time Slice 1/1/2016-2/1/2016 Active	**45.02**	**50.72**	**77.51**	**0.11**	0.46	**3.15**	3.61	0.16	**2.88**	3.04	**16,264.32**
Asphalt 01/01/2016-02/01/2016	2.69	14.69	11.99	0.00	0.02	1.16	1.17	0.01	1.06	1.07	1,940.61
Paving Off-Gas	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.24	13.91	10.51	0.00	0.00	1.12	1.12	0.00	1.03	1.03	1,517.70
Paving On Road Diesel	0.06	0.72	0.28	0.00	0.01	0.03	0.03	0.00	0.02	0.03	205.40
Paving Worker Trips	0.03	0.06	1.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01	217.51
Building 01/01/2014-02/01/2016	5.96	35.97	64.43	0.10	0.43	1.99	2.42	0.15	1.81	1.97	14,125.93
Building Off Road Diesel	4.04	25.11	19.55	0.00	0.00	1.44	1.44	0.00	1.32	1.32	4,156.79
Building Vendor Trips	0.92	8.92	8.84	0.03	0.12	0.36	0.48	0.04	0.33	0.37	3,414.39
Building Worker Trips	1.00	1.94	36.04	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,554.75
Coating 08/01/2015-02/01/2016	36.37	0.06	1.09	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.79
Architectural Coating	36.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	1.09	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.79

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 10/1/2013 - 11/30/2013 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

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Phase Assumptions

Phase: Fine Grading 12/1/2013 - 12/31/2013 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 0
Maximum Daily Acreage Disturbed: 0
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 10/1/2013 - 11/30/2013 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 1.56
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 189.39
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Bore/Drill Rigs (291 hp) operating at a 0.75 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 1/1/2016 - 2/1/2016 - Default Paving Description
Acres to be Paved: 2.97
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/1/2014 - 2/1/2016 - Default Building Construction Description
Off-Road Equipment:
1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day
1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
2 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/1/2015 - 2/1/2016 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase2.urb924

Project Name: Golden Shore- Phase 2 Residential and Retail

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 10/1/2013-11/29/2013	6.10	50.71	28.33	0.01	7.84	2.40	10.24	1.64	2.21	3.85	7,551.44
Mass Grading 10/01/2013-	6.10	50.71	28.33	0.01	7.84	2.40	10.24	1.64	2.21	3.85	7,551.44
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	5.69	46.42	24.61	0.00	0.00	2.23	2.23	0.00	2.05	2.05	6,437.89
Mass Grading On Road Diesel	0.34	4.17	1.62	0.01	0.03	0.16	0.19	0.01	0.15	0.16	802.73
Mass Grading Worker Trips	0.06	0.12	2.11	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.83
Time Slice 12/2/2013-12/31/2013	2.40	18.53	11.54	0.00	0.01	1.06	1.07	0.00	0.97	0.98	2,623.51
Fine Grading 12/01/2013-	2.40	18.53	11.54	0.00	0.01	1.06	1.07	0.00	0.97	0.98	2,623.51
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	2.35	18.43	9.86	0.00	0.00	1.05	1.05	0.00	0.97	0.97	2,374.85
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.05	0.09	1.69	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.66
Time Slice 1/1/2014-12/31/2014	7.10	44.03	71.96	0.10	0.43	2.42	2.85	0.15	2.21	2.36	14,127.05
Building 01/01/2014-02/01/2016	7.10	44.03	71.96	0.10	0.43	2.42	2.85	0.15	2.21	2.36	14,127.05
Building Off Road Diesel	4.79	30.20	20.16	0.00	0.00	1.76	1.76	0.00	1.62	1.62	4,156.79
Building Vendor Trips	1.11	11.54	10.36	0.03	0.12	0.47	0.59	0.04	0.43	0.47	3,414.18
Building Worker Trips	1.20	2.29	41.44	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,556.09
Time Slice 1/1/2015-7/31/2015 Active	6.50	39.75	67.95	0.10	0.43	2.20	2.63	0.15	2.00	2.16	14,126.63
Building 01/01/2014-02/01/2016	6.50	39.75	67.95	0.10	0.43	2.20	2.63	0.15	2.00	2.16	14,126.63
Building Off Road Diesel	4.40	27.55	19.83	0.00	0.00	1.60	1.60	0.00	1.47	1.47	4,156.79
Building Vendor Trips	1.00	10.10	9.53	0.03	0.12	0.41	0.53	0.04	0.37	0.41	3,414.31
Building Worker Trips	1.10	2.10	38.58	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,555.53
Time Slice 8/3/2015-12/31/2015	42.87	39.82	69.11	0.10	0.44	2.20	2.64	0.16	2.01	2.16	14,324.44
Building 01/01/2014-02/01/2016	6.50	39.75	67.95	0.10	0.43	2.20	2.63	0.15	2.00	2.16	14,126.63
Building Off Road Diesel	4.40	27.55	19.83	0.00	0.00	1.60	1.60	0.00	1.47	1.47	4,156.79
Building Vendor Trips	1.00	10.10	9.53	0.03	0.12	0.41	0.53	0.04	0.37	0.41	3,414.31
Building Worker Trips	1.10	2.10	38.58	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,555.53
Coating 08/01/2015-02/01/2016	36.37	0.06	1.16	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.81
Architectural Coating	36.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	1.16	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.81
Time Slice 1/1/2016-2/1/2016 Active	**45.02**	**50.72**	**77.51**	**0.11**	0.46	**3.15**	3.61	0.16	**2.88**	3.04	**16,264.32**
Asphalt 01/01/2016-02/01/2016	2.69	14.69	11.99	0.00	0.02	1.16	1.17	0.01	1.06	1.07	1,940.61
Paving Off-Gas	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.24	13.91	10.51	0.00	0.00	1.12	1.12	0.00	1.03	1.03	1,517.70
Paving On Road Diesel	0.06	0.72	0.28	0.00	0.01	0.03	0.03	0.00	0.02	0.03	205.40
Paving Worker Trips	0.03	0.06	1.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01	217.51
Building 01/01/2014-02/01/2016	5.96	35.97	64.43	0.10	0.43	1.99	2.42	0.15	1.81	1.97	14,125.93
Building Off Road Diesel	4.04	25.11	19.55	0.00	0.00	1.44	1.44	0.00	1.32	1.32	4,156.79
Building Vendor Trips	0.92	8.92	8.84	0.03	0.12	0.36	0.48	0.04	0.33	0.37	3,414.39
Building Worker Trips	1.00	1.94	36.04	0.07	0.31	0.20	0.50	0.11	0.16	0.28	6,554.75
Coating 08/01/2015-02/01/2016	36.37	0.06	1.09	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.79
Architectural Coating	36.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	1.09	0.00	0.01	0.01	0.02	0.00	0.00	0.01	197.79

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 10/1/2013 - 11/30/2013 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

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Phase Assumptions

Phase: Fine Grading 12/1/2013 - 12/31/2013 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 0
Maximum Daily Acreage Disturbed: 0
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 10/1/2013 - 11/30/2013 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 1.56
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 189.39
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Bore/Drill Rigs (291 hp) operating at a 0.75 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 1/1/2016 - 2/1/2016 - Default Paving Description
Acres to be Paved: 2.97
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/1/2014 - 2/1/2016 - Default Building Construction Description
Off-Road Equipment:
1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day
1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
2 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/1/2015 - 2/1/2016 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase3.urb924

Project Name: Golden Shore- Phase 3 Office and Residential

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 2/1/2016-3/31/2016 Active	4.36	**42.59**	21.09	**0.09**	**66.54**	1.76	**68.30**	**13.88**	1.62	**15.50**	11,144.61
Demolition 02/01/2016-03/31/2016	4.36	42.59	21.09	0.09	66.54	1.76	68.30	13.88	1.62	15.50	11,144.61
Fugitive Dust	0.00	0.00	0.00	0.00	66.22	0.00	66.22	13.77	0.00	13.77	0.00
Demo Off Road Diesel	1.40	10.12	7.24	0.00	0.00	0.58	0.58	0.00	0.53	0.53	1,677.13
Demo On Road Diesel	2.93	32.42	12.82	0.09	0.31	1.18	1.49	0.10	1.08	1.18	9,281.04
Demo Worker Trips	0.03	0.06	1.03	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.44
Time Slice 4/1/2016-5/31/2016 Active	4.96	36.96	25.88	0.01	9.04	1.71	10.76	1.89	1.58	3.47	7,570.02
Mass Grading 04/01/2016-	4.96	36.96	25.88	0.01	9.04	1.71	10.76	1.89	1.58	3.47	7,570.02
Mass Grading Dust	0.00	0.00	0.00	0.00	9.00	0.00	9.00	1.88	0.00	1.88	0.00
Mass Grading Off Road Diesel	4.65	33.99	23.03	0.00	0.00	1.60	1.60	0.00	1.47	1.47	6,437.89
Mass Grading On Road Diesel	0.26	2.87	1.13	0.01	0.03	0.10	0.13	0.01	0.10	0.10	821.40
Mass Grading Worker Trips	0.05	0.09	1.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.73
Time Slice 6/1/2016-6/30/2016 Active	1.91	13.86	10.91	0.00	0.01	0.76	0.77	0.00	0.69	0.70	2,623.44
Fine Grading 06/01/2016-	1.91	13.86	10.91	0.00	0.01	0.76	0.77	0.00	0.69	0.70	2,623.44
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	1.87	13.79	9.55	0.00	0.00	0.75	0.75	0.00	0.69	0.69	2,374.85
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.04	0.07	1.37	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.59
Time Slice 7/1/2016-12/30/2016	5.39	32.53	51.63	0.07	0.31	1.82	2.12	0.11	1.66	1.77	11,207.61
Building 07/01/2016-06/01/2018	5.39	32.53	51.63	0.07	0.31	1.82	2.12	0.11	1.66	1.77	11,207.61
Building Off Road Diesel	4.04	25.11	19.55	0.00	0.00	1.44	1.44	0.00	1.32	1.32	4,156.79
Building Vendor Trips	0.62	6.01	5.99	0.02	0.08	0.24	0.32	0.03	0.22	0.25	2,305.79
Building Worker Trips	0.73	1.41	26.09	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,745.04
Time Slice 1/2/2017-12/29/2017	4.93	29.60	49.20	0.07	0.31	1.60	1.90	0.11	1.45	1.56	11,207.30
Building 07/01/2016-06/01/2018	4.93	29.60	49.20	0.07	0.31	1.60	1.90	0.11	1.45	1.56	11,207.30
Building Off Road Diesel	3.69	22.95	19.30	0.00	0.00	1.24	1.24	0.00	1.14	1.14	4,156.79
Building Vendor Trips	0.57	5.35	5.57	0.02	0.08	0.22	0.30	0.03	0.20	0.22	2,305.87
Building Worker Trips	0.67	1.30	24.33	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,744.64
Time Slice 1/1/2018-3/30/2018 Active	47.35	26.96	47.75	0.07	0.31	1.45	1.76	0.11	1.32	1.43	11,378.46
Building 07/01/2016-06/01/2018	4.53	26.91	46.93	0.07	0.31	1.44	1.75	0.11	1.32	1.42	11,207.10
Building Off Road Diesel	3.40	20.92	19.05	0.00	0.00	1.11	1.11	0.00	1.02	1.02	4,156.79
Building Vendor Trips	0.52	4.79	5.20	0.02	0.08	0.19	0.27	0.03	0.18	0.20	2,305.95
Building Worker Trips	0.61	1.20	22.68	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,744.37
Coating 01/01/2018-06/01/2018	42.82	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35
Architectural Coating	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35
Time Slice 4/2/2018-6/1/2018 Active	**49.54**	39.44	**59.29**	0.08	0.33	**2.40**	2.73	0.12	**2.20**	2.31	**13,207.24**
Asphalt 04/01/2018-06/01/2018	2.19	12.49	11.54	0.00	0.01	0.95	0.97	0.00	0.88	0.88	1,828.78
Paving Off-Gas	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.98	12.17	10.39	0.00	0.00	0.94	0.94	0.00	0.86	0.86	1,517.70
Paving On Road Diesel	0.02	0.26	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	93.60
Paving Worker Trips	0.03	0.05	1.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	217.48
Building 07/01/2016-06/01/2018	4.53	26.91	46.93	0.07	0.31	1.44	1.75	0.11	1.32	1.42	11,207.10
Building Off Road Diesel	3.40	20.92	19.05	0.00	0.00	1.11	1.11	0.00	1.02	1.02	4,156.79
Building Vendor Trips	0.52	4.79	5.20	0.02	0.08	0.19	0.27	0.03	0.18	0.20	2,305.95
Building Worker Trips	0.61	1.20	22.68	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,744.37
Coating 01/01/2018-06/01/2018	42.82	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35
Architectural Coating	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 4/1/2016 - 5/31/2016 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

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Phase Assumptions

Phase: Demolition 2/1/2016 - 3/31/2016 - Default Demolition Description
Building Volume Total (cubic feet): 1576620
Building Volume Daily (cubic feet): 157662
On Road Truck Travel (VMT): 2189.75
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 6/1/2016 - 6/30/2016 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 0
Maximum Daily Acreage Disturbed: 0
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 4/1/2016 - 5/31/2016 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 1.56
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 193.8
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Bore/Drill Rigs (291 hp) operating at a 0.75 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/1/2018 - 6/1/2018 - Default Paving Description
Acres to be Paved: 2.83
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 7/1/2016 - 6/1/2018 - Default Building Construction Description
Off-Road Equipment:
1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day
1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
2 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 1/1/2018 - 6/1/2018 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase3.urb924

Project Name: Golden Shore- Phase 3 Office and Residential

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 2/1/2016-3/31/2016 Active	4.36	**42.59**	21.09	**0.09**	**66.54**	1.76	**68.30**	**13.88**	1.62	**15.50**	11,144.61
Demolition 02/01/2016-03/31/2016	4.36	42.59	21.09	0.09	66.54	1.76	68.30	13.88	1.62	15.50	11,144.61
Fugitive Dust	0.00	0.00	0.00	0.00	66.22	0.00	66.22	13.77	0.00	13.77	0.00
Demo Off Road Diesel	1.40	10.12	7.24	0.00	0.00	0.58	0.58	0.00	0.53	0.53	1,677.13
Demo On Road Diesel	2.93	32.42	12.82	0.09	0.31	1.18	1.49	0.10	1.08	1.18	9,281.04
Demo Worker Trips	0.03	0.06	1.03	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.44
Time Slice 4/1/2016-5/31/2016 Active	4.96	36.96	25.88	0.01	7.84	1.71	9.56	1.64	1.58	3.22	7,570.02
Mass Grading 04/01/2016-	4.96	36.96	25.88	0.01	7.84	1.71	9.56	1.64	1.58	3.22	7,570.02
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	4.65	33.99	23.03	0.00	0.00	1.60	1.60	0.00	1.47	1.47	6,437.89
Mass Grading On Road Diesel	0.26	2.87	1.13	0.01	0.03	0.10	0.13	0.01	0.10	0.10	821.40
Mass Grading Worker Trips	0.05	0.09	1.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.73
Time Slice 6/1/2016-6/30/2016 Active	1.91	13.86	10.91	0.00	0.01	0.76	0.77	0.00	0.69	0.70	2,623.44
Fine Grading 06/01/2016-06/30/2016	1.91	13.86	10.91	0.00	0.01	0.76	0.77	0.00	0.69	0.70	2,623.44
Fine Grading Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Off Road Diesel	1.87	13.79	9.55	0.00	0.00	0.75	0.75	0.00	0.69	0.69	2,374.85
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.04	0.07	1.37	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.59
Time Slice 7/1/2016-12/30/2016 Active	5.39	32.53	51.63	0.07	0.31	1.82	2.12	0.11	1.66	1.77	11,207.61
Building 07/01/2016-06/01/2018	5.39	32.53	51.63	0.07	0.31	1.82	2.12	0.11	1.66	1.77	11,207.61
Building Off Road Diesel	4.04	25.11	19.55	0.00	0.00	1.44	1.44	0.00	1.32	1.32	4,156.79
Building Vendor Trips	0.62	6.01	5.99	0.02	0.08	0.24	0.32	0.03	0.22	0.25	2,305.79
Building Worker Trips	0.73	1.41	26.09	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,745.04
Time Slice 1/2/2017-12/29/2017 Active	4.93	29.60	49.20	0.07	0.31	1.60	1.90	0.11	1.45	1.56	11,207.30
Building 07/01/2016-06/01/2018	4.93	29.60	49.20	0.07	0.31	1.60	1.90	0.11	1.45	1.56	11,207.30
Building Off Road Diesel	3.69	22.95	19.30	0.00	0.00	1.24	1.24	0.00	1.14	1.14	4,156.79
Building Vendor Trips	0.57	5.35	5.57	0.02	0.08	0.22	0.30	0.03	0.20	0.22	2,305.87
Building Worker Trips	0.67	1.30	24.33	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,744.64
Time Slice 1/1/2018-3/30/2018 Active	47.35	26.96	47.75	0.07	0.31	1.45	1.76	0.11	1.32	1.43	11,378.46
Building 07/01/2016-06/01/2018	4.53	26.91	46.93	0.07	0.31	1.44	1.75	0.11	1.32	1.42	11,207.10
Building Off Road Diesel	3.40	20.92	19.05	0.00	0.00	1.11	1.11	0.00	1.02	1.02	4,156.79
Building Vendor Trips	0.52	4.79	5.20	0.02	0.08	0.19	0.27	0.03	0.18	0.20	2,305.95
Building Worker Trips	0.61	1.20	22.68	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,744.37
Coating 01/01/2018-06/01/2018	42.82	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35
Architectural Coating	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35
Time Slice 4/2/2018-6/1/2018 Active	**49.54**	39.44	**59.29**	0.08	0.33	**2.40**	2.73	0.12	**2.20**	2.31	**13,207.24**
Asphalt 04/01/2018-06/01/2018	2.19	12.49	11.54	0.00	0.01	0.95	0.97	0.00	0.88	0.88	1,828.78
Paving Off-Gas	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.98	12.17	10.39	0.00	0.00	0.94	0.94	0.00	0.86	0.86	1,517.70
Paving On Road Diesel	0.02	0.26	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	93.60
Paving Worker Trips	0.03	0.05	1.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	217.48
Building 07/01/2016-06/01/2018	4.53	26.91	46.93	0.07	0.31	1.44	1.75	0.11	1.32	1.42	11,207.10
Building Off Road Diesel	3.40	20.92	19.05	0.00	0.00	1.11	1.11	0.00	1.02	1.02	4,156.79
Building Vendor Trips	0.52	4.79	5.20	0.02	0.08	0.19	0.27	0.03	0.18	0.20	2,305.95
Building Worker Trips	0.61	1.20	22.68	0.05	0.22	0.14	0.37	0.08	0.12	0.20	4,744.37
Coating 01/01/2018-06/01/2018	42.82	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35
Architectural Coating	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.82	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.35

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 4/1/2016 - 5/31/2016 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

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Phase Assumptions

Phase: Demolition 2/1/2016 - 3/31/2016 - Default Demolition Description
Building Volume Total (cubic feet): 1576620
Building Volume Daily (cubic feet): 157662
On Road Truck Travel (VMT): 2189.75
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 6/1/2016 - 6/30/2016 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 0
Maximum Daily Acreage Disturbed: 0
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
2 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 4/1/2016 - 5/31/2016 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 1.56
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 193.8
Off-Road Equipment:
1 Air Compressors (106 hp) operating at a 0.48 load factor for 8 hours per day
1 Bore/Drill Rigs (291 hp) operating at a 0.75 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/1/2018 - 6/1/2018 - Default Paving Description
Acres to be Paved: 2.83
Off-Road Equipment:
2 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 7/1/2016 - 6/1/2018 - Default Building Construction Description
Off-Road Equipment:
1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day
1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
2 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day
1 Pumps (53 hp) operating at a 0.74 load factor for 8 hours per day
1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 1/1/2018 - 6/1/2018 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase1.urb924

Project Name: Golden Shore- Phase 1 Office Tower

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	CO2
2011 TOTALS (tons/year unmitigated)	487.67
2011 TOTALS (tons/year mitigated)	487.67
Percent Reduction	0.00
2012 TOTALS (tons/year unmitigated)	889.71
2012 TOTALS (tons/year mitigated)	889.71
Percent Reduction	0.00
2013 TOTALS (tons/year unmitigated)	709.52
2013 TOTALS (tons/year mitigated)	709.52
Percent Reduction	0.00

AREA SOURCE EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	393.33

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	393.33

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase2.urb924

Project Name: Golden Shore- Phase 2 Residential and Retail

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	CO2
2013 TOTALS (tons/year unmitigated)	194.99
2013 TOTALS (tons/year mitigated)	194.99
Percent Reduction	0.00
2014 TOTALS (tons/year unmitigated)	1,843.58
2014 TOTALS (tons/year mitigated)	1,843.58
Percent Reduction	0.00
2015 TOTALS (tons/year unmitigated)	1,854.31
2015 TOTALS (tons/year mitigated)	1,854.31
Percent Reduction	0.00
2016 TOTALS (tons/year unmitigated)	178.91
2016 TOTALS (tons/year mitigated)	178.91
Percent Reduction	0.00

AREA SOURCE EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	1,767.67

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	1,767.67

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: V:\AQNOISE DIVISION\Active Projects\Golden Shore\Construction\Urbemis-Phase3.urb924

Project Name: Golden Shore- Phase 3 Office and Residential

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	CO2
2016 TOTALS (tons/year unmitigated)	1,170.89
2016 TOTALS (tons/year mitigated)	1,170.89
Percent Reduction	0.00
2017 TOTALS (tons/year unmitigated)	1,456.95
2017 TOTALS (tons/year mitigated)	1,456.95
Percent Reduction	0.00
2018 TOTALS (tons/year unmitigated)	666.96
2018 TOTALS (tons/year mitigated)	666.96
Percent Reduction	0.00

AREA SOURCE EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	1,225.73

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	6,617.91

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	7,843.64

Appendix B-2

- SCAQMD Rule 403 (Fugitive Dust) Control Requirements

(Adopted May 7, 1976) (Amended November 6, 1992)
(Amended July 9, 1993) (Amended February 14, 1997)
(Amended December 11, 1998)(Amended April 2, 2004)
(Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

(1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.

(2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.

(3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.

(4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.

(5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

(6) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.

(7) CEMENT MANUFACTURING FACILITY is any facility that has a cement kiln at the facility.

(8) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

(9) COMMERCIAL POULTRY RANCH means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.

(10) CONFINED ANIMAL FACILITY means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.

(11) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

(12) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.

(13) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

(14) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:

(A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

(B) been paved or otherwise covered by a permanent structure; or

(C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.

(15) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(16) EARTH-MOVING ACTIVITIES means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.

(17) DUST CONTROL SUPERVISOR means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.

(18) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.

(19) HIGH WIND CONDITIONS means that instantaneous wind speeds exceed 25 miles per hour.

(20) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.

(21) LARGE OPERATIONS means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

meters (5,000 cubic yards) or more three times during the most recent 365-day period.

(22) OPEN STORAGE PILE is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.

(23) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.

(24) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.

(25) PM_{10} means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.

(26) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

(27) RULE 403 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.

(28) SERVICE ROADS are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.

(29) SIMULTANEOUS SAMPLING means the operation of two PM_{10} samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.

(30) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

(31) STABILIZED SURFACE means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.

(32) TRACK-OUT means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

(33) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.

(34) UNPAVED ROADS means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.

(35) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

(36) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.

(37) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) Requirements

(1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

(A) the dust remains visible in the atmosphere beyond the property line of the emission source; or

(B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.

(2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.

(3) No person shall cause or allow PM_{10} levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM_{10} monitoring. If sampling is conducted, samplers shall be:

(A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM_{10}.

(B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

(4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.

(5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.

(A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

(B) Pave the surface extending at least 100 feet and at least 20 feet wide.

(C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.

(D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.

(E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).

(6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.

(e) Additional Requirements for Large Operations

(1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:

(A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;

(B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;

(C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

(D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;

(E) identify a dust control supervisor that:

(i) is employed by or contracted with the property owner or developer;

(ii) is on the site or available on-site within 30 minutes during working hours;

(iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;

(iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and

(F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).

(2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).

(f) Compliance Schedule

The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

(1) The provisions of this Rule shall not apply to:

(A) Dairy farms.

(B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.

(C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.

(D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:

(i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;

(ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and

(iii) makes the completed self-monitoring form available to the Executive Officer upon request.

(E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:

(i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and

(ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and

(iii) makes the completed self-monitoring form available to the Executive Officer upon request.

(F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.

(G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.

(H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.

(I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.

(J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:

(i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and

(ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.

(K) sandblasting operations.

(2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:

(A) When wind gusts exceed 25 miles per hour, provided that:

(i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;

(ii) records are maintained in accordance with subparagraph (e)(1)(C).

(B) To unpaved roads, provided such roads:

(i) are used solely for the maintenance of wind-generating equipment; or

(ii) are unpaved public alleys as defined in Rule 1186; or

(iii) are service roads that meet all of the following criteria:

(a) are less than 50 feet in width at all points along the road;

(b) are within 25 feet of the property line; and

(c) have a traffic volume less than 20 vehicle-trips per day.

(C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.

(3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.

(4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:

(A) Blasting operations which have been permitted by the California Division of Industrial Safety; and

(B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.

(5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

(6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.

(7) The provisions of subdivision (e) shall not apply to:

(A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.

(B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.

(C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.

(8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM_{10} pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	✓ Mix backfill soil with water prior to moving ✓ Dedicate water truck or high capacity hose to backfilling equipment ✓ Empty loader bucket slowly so that no dust plumes are generated ✓ Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	✓ Maintain live perennial vegetation where possible ✓ Apply water in sufficient quantity to prevent generation of dust plumes
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	✓ Follow permit conditions for crushing equipment ✓ Pre-water material prior to loading into crusher ✓ Monitor crusher emissions opacity ✓ Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration ✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and 07-2 Stabilize disturbed soil between structures	✓ Limit vehicular traffic and disturbances on soils where possible ✓ If interior block walls are planned, install as early as possible ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	✓ Grade each project phase separately, timed to coincide with construction phase ✓ Upwind fencing can prevent material movement on site ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	✓ Use tarps or other suitable enclosures on haul trucks ✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage ✓ Comply with track-out prevention/mitigation requirements ✓ Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	✓ Apply water to materials to stabilize ✓ Maintain materials in a crusted condition ✓ Maintain effective cover over materials ✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes ✓ Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs ✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	✓ Dedicate water truck or high capacity hose to screening operation ✓ Drop material through the screen slowly and minimize drop height ✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	✓ Limit size of staging area ✓ Limit vehicle speeds to 15 miles per hour ✓ Limit number and size of staging area entrances/exists
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	✓ Add or remove material from the downwind portion of the storage pile ✓ Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas ✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching ✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	✓ Empty loader bucket such that no visible dust plumes are created ✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	✓ Haul waste material immediately off-site

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	(1a-1)	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS	
Earth-moving: Construction cut areas and mining operations:	(1c)	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c)	Apply chemical stabilizers within five working days of grading completion; OR
	(2d)	Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a)	Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR
	(3b)	Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR
	(3c)	Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR
	(3d)	Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS	
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a)	Apply chemical stabilizers; OR
	(5b)	Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	(5c)	Install temporary coverings; OR
	(5d)	Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	(6a)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling **(Only applicable to Commercial Poultry Ranches)**	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

Appendix B-3

- Operation Emissions Inventory
  - Regional Operation Emissions
    - Regional Emission Summary Sheet
    - Stationary Emission Summary Sheet
    - URBEMIS2007 Output Files

Golden Shore

Regional Emission Calculations (lbs/day)

		VOC	NOx	CO	SO2	PM10	PM2.5
Existing							
	Mobile	18	23	197	0	50	10
	Area	2	2	3	0	0	0
	Stationary	0	12	2	1	0	0
	Total Existing	**20**	**37**	**203**	**2**	**50**	**10**
Project							
	Mobile	58	76	621	1	210	41
	Area	64	17	14	0	0	0
	Stationary	0	47	6	4	1	0
	Total Project	**122**	**140**	**641**	**5**	**211**	**41**
Net Project							
	Net Mobile	41	53	423	1	160	31
	Net Area	62	15	11	<1	<1	<1
	Net Stationary	<1	35	4	2	<1	<1
	Total Net	103	103	438	3	160	31
	SCAQMD Significance Th	55	55	550	150	150	55
	Difference	**48**	**48**	**(112)**	**(147)**	**10**	**(24)**
	Significant?	**Yes**	**Yes**	**No**	**No**	**Yes**	**No**

Golden Shore

Electricity Usage

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO	ROC	NOx	PM10	SOx	CO2	CH4	NO2
					Emission Factors (lbs/MWh) [b]							
					0.2	0.01	1.15	0.04	0.12	804.54	0.0067	0.0037
Existing					Emissions from Electricity Consumption (lbs/day)							
Office	294.0	12.95	3,807,300	10.431	2.086	0.104	11.996	0.417	1.252	8392.124	0.070	0.039
Total Existing			**3,807,300**	**10.431**	**2.09**	**0.10**	**12.00**	**0.42**	**1.25**	**8,392.12**	**0.07**	**0.04**
Project												
Office	367.0	12.95	4,752,650	13.021	2.604	0.130	14.974	0.521	1.563	10475.882	0.087	0.048
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	400.0	9.95	3,980,000	10.904	2.181	0.109	12.540	0.436	1.308	8772.792	0.073	0.040
Condominium (DU)	1110.0	5,627	6,245,415	17.111	3.422	0.171	19.677	0.684	2.053	13766.264	0.115	0.063
Total Project			**14,978,065**	**41.036**	**8.21**	**0.41**	**47.19**	**1.64**	**4.92**	**33,014.94**	**0.28**	**0.15**
Net Emissions From Electricity Usage					**6.12**	**0.31**	**35.20**	**1.22**	**3.67**	**24622.81**	**0.21**	**0.11**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	2.09	0.10	12.00	0.42	1.25
Total Project Emissions (lbs/day)	8.21	0.41	47.19	1.64	4.92
Total Net Emissions (lbs/day)	**6.12**	**0.31**	**35.20**	**1.22**	**3.67**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: V:\ACTIVE PROJECTS\Golden Shore\Operations\Ops- Existing_Golden Shore.urb924

Project Name: Golden Shore- Existing Land Use

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.98	1.98	3.20	0.00	0.01	0.01	2,354.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	17.28	18.23	197.37	0.29	50.05	9.62	29,236.27

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	19.26	20.21	200.57	0.29	50.06	9.63	31,591.08

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.14	1.96	1.65	0.00	0.00	0.00	2,352.00
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	1.72						
TOTALS (lbs/day, unmitigated)	1.98	1.98	3.20	0.00	0.01	0.01	2,354.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General office building	17.28	18.23	197.37	0.29	50.05	9.62	29,236.27

TOTALS (lbs/day, unmitigated)	17.28	18.23	197.37	0.29	50.05	9.62	29,236.27

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General office building		12.20	1000 sq ft	294.00	3,586.80	29,062.05
					3,586.80	29,062.05

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.6	1.0	98.8	0.2
Light Truck < 3750 lbs	10.9	1.8	93.6	4.6
Light Truck 3751-5750 lbs	21.8	0.5	99.0	0.5
Med Truck 5751-8500 lbs	9.6	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	42.9	57.1
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.5	62.9	37.1	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General office building				35.0	17.5	47.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: V:\ACTIVE PROJECTS\Golden Shore\Operations\Ops- Existing_Golden Shore.urb924

Project Name: Golden Shore- Existing Land Use

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.14	1.96	1.65	0.00	0.00	0.00	2,352.00
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.72						
TOTALS (lbs/day, unmitigated)	1.86	1.96	1.65	0.00	0.00	0.00	2,352.00

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General office building	17.59	22.81	181.47	0.25	50.05	9.62	25,358.22
TOTALS (lbs/day, unmitigated)	17.59	22.81	181.47	0.25	50.05	9.62	25,358.22

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General office building		12.20	1000 sq ft	294.00	3,586.80	29,062.05
					3,586.80	29,062.05

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.6	1.0	98.8	0.2
Light Truck < 3750 lbs	10.9	1.8	93.6	4.6
Light Truck 3751-5750 lbs	21.8	0.5	99.0	0.5
Med Truck 5751-8500 lbs	9.6	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	42.9	57.1
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.5	62.9	37.1	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General office building				35.0	17.5	47.5

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: V:\ACTIVE PROJECTS\Golden Shore\Operations\Ops- Golden Shore.urb924

Project Name: Golden Shore- Long Beach

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	1.25	16.53	9.37	0.00	0.03	0.03	20,668.63
Hearth							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	56.94						
Architectural Coatings	5.21						
TOTALS (lbs/day, unmitigated)	63.77	16.59	14.01	0.00	0.05	0.05	20,677.06

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse high rise	23.93	24.41	243.80	0.50	80.76	15.71	48,750.10
Hotel	14.48	16.98	161.98	0.34	55.94	10.86	33,500.60
General office building	18.10	21.97	214.95	0.45	72.94	14.17	43,834.64
TOTALS (lbs/day, unmitigated)	56.51	63.36	620.73	1.29	209.64	40.74	126,085.34

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse high rise	17.34	4.17	dwelling units	1,110.00	4,628.70	46,762.83
Hotel		8.92	rooms	400.00	3,568.00	32,406.36
General office building		11.31	1000 sq ft	367.00	4,150.77	42,244.46
					12,347.47	121,413.65

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.6	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.3	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	41.4	58.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
General office building				35.0	17.5	47.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: V:\ACTIVE PROJECTS\Golden Shore\Operations\Ops- Golden Shore.urb924

Project Name: Golden Shore- Long Beach

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	1.25	16.53	9.37	0.00	0.03	0.03	20,668.63
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	56.94						
Architectural Coatings	5.21						
TOTALS (lbs/day, unmitigated)	63.40	16.53	9.37	0.00	0.03	0.03	20,668.63

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse high rise	23.61	29.35	228.83	0.41	80.76	15.71	44,111.47
Hotel	15.19	20.39	152.94	0.28	55.94	10.86	30,286.06
General office building	19.44	26.41	201.34	0.37	72.94	14.17	39,644.21
TOTALS (lbs/day, unmitigated)	58.24	76.15	583.11	1.06	209.64	40.74	114,041.74

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse high rise	17.34	4.17	dwelling units	1,110.00	4,628.70	46,762.83
Hotel		8.92	rooms	400.00	3,568.00	32,406.36
General office building		11.31	1000 sq ft	367.00	4,150.77	42,244.46
					12,347.47	121,413.65

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.6	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.3	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	41.4	58.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
General office building				35.0	17.5	47.5

Appendix B-4

- Greenhouse Gas Emissions
    - GHG Analysis

Golden Shore
Greenhouse Gas Analysis

Emission Source	CO_2e[e] (Metric Tons)
Existing	
Construction	**0**
On-road Vehicles[a]	6,081
Electricity[b]	1,256
Water Conveyance	32
Natural gas[c]	173
Total	**7,543**
Proposed Project	
Construction	9,510
Construction (amortized)	317
On-road Vehicles[a]	18,931
Electricity[b]	4,249
Water Conveyance	1,104
Natural gas[c]	1,802
Total	**26,403**
Net Increase	
Total	18,861
2004 Statewide Total[d]	479,740,000
Net Increase as Percentage of 2004 Statewide Inventory	**0.003931%**

[a] Mobile source values were derived using EMFAC2007 in addition to the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008.

[b] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993. Water conveyance energy rates from California Energy Commission Staff Report: California's Water - Energy Relationship. 2005

[c] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[d] Statewide Greenhouse Gas Emissions Inventory: http://www.arb.ca.gov/cc/ccei/emsinv/emsinv.htm

[e] All CO2e factors were derived using the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008

Sources: PCR Services Corporation, 2009.

Emission Source	CO_2e[e] (Metric Tons)
Business as Usual	
Construction	9,510
On-road Vehicles[a]	25,404
Electricity[b]	4,941
Water Conveyance	1,350
Natural gas[c]	2,096
Total	**33,791**
Proposed Project	
Construction	9,510
Construction (amortized)	317
On-road Vehicles[a]	18,931
Electricity[b]	4,249
Water Conveyance	1,104
Natural gas[c]	1,802
Total	**26,403**
GHG Reduction	
Total	-7,387
% Reduction Below BAU	-21.9%

[a] Mobile source values were derived using EMFAC2007 in addition to the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008.

[b] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993. Water conveyance energy rates from California Energy Commission Staff Report: California's Water - Energy Relationship. 2005

[c] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[d] Statewide Greenhouse Gas Emissions Inventory: http://www.arb.ca.gov/cc/ccei/emsinv/emsinv.htm

[e] All CO2e factors were derived using the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008

Sources: PCR Services Corporation, 2009.

Golden Shore
Construction GHGs

CO_2e[d] (Metric Tons)											
	Phase I			**Phase II**				**Phase III**			**Total**
Emission Source	2011	2012	2013	2013	2014	2015	2016	2016	2017	2018	
CO_2 Emissions	488	890	710	195	1,844	1,854	179	1,171	1,457	667	**9,453**
CH_4 Emissions	1	3	2	1	5	5	1	3	4	2	**27**
N_2O Emissions	1	3	2	1	6	6	1	4	4	2	**29**
CO_2e Emissions	491	895	714	196	1,855	1,865	180	1,178	1,466	671	**9,510**
2004 Statewide Total[c]	479,740,000	479,740,000	479,740,000	479,740,000	479,740,000	479,740,000	479,740,000	479,740,000	479,740,000	479,740,000	**479,740,000**
Net Increase as Percentage of 2004 Statewide Inventory	0.00010%	0.00019%	0.00015%	0.00004%	0.00039%	0.00039%	0.00004%	0.00025%	0.00031%	0.00014%	**0.00198%**

[a] *Mobile source values were derived using EMFAC2007 in addition to the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008.*

[b] *On site construction equipment values were derived using OFFROAD2007 in addition to the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008.*

[c] *Statewide totals were derived from the CARB Draft California GHG Inventory.*

[d] *All CO_2E factors were derived using the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008.*

Source: PCR Services Corporation, 2009.

Electricity

Land Use	1,000 Sqft	Usage Rate [a] (kWh\sq.ft\yr)	(KWh\year)	MWh\year
Existing				
Office	294.0	12.95	3,807,300	3,807
Total Existing			**3,807,300**	**3,807**
Proposed Project				
Office	367.0	11.14	4,087,279	4,087
Hotel/Motel	400.0	8.56	3,422,800	3,423
Residential (DU)	1110.0	4,839	5,371,057	5,371
Total Project			**12,881,136**	**12,881**
Net Project Electricity Usage			**9,073,836**	**9,074**

GHG	lbs/MWh[b]	lbs	metric tons	CO_2E (metric tons)
Existing				
CO_2	724.12	2756942.076	1250.52687	1,251
CH_4	0.0302	114.98046	0.052154217	1
N_2O	0.0081	30.83913	0.013988383	4
Proposed Project				**1,256**
CO_2	724.12	9327488.128	4230.873995	4,231
CH_4	0.0302	389.0103042	0.176451962	4
N_2O	0.0081	104.3372008	0.04732652	15
Net				**4,249**
CO_2	724.12	6,570,546	2,980	2,980
CH_4	0.0302	274	0.12	3
N_2O	0.0081	73	0.03	10
				2,993 **Total Annual CO2e**

Land Use	1,000 Sqft	Usage Rate [a] (kWh\sq.ft\yr)	(KWh\year)	MWh\year
BAU				
Office	367.0	12.95	4,752,650	4,753
Hotel/Motel	400.0	9.95	3,980,000	3,980
Residential (DU)	1110.0	5,627	6,245,415	6,245
Total BAU			**14,978,065**	**14,978**
Proposed Project				
Office	367.0	11.14	4,087,279	4,087
Hotel/Motel	400.0	8.56	3,422,800	3,423
Residential (DU)	1110.0	4,839	5,371,057	5,371
Total Project			**12,881,136**	**12,881**
Difference in Electricity Usage			**(2,096,929)**	**(2,097)**

GHG	lbs/MWh[b]	lbs	metric tons	CO_2E (metric tons)
BAU				
CO_2	724.12	10845916.43	4919.620924	4,920
CH_4	0.0302	452.337563	0.2051767	4
N_2O	0.0081	121.3223265	0.055030837	17
Proposed Project				**4,941**
CO_2	724.12	9327488.128	4230.873995	4,231
CH_4	0.0302	389.0103042	0.176451962	4
N_2O	0.0081	104.3372008	0.04732652	15
Difference				**4,249**
CO_2	724.12	-1,518,428	-689	-689
CH_4	0.0302	-63	(0.03)	-1
N_2O	0.0081	-17	(0.01)	-2
				-692 **Total Annual CO2e**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Electricity Usage Rates from California Energy Commission Staff Report: California's Water - Energy Relationship. 2005

[c] Emission factors for CO_2, CH_4, and N_2O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008

Water and Wastewater Generation Factors

			Water			Wastewater		
Land Use	Amount	Units	AF/Year/Unit	MG/Year/Unit	MG/Year	GPD/Unit	MG/Year/Unit	MG/Year
Existing								
Office	294.0	KSF	0.073	0.024	7.0	100	0.037	10.7
Total Existing					**7.0**			**10.7**
Project								
Office	367.0	KSF	0.059	0.019	7.0	100	0.037	13.4
Hotel/Motel	400.0	KSF	0.20	0.064	25.5	167	0.061	24.4
Residential (DU)	1110.0	DU	0.72	0.235	260.4	260	0.095	105.3
Total Project					**293.0**			**143.1**
Net Project					**286.0**			**132.4**

1 acre foot = 325851.433266421 gallon [US, liquid]

Water Conveyance (Water and Wastewater)

	MGD	Usage Rate [c] kWh/MG	(KWh\year)	MWh\year
Existing				
Water Supply, Conveyance, Treatment, and Distribution	0.02	10,200	**71,661**	**72**
Wastewater Treatment	0.03	2,500	**26,828**	**27**
Total Existing			**98,489**	**98**
Proposed Project				
Water Supply, Conveyance, Treatment, and Distribution	0.80	10,200	**2,988,353**	**2,988**
Wastewater Treatment	0.39	2,500	**357,791**	**358**
Total Proposed Project			**3,346,144**	**3,346**
Net Project Water Power Usage			**3,247,655**	**3,248**

GHG	lbs/MWh[b]	lbs	metric tons	CO_2E (metric tons)
Existing				
CO_2	724.12	71317.845	32.34920385	32.34920385
CH_4	0.0302	2.9743674	0.001349149	0.028332134
N_2O	0.0081	0.7977608	0.000361858	0.112175953
Proposed Project				32.49
CO_2	724.12	2423010.1	1099.057977	1099.057977
CH_4	0.0302	101.05356	0.045837086	0.962578812
N_2O	0.0081	27.103769	0.012294053	3.811156411
Net				1103.83
CO_2	724.12	2,351,692	1,067	1,067
CH_4	0.0302	98	0.04	0.93
N_2O	0.0081	26	0.01	4
			1,071	**Total Annual CO2e**

			Water			Wastewater		
Land Use	Amount	Units	AF/Year/Unit	MG/Year/Unit	MG/Year	GPD/Unit	MG/Year/Unit	MG/Year
BAU								
Office	367.0	KSF	0.073	0.024	8.8	100	0.037	13.4
Hotel/Motel	400.0	KSF	0.24	0.080	31.9	167	0.061	24.4
Residential (DU)	1110.0	DU	0.90	0.293	325.5	260	0.095	105.3
Total BAU					**366.2**			**143.1**
Proposed Project								
Office	367.0	KSF	0.059	0.019	7.0	100	0.037	13.4
Hotel/Motel	400.0	KSF	0.20	0.064	25.5	167	0.061	24.4
Residential (DU)	1110.0	DU	0.72	0.235	260.4	260	0.095	105.3
Total Project					**293.0**			**143.1**
Difference					**(73.2)**			**0.0**

1 acre foot = 325851.433266421 gallon [US, liquid]

	MGD	Usage Rate [c] kWh/MG	(KWh\year)	MWh\year
BAU				
Water Supply, Conveyance, Treatment, and Distribution	1.00	10,200	**3,735,441**	**3,735**
Wastewater Treatment	0.39	2,500	**357,791**	**358**
Total Existing			**4,093,233**	**4,093**
Proposed Project				
Water Supply, Conveyance, Treatment, and Distribution	0.80	10,200	**2,988,353**	**2,988**
Wastewater Treatment	0.39	2,500	**357,791**	**358**
Total Proposed Project			**3,346,144**	**3,346**
Difference Water Power Usage			**-747,088**	**-747**

GHG	lbs/MWh[b]	lbs	metric tons	CO_2E (metric tons)
BAU				
CO_2	724.12	2963991.6	1344.442887	1344.442887
CH_4	0.0302	123.61563	0.056071059	1.177492237
N_2O	0.0081	33.155184	0.015038926	4.662067183
Proposed Project				1350.28
CO_2	724.12	2423010.1	1099.057977	1099.057977
CH_4	0.0302	101.05356	0.045837086	0.962578812
N_2O	0.0081	27.103769	0.012294053	3.811156411
Difference				1103.83
CO_2	724.12	-540,982	-245	-245
CH_4	0.0302	-23	(0.01)	-0.21
N_2O	0.0081	-6	(0.00)	-1
			-246	**Total Annual CO2e**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Electricity Usage Rates from California Energy Commission Staff Report: California's Water - Energy Relationship. 2005

[c] Emission factors for CO_2, CH_4, and N_2O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008

Natural Gas

Land Use	1,000 Sqft	Usage Rate[c] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (cu.ft\year)	Total Natural Gas Usage (MMBTU\year)
Existing					
Office	294.0	2.0	588,000	7,056,000	7,197
Total Existing			588,000	**7,056,000**	**7,197**
Proposed Project					
Office	367.0	1.7	631,240	7,574,880	7,726
Hotel/Motel	400.0	4.1	1,651,200	19,814,400	20,211
Residential (DU)	1110.0	3,450	3,829,378	45,952,535	46,872
Total Project			**6,111,818**	**73,341,815**	**74,809**
Net Project			**5,523,818**	**66,285,815**	**67,612**

GHG	Kg/MMBtu[b]	Kg	metric tons	CO_2E (Metric Tons)
Existing				
CO_2	53.06	381,879.19	173.22	173.22
CH_4	0.001	7.20	0.00	0.07
N_2O	0.0001	0.72	0.00	0.10
Project				**173.39**
CO_2	53.06	3,969,347.03	1,800.46	1,800.46
CH_4	0.001	74.81	0.03	0.71
N_2O	0.0001	7.48	0.00	1.05
Net				**1,802.23**
CO_2	53.06	3,587,467.84	1,627.25	1,627.25
CH_4	0.001	67.61	0.03	0.64
N_2O	0.0001	6.76	0.00	0.95

1628.84 Total Annual CO2E

Land Use	1,000 Sqft	Usage Rate[c] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (cu.ft\year)	Total Natural Gas Usage (MMBTU\year)
BAU					
Office	367.0	2.0	734,000	8,808,000	8,984
Hotel/Motel	400.0	4.8	1,920,000	23,040,000	23,501
Residential (DU)	1110.0	4,012	4,452,765	53,433,180	54,502
Total BAU			7,106,765	**85,281,180**	**86,987**
Proposed Project					
Office	367.0	1.7	631,240	7,574,880	7,726
Hotel/Motel	400.0	4.1	1,651,200	19,814,400	20,211
Residential (DU)	1110.0	3,450	3,829,378	45,952,535	46,872
Total Project			**6,111,818**	**73,341,815**	**74,809**
Difference			**(994,947)**	**(11,939,365)**	**(12,178)**

[a] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

GHG	Kg/MMBtu[b]	Kg	metric tons	CO_2E (Metric Tons)
BAU				
CO_2	53.06	4,615,519.80	2,093.56	2,093.56
CH_4	0.001	86.99	0.04	0.83
N_2O	0.0001	8.70	0.00	1.22
Proposed Project				**2095.61**
CO_2	53.06	3,969,347.03	1,800.46	1,800.46
CH_4	0.001	74.81	0.03	0.71
N_2O	0.0001	7.48	0.00	1.05
Difference				**1,802.23**
CO_2	53.06	(646,172.77)	(293.10)	(293.10)
CH_4	0.001	(12.18)	(0.01)	(0.12)
N_2O	0.0001	(1.22)	(0.00)	(0.17)

-293.39 Total Annual CO2E

[b] Emission factors for CO_2, CH_4, and N_2O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.0, April 2008.

On Road Mobile Source

Land Use	Daily VMT	Annual VMT[a]
Existing		
Office	29062.05	10,607,648
Total Existing	**29,062**	**10,607,648**
Proposed Project		
Office	35062.9	12,797,959
Hotel/Motel	26897.28	9,817,507
Residential (DU)	28518.6	10,409,289
Total Project	**90,479**	**33,024,755**
Net Project		**22,417,106**

Los Angeles County CO_2 2020 AVG Gram/Mile[c]	**557.2940714**
Los Angeles County CH_4 2020 AVG Gram/Mile[c]	**0.021357143**
Los Angeles County N_2O 2020 AVG Gram/Mile[d]	**0.05**

GHG	Gram/Mile	Grams	metric tons	CO_2E (Metric Tons)
Existing				
CO_2	557.29	5,911,579,482	5,912	5,912
CH_4	0.02	226,549	0.23	5
N_2O	0.05	530,382	0.53	164
Project				**6,081**
CO_2	557.29	18,404,500,005	18,405	18,405
CH_4	0.02	705,314	0.71	15
N_2O	0.05	1,651,238	1.65	512
Net				**18,931**
CO_2	557.29	12,492,920,523	12,493	12,493
CH_4	0.02	478,765	0	10
N_2O	0.05	1,120,855	1	347
			Total Annual CO2E	**12,850**

Land Use	Daily VMT	Annual VMTa
BAU		
Office	42244.46	15,419,228
Hotel/Motel	32406.36	11,828,321
Residential (DU)	46762.83	17,068,433
Total BAU	**121,414**	**44,315,982**
Proposed Project		
Office	35062.9	12,797,959
Hotel/Motel	26897.28	9,817,507
Residential (DU)	28518.6	10,409,289
Total Project	**90,479**	33,024,755
Difference		**(11,291,228)**

[a] Multiplied Daily VMT by 365 to get Annual VMT

[b] Factors dervied from URBEMIS2007

Los Angeles County CO_2 2020 AVG Gram/Mile[c]	**557.2940714**
Los Angeles County CH_4 2020 AVG Gram/Mile[c]	**0.021357143**
Los Angeles County N_2O 2020 AVG Gram/Mile[d]	**0.05**

GHG	Gram/Mile	Grams	metric tons	CO_2E (Metric Tons)
BAU				
CO_2	557.29	24,697,034,177	24,697	24,697
CH_4	0.02	946,463	0.95	20
N_2O	0.05	2,215,799	2.22	687
Proposed Project				**25,404**
CO_2	557.29	18,404,500,005	18,405	18,405
CH_4	0.02	705,314	0.71	15
N_2O	0.05	1,651,238	1.65	512
Difference				**18,931**
CO_2	557.29	-6,292,534,173	-6,293	-6,293
CH_4	0.02	-241,148	0	-5
N_2O	0.05	-564,561	-1	-175
			Total Annual CO2E	

[c] Averaged EMFAC2007 fleet values for 0-65mph

[d] Emission factors for CH_4 and N_2O were derived from the California Climate Action Registry General Reporting Protocol;

EMFAC2007 Summary

CO2	
Speed	**Grams/Mile**
0	392.609
5	1207.737
10	921.398
15	728.826
20	598.73
25	514.889
30	458.228
35	421.494
40	400.388
45	392.63
50	397.489
55	415.645
60	449.319
65	502.735
AVG	**557.2940714**

Pollutant Name: Carbon Dioxide **Temperature: 60F Relative Humidity: 50%**

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	996.277	5331.105	0	0	392.609
5	933.621	1184.236	1710.984	2969.7	2622.715	263.543	1207.737
10	705.521	895.053	1262.174	2477.318	2342.694	220.033	921.398
15	553.359	702.143	973.371	2090.251	2177.333	189.124	728.826
20	450.465	571.694	783.579	1816.708	2076.646	167.308	598.73
25	380.601	483.122	657.574	1713.249	2014.071	152.342	514.889
30	333.759	423.736	574.559	1631.059	1975.087	142.834	458.228
35	303.773	385.72	522.156	1567.185	1951.629	137.995	421.494
40	286.956	364.4	493.167	1520.007	1939.281	137.519	400.388
45	281.341	357.28	483.839	1488.731	1935.872	141.541	392.63
50	286.285	363.549	493.014	1473.144	1940.821	150.684	397.489
55	302.354	383.921	521.877	1473.556	1954.974	166.194	415.645
60	331.423	420.775	574.224	1490.886	1980.844	190.21	449.319
65	377.053	478.624	657.343	1526.949	2023.377	226.248	502.735

CH4	
Speed	**Grams/Mile**
0	0.037
5	0.053
10	0.038
15	0.028
20	0.022
25	0.018
30	0.015
35	0.013
40	0.012
45	0.012
50	0.012
55	0.012
60	0.013
65	0.014
AVG	**0.021357143**

Pollutant Name: Methane **Temperature: 60F Relative Humidity: 50%**

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	0.16	0.332	0	0	0.037
5	0.037	0.057	0.067	0.139	0.163	0.296	0.053
10	0.027	0.043	0.052	0.08	0.113	0.251	0.038
15	0.02	0.032	0.04	0.042	0.082	0.222	0.028
20	0.016	0.025	0.031	0.026	0.062	0.203	0.022
25	0.012	0.02	0.026	0.022	0.049	0.191	0.018
30	0.01	0.017	0.022	0.019	0.04	0.184	0.015
35	0.009	0.015	0.019	0.016	0.034	0.182	0.013
40	0.008	0.014	0.018	0.014	0.03	0.184	0.012
45	0.008	0.013	0.017	0.013	0.028	0.191	0.012
50	0.008	0.013	0.017	0.012	0.026	0.202	0.012
55	0.008	0.013	0.017	0.012	0.026	0.22	0.012
60	0.009	0.014	0.018	0.013	0.026	0.249	0.013
65	0.01	0.016	0.02	0.014	0.027	0.292	0.014