

# ***APPENDIX L***

---

---

*URBEMIS Output Files*

5/25/2010 3:39:29 PM

Urbemis 2007 Version 9.2.4

## Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt A - Construction and Operation.urb924

Project Name: Barstow Alt A - Construction and Operation

Project Location: San Bernadino County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

## CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2012 TOTALS (tons/year unmitigated)	3.44	9.09	6.98	0.01	5.33	0.45	5.78	1.12	0.41	1.53	1,675.42
2012 TOTALS (tons/year mitigated)	2.56	8.56	6.98	0.01	0.42	0.24	0.66	0.09	0.22	0.31	1,675.42
Percent Reduction	25.61	5.81	0.00	0.00	92.10	47.78	88.64	91.58	47.85	79.75	0.00
2013 TOTALS (tons/year unmitigated)	1.22	1.02	1.17	0.00	0.01	0.07	0.08	0.00	0.07	0.07	201.19
2013 TOTALS (tons/year mitigated)	0.47	0.90	1.17	0.00	0.01	0.02	0.02	0.00	0.01	0.02	201.19
Percent Reduction	61.55	11.57	0.00	0.00	0.00	79.35	74.08	0.00	79.52	77.40	0.00

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.45	0.53	1.29	0.00	0.00	0.00	628.63

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.77	42.45	281.46	0.36	60.47	12.04	35,686.39

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	27.22	42.98	282.75	0.36	60.47	12.04	36,315.02

Page: 1

5/25/2010 3:40:08 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt A - Construction and Operation.urb924

Project Name: Barstow Alt A - Construction and Operation

Project Location: San Bernadino 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

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2012 TOTALS (lbs/day unmitigated)	53.58	202.44	88.28	0.24	216.44	8.53	224.97	45.30	7.85	53.15	31,092.98
2012 TOTALS (lbs/day mitigated)	35.80	193.56	88.28	0.24	16.05	5.69	21.74	3.45	5.23	8.69	31,092.98
2013 TOTALS (lbs/day unmitigated)	55.58	46.67	58.61	0.07	0.28	3.23	3.51	0.10	2.97	3.06	10,128.14
2013 TOTALS (lbs/day mitigated)	21.47	41.41	58.61	0.07	0.28	0.73	1.00	0.10	0.66	0.76	10,128.14

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	2.42	2.92	7.05	0.00	0.03	0.03	3,444.57

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	129.48	219.13	1,567.85	2.06	331.35	66.04	201,538.28

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	131.90	222.05	1,574.90	2.06	331.38	66.07	204,982.85

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
------------	------------	-----------	------------	------------------	---------------------	-------------	-------------------	----------------------	--------------	------------

5/25/2010 3:40:08 PM

Time Slice 1/2/2012-3/14/2012	14.76	172.74	70.50	0.23	108.63	6.99	115.62	22.79	6.43	29.22	27,873.32
Active Days: 53											
Mass Grading 01/01/2012-03/31/2012	14.76	172.74	70.50	0.23	108.63	6.99	115.62	22.79	6.43	29.22	27,873.32
Mass Grading Dust	0.00	0.00	0.00	0.00	107.80	0.00	107.80	22.51	0.00	22.51	0.00
Mass Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.04	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18
Time Slice 3/15/2012-3/30/2012	18.51	<u>202.44</u>	<u>88.28</u>	<u>0.24</u>	<u>216.44</u>	<u>8.53</u>	<u>224.97</u>	<u>45.30</u>	<u>7.85</u>	<u>53.15</u>	<u>31,092.98</u>
Active Days: 12											
Fine Grading 03/15/2012-04/30/2012	3.75	29.70	17.78	0.00	107.81	1.54	109.35	22.52	1.42	23.94	3,219.66
Fine Grading Dust	0.00	0.00	0.00	0.00	107.80	0.00	107.80	22.51	0.00	22.51	0.00
Fine Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
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	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18
Mass Grading 01/01/2012-03/31/2012	14.76	172.74	70.50	0.23	108.63	6.99	115.62	22.79	6.43	29.22	27,873.32
Mass Grading Dust	0.00	0.00	0.00	0.00	107.80	0.00	107.80	22.51	0.00	22.51	0.00
Mass Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.04	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18

5/25/2010 3:40:08 PM

Time Slice 4/2/2012-4/30/2012	3.75	29.70	17.78	0.00	107.81	1.54	109.35	22.52	1.42	23.94	3,219.66
Active Days: 21											
Fine Grading 03/15/2012-04/30/2012	3.75	29.70	17.78	0.00	107.81	1.54	109.35	22.52	1.42	23.94	3,219.66
Fine Grading Dust	0.00	0.00	0.00	0.00	107.80	0.00	107.80	22.51	0.00	22.51	0.00
Fine Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
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	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18
Time Slice 5/1/2012-8/14/2012	6.39	34.08	49.88	0.06	0.24	2.27	2.51	0.09	2.08	2.17	8,134.74
Active Days: 76											
Building 05/01/2012-02/15/2013	6.39	34.08	49.88	0.06	0.24	2.27	2.51	0.09	2.08	2.17	8,134.74
Building Off Road Diesel	4.92	23.62	17.40	0.00	0.00	1.80	1.80	0.00	1.66	1.66	2,545.06
Building Vendor Trips	0.77	9.01	7.60	0.02	0.08	0.36	0.44	0.03	0.33	0.36	2,168.90
Building Worker Trips	0.70	1.45	24.87	0.04	0.16	0.10	0.27	0.06	0.09	0.15	3,420.78
Time Slice 8/15/2012-12/31/2012	<u>53.58</u>	34.12	50.55	0.06	0.25	2.27	2.52	0.09	2.09	2.17	8,228.18
Active Days: 99											
Building 05/01/2012-02/15/2013	6.39	34.08	49.88	0.06	0.24	2.27	2.51	0.09	2.08	2.17	8,134.74
Building Off Road Diesel	4.92	23.62	17.40	0.00	0.00	1.80	1.80	0.00	1.66	1.66	2,545.06
Building Vendor Trips	0.77	9.01	7.60	0.02	0.08	0.36	0.44	0.03	0.33	0.36	2,168.90
Building Worker Trips	0.70	1.45	24.87	0.04	0.16	0.10	0.27	0.06	0.09	0.15	3,420.78
Coating 08/15/2012-03/01/2013	47.19	0.04	0.68	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.44
Architectural Coating	47.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.68	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.44

5/25/2010 3:40:08 PM

Time Slice 1/1/2013-2/15/2013	<u>55.58</u>	<u>46.67</u>	<u>58.61</u>	<u>0.07</u>	<u>0.28</u>	<u>3.23</u>	<u>3.51</u>	<u>0.10</u>	<u>2.97</u>	<u>3.06</u>	<u>10,128.14</u>
Active Days: 34											
Asphalt 01/01/2013-03/31/2013	2.56	15.18	11.12	0.01	0.03	1.18	1.21	0.01	1.09	1.10	1,903.00
Paving Off-Gas	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.10	12.84	8.03	0.00	0.00	1.09	1.09	0.00	1.00	1.00	1,131.92
Paving On Road Diesel	0.18	2.21	0.82	0.00	0.01	0.08	0.10	0.00	0.08	0.08	431.91
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Building 05/01/2012-02/15/2013	5.83	31.45	46.87	0.06	0.24	2.04	2.29	0.09	1.87	1.96	8,131.78
Building Off Road Diesel	4.50	22.18	16.96	0.00	0.00	1.62	1.62	0.00	1.49	1.49	2,545.06
Building Vendor Trips	0.70	7.96	6.98	0.02	0.08	0.32	0.40	0.03	0.29	0.32	2,169.15
Building Worker Trips	0.63	1.32	22.93	0.04	0.16	0.11	0.27	0.06	0.09	0.15	3,417.57
Coating 08/15/2012-03/01/2013	47.19	0.04	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36
Architectural Coating	47.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36
Time Slice 2/18/2013-3/1/2013	49.74	15.21	11.75	0.01	0.04	1.19	1.22	0.01	1.09	1.10	1,996.36
Active Days: 10											
Asphalt 01/01/2013-03/31/2013	2.56	15.18	11.12	0.01	0.03	1.18	1.21	0.01	1.09	1.10	1,903.00
Paving Off-Gas	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.10	12.84	8.03	0.00	0.00	1.09	1.09	0.00	1.00	1.00	1,131.92
Paving On Road Diesel	0.18	2.21	0.82	0.00	0.01	0.08	0.10	0.00	0.08	0.08	431.91
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Coating 08/15/2012-03/01/2013	47.19	0.04	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36
Architectural Coating	47.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36



5/25/2010 3:40:08 PM

Time Slice 3/4/2013-3/29/2013	2.56	15.18	11.12	0.01	0.03	1.18	1.21	0.01	1.09	1.10	1,903.00
Active Days: 20											
Asphalt 01/01/2013-03/31/2013	2.56	15.18	11.12	0.01	0.03	1.18	1.21	0.01	1.09	1.10	1,903.00
Paving Off-Gas	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.10	12.84	8.03	0.00	0.00	1.09	1.09	0.00	1.00	1.00	1,131.92
Paving On Road Diesel	0.18	2.21	0.82	0.00	0.01	0.08	0.10	0.00	0.08	0.08	431.91
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17

Phase Assumptions

Phase: Fine Grading 3/15/2012 - 4/30/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 21.55

Maximum Daily Acreage Disturbed: 5.39

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 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: Mass Grading 1/1/2012 - 3/31/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 21.55

Maximum Daily Acreage Disturbed: 5.39

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 5816.74

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

Page: 7

**5/25/2010 3:40:08 PM**

- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 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 1/1/2013 - 3/31/2013 - Default Paving Description

Acres to be Paved: 5.39

Off-Road Equipment:

- 4 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

Phase: Building Construction 5/1/2012 - 2/15/2013 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 2 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 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 8/15/2012 - 3/1/2013 - 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

Construction Mitigated Detail Report:

5/25/2010 3:40:08 PM

## CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 1/2/2012-3/14/2012	14.76	168.30	70.50	0.23	8.44	5.57	14.00	1.86	5.12	6.98	27,873.32
Active Days: 53											
Mass Grading 01/01/2012-03/31/2012	14.76	168.30	70.50	0.23	8.44	5.57	14.00	1.86	5.12	6.98	27,873.32
Mass Grading Dust	0.00	0.00	0.00	0.00	7.61	0.00	7.61	1.59	0.00	1.59	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.12	0.12	0.00	0.11	0.11	3,007.48
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.04	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18
Time Slice 3/15/2012-3/30/2012	18.51	<u>193.56</u>	<u>88.28</u>	<u>0.24</u>	<u>16.05</u>	<u>5.69</u>	<u>21.74</u>	<u>3.45</u>	<u>5.23</u>	<u>8.69</u>	<u>31,092.98</u>
Active Days: 12											
Fine Grading 03/15/2012-04/30/2012	3.75	25.26	17.78	0.00	7.62	0.12	7.74	1.59	0.11	1.70	3,219.66
Fine Grading Dust	0.00	0.00	0.00	0.00	7.61	0.00	7.61	1.59	0.00	1.59	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.12	0.12	0.00	0.11	0.11	3,007.48
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	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18
Mass Grading 01/01/2012-03/31/2012	14.76	168.30	70.50	0.23	8.44	5.57	14.00	1.86	5.12	6.98	27,873.32
Mass Grading Dust	0.00	0.00	0.00	0.00	7.61	0.00	7.61	1.59	0.00	1.59	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.12	0.12	0.00	0.11	0.11	3,007.48
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.04	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18

5/25/2010 3:40:08 PM

Time Slice 4/2/2012-4/30/2012	3.75	25.26	17.78	0.00	7.62	0.12	7.74	1.59	0.11	1.70	3,219.66
Active Days: 21											
Fine Grading 03/t5/2012-04/30/2012	3.75	25.26	17.78	0.00	7.62	0.12	7.74	1.59	0.11	1.70	3,219.66
Fine Grading Dust	0.00	0.00	0.00	0.00	7.61	0.00	7.61	1.59	0.00	1.59	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.12	0.12	0.00	0.11	0.11	3,007.48
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	0.09	1.54	0.00	0.01	0.01	0.02	0.00	0.01	0.01	212.18
Time Slice 5/1/2012-8/14/2012	6.39	30.54	49.88	0.06	0.24	0.60	0.84	0.09	0.55	0.63	8,134.74
Active Days: 76											
Building 05/01/2012-02/15/2013	6.39	30.54	49.88	0.06	0.24	0.60	0.84	0.09	0.55	0.63	8,134.74
Building Off Road Diesel	4.92	20.08	17.40	0.00	0.00	0.14	0.14	0.00	0.12	0.12	2,545.06
Building Vendor Trips	0.77	9.01	7.60	0.02	0.08	0.36	0.44	0.03	0.33	0.36	2,168.90
Building Worker Trips	0.70	1.45	24.87	0.04	0.16	0.10	0.27	0.06	0.09	0.15	3,420.78
Time Slice 8/15/2012-12/31/2012	<u>35.80</u>	30.58	50.55	0.06	0.25	0.61	0.85	0.09	0.55	0.64	8,228.18
Active Days: 99											
Building 05/01/2012-02/15/2013	6.39	30.54	49.88	0.06	0.24	0.60	0.84	0.09	0.55	0.63	8,134.74
Building Off Road Diesel	4.92	20.08	17.40	0.00	0.00	0.14	0.14	0.00	0.12	0.12	2,545.06
Building Vendor Trips	0.77	9.01	7.60	0.02	0.08	0.36	0.44	0.03	0.33	0.36	2,168.90
Building Worker Trips	0.70	1.45	24.87	0.04	0.16	0.10	0.27	0.06	0.09	0.15	3,420.78
Coating 08/15/2012-03/01/2013	29.41	0.04	0.68	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.44
Architectural Coating	29.39	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	0.68	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.44

5/25/2010 3:40:08 PM

Time Slice 1/1/2013-2/15/2013	<u>21.47</u>	<u>41.41</u>	<u>58.61</u>	<u>0.07</u>	<u>0.28</u>	<u>0.73</u>	<u>1.00</u>	<u>0.10</u>	<u>0.66</u>	<u>0.76</u>	<u>10,128.14</u>
Active Days: 34											
Asphalt 01/01/2013-03/31/2013	2.56	13.25	11.12	0.01	0.03	0.18	0.21	0.01	0.16	0.17	1,903.00
Paving Off-Gas	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.10	10.91	8.03	0.00	0.00	0.08	0.08	0.00	0.08	0.08	1,131.92
Paving On Road Diesel	0.18	2.21	0.82	0.00	0.01	0.08	0.10	0.00	0.08	0.08	431.91
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Building 05/01/2012-02/15/2013	5.83	28.13	46.87	0.06	0.24	0.55	0.79	0.09	0.50	0.58	8,131.78
Building Off Road Diesel	4.50	18.85	16.96	0.00	0.00	0.12	0.12	0.00	0.11	0.11	2,545.06
Building Vendor Trips	0.70	7.96	6.98	0.02	0.08	0.32	0.40	0.03	0.29	0.32	2,169.15
Building Worker Trips	0.63	1.32	22.93	0.04	0.16	0.11	0.27	0.06	0.09	0.15	3,417.57
Coating 08/15/2012-03/01/2013	13.08	0.04	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36
Architectural Coating	13.06	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	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36
Time Slice 2/18/2013-3/1/2013	15.64	13.29	11.75	0.01	0.04	0.18	0.21	0.01	0.16	0.18	1,996.36
Active Days: 10											
Asphalt 01/01/2013-03/31/2013	2.56	13.25	11.12	0.01	0.03	0.18	0.21	0.01	0.16	0.17	1,903.00
Paving Off-Gas	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.10	10.91	8.03	0.00	0.00	0.08	0.08	0.00	0.08	0.08	1,131.92
Paving On Road Diesel	0.18	2.21	0.82	0.00	0.01	0.08	0.10	0.00	0.08	0.08	431.91
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Coating 08/15/2012-03/01/2013	13.08	0.04	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36
Architectural Coating	13.06	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	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.36

5/25/2010 3:40:08 PM

Time Slice 3/4/2013-3/29/2013 Active Days: 20	2.56	13.25	11.12	0.01	0.03	0.18	0.21	0.01	0.16	0.17	1,903.00
Asphalt 01/01/2013-03/31/2013	2.56	13.25	11.12	0.01	0.03	0.18	0.21	0.01	0.16	0.17	1,903.00
Paving Off-Gas	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.10	10.91	8.03	0.00	0.00	0.08	0.08	0.00	0.08	0.08	1,131.92
Paving On Road Diesel	0.18	2.21	0.82	0.00	0.01	0.08	0.10	0.00	0.08	0.08	431.91
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/15/2012 - 4/30/2012 - Default Fine Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

Page: 12

5/25/2010 3:40:09 PM

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Mass Grading 1/1/2012 - 3/31/2012 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

Page: 13

**5/25/2010 3:40:09 PM**

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Paving 1/1/2013 - 3/31/2013 - Default Paving Description

For Cement and Mortar Mixers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Building Construction 5/1/2012 - 2/15/2013 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%



5/25/2010 3:40:09 PM

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Generator Sets, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Generator Sets, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Welders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Welders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Architectural Coating 8/15/2012 - 3/1/2013 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.21	2.86	2.41	0.00	0.01	0.01	3,436.14
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	1.84						
TOTALS (lbs/day, unmitigated)	2.42	2.92	7.05	0.00	0.03	0.03	3,444.57

Area Source Changes to Defaults

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
High turnover (sit-down) rest.	11.02	20.44	146.01	0.19	31.18	6.21	18,944.78
Hotel	6.24	10.12	72.21	0.10	15.50	3.09	9,409.05
Casino	112.22	188.57	1,349.63	1.77	284.67	56.74	173,184.45
TOTALS (lbs/day, unmitigated)	129.48	219.13	1,567.85	2.06	331.35	66.04	201,538.28

## Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 80 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
High turnover (sit-down) rest.		127.15	1000 sq ft	5.86	745.10	17,927.08
Hotel		2.06	rooms	160.00	329.60	8,909.09
Casino		39.43	1000 sq ft	229.02	9,030.26	163,628.29
					10,104.96	190,464.46

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.4	0.4	99.4	0.2
Light Truck < 3750 lbs	10.0	2.0	94.0	4.0
Light Truck 375 t-5750 lbs	20.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	11.4	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.0	0.0	80.0	20.0
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	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.2	54.8	45.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.4	0.0	92.9	7.1

	<u>Residential</u>			<u>Commercial</u>		
	Home-Work	Home-Shop	Home-Other	Commuter	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	30.0	30.0	30.0
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Casino				2.0	1.0	97.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

Commercial-based commute rural trip length changed from 15.4 miles to 30 miles

Commercial-based non-work rural trip length changed from 9.6 miles to 30 miles

Commercial-based customer rural trip length changed from 12.6 miles to 30 miles

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt B - Construction and Operation.urb924

Project Name: Barstow Alt B - Construction and Operation

Project Location: San Bernadino County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2012 TOTALS (tons/year unmitigated)	2.65	8.44	5.87	0.01	2.52	0.42	2.94	0.53	0.38	0.91	1,487.73
2012 TOTALS (tons/year mitigated)	2.03	7.96	5.87	0.01	0.22	0.22	0.44	0.05	0.20	0.25	1,487.73
Percent Reduction	23.27	5.59	0.00	0.00	91.40	46.75	85.07	90.47	46.80	72.20	0.00
2013 TOTALS (tons/year unmitigated)	0.90	0.96	1.02	0.00	0.00	0.07	0.07	0.00	0.07	0.07	169.18
2013 TOTALS (tons/year mitigated)	0.37	0.85	1.02	0.00	0.00	0.02	0.02	0.00	0.02	0.02	169.18
Percent Reduction	58.54	11.42	0.00	0.00	0.00	74.92	71.24	0.00	75.04	73.58	0.00

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.34	0.37	1.15	0.00	0.00	0.00	429.17

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	19.74	31.41	208.23	0.26	44.75	8.91	26,408.97

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	20.08	31.78	209.38	0.26	44.75	8.91	26,838.14

Page: 1

8/2/2010 3:32:04 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt B - Construction and Operation.urb924

Project Name: Barstow Alt B - Construction and Operation

Project Location: San Bernadino 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

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2012 TOTALS (lbs/day unmitigated)	38.96	187.07	78.22	0.23	102.04	7.60	109.64	21.41	6.99	28.40	29,487.79
2012 TOTALS (lbs/day mitigated)	26.52	180.49	78.22	0.23	7.98	5.62	13.59	1.77	5.17	6.93	29,487.79
2013 TOTALS (lbs/day unmitigated)	40.88	43.46	49.89	0.05	0.19	3.11	3.31	0.07	2.86	2.93	8,332.24
2013 TOTALS (lbs/day mitigated)	17.02	38.47	49.89	0.05	0.19	0.75	0.95	0.07	0.69	0.76	8,332.24

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1.80	2.01	6.28	0.00	0.02	0.02	2,351.61

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	95.48	162.13	1,159.96	1.52	245.22	48.87	149,144.37

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	97.28	164.14	1,166.24	1.52	245.24	48.89	151,495.98

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
------------	------------	-----------	------------	------------------	---------------------	-------------	-------------------	----------------------	--------------	------------



8/2/2010 3:32:04 PM

Time Slice 1/2/2012-3/14/2012 Active Days: 53	13.73	165.05	65.47	0.23	51.43	6.52	57.95	10.84	6.00	16.84	27,070.73
Mass Grading 01/01/2012-03/31/2012	13.73	165.05	65.47	0.23	51.43	6.52	57.95	10.84	6.00	16.84	27,070.73
Mass Grading Dust	0.00	0.00	0.00	0.00	50.60	0.00	50.60	10.57	0.00	10.57	0.00
Mass Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75
Time Slice 3/15/2012-3/30/2012 Active Days: 12	16.46	<b><u>187.07</u></b>	<b><u>78.22</u></b>	<b><u>0.23</u></b>	<b><u>102.04</u></b>	<b><u>7.60</u></b>	<b><u>109.64</u></b>	<b><u>21.41</u></b>	<b><u>6.99</u></b>	<b><u>28.40</u></b>	<b><u>29,487.79</u></b>
Fine Grading 03/15/2012-04/30/2012	2.73	22.02	12.75	0.00	50.61	1.08	51.69	10.57	0.99	11.56	2,417.06
Fine Grading Dust	0.00	0.00	0.00	0.00	50.60	0.00	50.60	10.57	0.00	10.57	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
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	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75
Mass Grading 01/01/2012-03/31/2012	13.73	165.05	65.47	0.23	51.43	6.52	57.95	10.84	6.00	16.84	27,070.73
Mass Grading Dust	0.00	0.00	0.00	0.00	50.60	0.00	50.60	10.57	0.00	10.57	0.00
Mass Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75

8/2/2010 3:32:04 PM

Time Slice 4/2/2012-4/30/2012 Active Days: 21	2.73	22.02	12.75	0.00	50.61	1.08	51.69	10.57	0.99	11.56	2,417.06
Fine Grading 03/15/2012-04/30/2012	2.73	22.02	12.75	0.00	50.61	1.08	51.69	10.57	0.99	11.56	2,417.06
Fine Grading Dust	0.00	0.00	0.00	0.00	50.60	0.00	50.60	10.57	0.00	10.57	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
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	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75
Time Slice 5/1/2012-8/14/2012 Active Days: 76	5.95	30.94	40.12	0.04	0.17	2.13	2.30	0.06	1.96	2.02	6,455.06
Building 05/01/2012-02/15/2013	5.95	30.94	40.12	0.04	0.17	2.13	2.30	0.06	1.96	2.02	6,455.06
Building Off Road Diesel	4.92	23.62	17.40	0.00	0.00	1.80	1.80	0.00	1.66	1.66	2,545.06
Building Vendor Trips	0.54	6.30	5.32	0.01	0.05	0.25	0.31	0.02	0.23	0.25	1,517.15
Building Worker Trips	0.49	1.01	17.40	0.03	0.11	0.07	0.19	0.04	0.06	0.10	2,392.85
Time Slice 8/15/2012-12/31/2012 Active Days: 99	<u>38.96</u>	30.97	40.59	0.04	0.17	2.13	2.31	0.06	1.96	2.02	6,520.43
Building 05/01/2012-02/15/2013	5.95	30.94	40.12	0.04	0.17	2.13	2.30	0.06	1.96	2.02	6,455.06
Building Off Road Diesel	4.92	23.62	17.40	0.00	0.00	1.80	1.80	0.00	1.66	1.66	2,545.06
Building Vendor Trips	0.54	6.30	5.32	0.01	0.05	0.25	0.31	0.02	0.23	0.25	1,517.15
Building Worker Trips	0.49	1.01	17.40	0.03	0.11	0.07	0.19	0.04	0.06	0.10	2,392.85
Coating 08/15/2012-03/01/2013	33.01	0.03	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.36
Architectural Coating	33.00	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	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.36

8/2/2010 3:32:05 PM

Time Slice 1/1/2013-2/15/2013	<u>40.88</u>	<u>43.46</u>	<u>49.89</u>	<u>0.05</u>	<u>0.19</u>	<u>3.11</u>	<u>3.31</u>	<u>0.07</u>	<u>2.86</u>	<u>2.93</u>	<u>8,332.24</u>
Active Days: 34											
Asphalt 01/01/2013-03/31/2013	2.44	14.77	11.58	0.01	0.02	1.20	1.22	0.01	1.10	1.11	1,813.95
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04
Paving On Road Diesel	0.08	1.04	0.38	0.00	0.01	0.04	0.05	0.00	0.04	0.04	202.73
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Building 05/01/2012-02/15/2013	5.43	28.67	37.88	0.04	0.17	1.92	2.08	0.06	1.76	1.82	6,453.00
Building Off Road Diesel	4.50	22.18	16.96	0.00	0.00	1.62	1.62	0.00	1.49	1.49	2,545.06
Building Vendor Trips	0.49	5.57	4.88	0.01	0.05	0.22	0.28	0.02	0.20	0.22	1,517.33
Building Worker Trips	0.44	0.92	16.04	0.03	0.11	0.08	0.19	0.04	0.07	0.11	2,390.61
Coating 08/15/2012-03/01/2013	33.01	0.03	0.44	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.30
Architectural Coating	33.00	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	0.01	0.00	0.00	0.00	65.30
Time Slice 2/18/2013-3/1/2013	35.45	14.79	12.01	0.01	0.03	1.20	1.22	0.01	1.10	1.11	1,879.25
Active Days: 10											
Asphalt 01/01/2013-03/31/2013	2.44	14.77	11.58	0.01	0.02	1.20	1.22	0.01	1.10	1.11	1,813.95
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04
Paving On Road Diesel	0.08	1.04	0.38	0.00	0.01	0.04	0.05	0.00	0.04	0.04	202.73
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Coating 08/15/2012-03/01/2013	33.01	0.03	0.44	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.30
Architectural Coating	33.00	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	0.01	0.00	0.00	0.00	65.30

8/2/2010 3:32:05 PM

Time Slice 3/4/2013-3/29/2013	2.44	14.77	11.58	0.01	0.02	1.20	1.22	0.01	1.10	1.11	1,813.95
Active Days: 20											
Asphalt 01/01/2013-03/31/2013	2.44	14.77	11.58	0.01	0.02	1.20	1.22	0.01	1.10	1.11	1,813.95
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04
Paving On Road Diesel	0.08	1.04	0.38	0.00	0.01	0.04	0.05	0.00	0.04	0.04	202.73
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17

Phase Assumptions

Phase: Fine Grading 3/15/2012 - 4/30/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 10.12

Maximum Daily Acreage Disturbed: 2.53

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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 1/1/2012 - 3/31/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 10.12

Maximum Daily Acreage Disturbed: 2.53

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 5816.74

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

Page: 7

**8/2/2010 3:32:06 PM**

- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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: Paving 1/1/2013 - 3/31/2013 - Default Paving Description

Acres to be Paved: 2.53

Off-Road Equipment:

- 4 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
- 1 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 5/1/2012 - 2/15/2013 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 2 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 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 8/15/2012 - 3/1/2013 - 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

8/2/2010 3:32:06 PM

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 1/2/2012-3/14/2012 Active Days: 53	13.73	161.76	65.47	0.23	4.40	5.53	9.93	1.02	5.09	6.11	27,070.73
Mass Grading 01/01/2012-03/31/2012	13.73	161.76	65.47	0.23	4.40	5.53	9.93	1.02	5.09	6.11	27,070.73
Mass Grading Dust	0.00	0.00	0.00	0.00	3.57	0.00	3.57	0.75	0.00	0.75	0.00
Mass Grading Off Road Diesel	2.69	18.65	11.51	0.00	0.00	0.08	0.08	0.00	0.07	0.07	2,247.32
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75
Time Slice 3/15/2012-3/30/2012 Active Days: 12	16.46	<u>180.49</u>	<u>78.22</u>	<u>0.23</u>	<u>7.98</u>	<u>5.62</u>	<u>13.59</u>	<u>1.77</u>	<u>5.17</u>	<u>6.93</u>	<u>29,487.79</u>
Fine Grading 03/15/2012-04/30/2012	2.73	18.73	12.75	0.00	3.58	0.09	3.66	0.75	0.08	0.83	2,417.06
Fine Grading Dust	0.00	0.00	0.00	0.00	3.57	0.00	3.57	0.75	0.00	0.75	0.00
Fine Grading Off Road Diesel	2.69	18.65	11.51	0.00	0.00	0.08	0.08	0.00	0.07	0.07	2,247.32
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	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75
Mass Grading 01/01/2012-03/31/2012	13.73	161.76	65.47	0.23	4.40	5.53	9.93	1.02	5.09	6.11	27,070.73
Mass Grading Dust	0.00	0.00	0.00	0.00	3.57	0.00	3.57	0.75	0.00	0.75	0.00
Mass Grading Off Road Diesel	2.69	18.65	11.51	0.00	0.00	0.08	0.08	0.00	0.07	0.07	2,247.32
Mass Grading On Road Diesel	11.01	143.04	52.72	0.23	0.82	5.45	6.27	0.27	5.01	5.28	24,653.66
Mass Grading Worker Trips	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75

8/2/2010 3:32:06 PM

Time Slice 4/2/2012-4/30/2012 Active Days: 21	2.73	18.73	12.75	0.00	3.58	0.09	3.66	0.75	0.08	0.83	2,417.06
Fine Grading 03/15/2012-04/30/2012	2.73	18.73	12.75	0.00	3.58	0.09	3.66	0.75	0.08	0.83	2,417.06
Fine Grading Dust	0.00	0.00	0.00	0.00	3.57	0.00	3.57	0.75	0.00	0.75	0.00
Fine Grading Off Road Diesel	2.69	18.65	11.51	0.00	0.00	0.08	0.08	0.00	0.07	0.07	2,247.32
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	0.03	0.07	1.23	0.00	0.01	0.01	0.01	0.00	0.00	0.01	169.75
Time Slice 5/1/2012-8/14/2012 Active Days: 76	5.95	27.40	40.12	0.04	0.17	0.46	0.63	0.06	0.42	0.48	6,455.06
Building 05/01/2012-02/15/2013	5.95	27.40	40.12	0.04	0.17	0.46	0.63	0.06	0.42	0.48	6,455.06
Building Off Road Diesel	4.92	20.08	17.40	0.00	0.00	0.14	0.14	0.00	0.12	0.12	2,545.06
Building Vendor Trips	0.54	6.30	5.32	0.01	0.05	0.25	0.31	0.02	0.23	0.25	1,517.15
Building Worker Trips	0.49	1.01	17.40	0.03	0.11	0.07	0.19	0.04	0.06	0.10	2,392.85
Time Slice 8/15/2012-12/31/2012 Active Days: 99	<u>26.52</u>	27.42	40.59	0.04	0.17	0.46	0.64	0.06	0.42	0.48	6,520.43
Building 05/01/2012-02/15/2013	5.95	27.40	40.12	0.04	0.17	0.46	0.63	0.06	0.42	0.48	6,455.06
Building Off Road Diesel	4.92	20.08	17.40	0.00	0.00	0.14	0.14	0.00	0.12	0.12	2,545.06
Building Vendor Trips	0.54	6.30	5.32	0.01	0.05	0.25	0.31	0.02	0.23	0.25	1,517.15
Building Worker Trips	0.49	1.01	17.40	0.03	0.11	0.07	0.19	0.04	0.06	0.10	2,392.85
Coating 08/15/2012-03/01/2013	20.57	0.03	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.36
Architectural Coating	20.56	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	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.36

8/2/2010 3:32:06 PM

Time Slice 1/1/2013-2/15/2013	<u>17.02</u>	<u>38.47</u>	<u>49.89</u>	<u>0.05</u>	<u>0.19</u>	<u>0.75</u>	<u>0.95</u>	<u>0.07</u>	<u>0.69</u>	<u>0.76</u>	<u>8,332.24</u>
Active Days: 34											
Asphalt 01/01/2013-03/31/2013	2.44	13.11	11.58	0.01	0.02	0.33	0.35	0.01	0.30	0.31	1,813.95
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	11.94	8.91	0.00	0.00	0.28	0.28	0.00	0.26	0.26	1,272.04
Paving On Road Diesel	0.08	1.04	0.38	0.00	0.01	0.04	0.05	0.00	0.04	0.04	202.73
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Building 05/01/2012-02/15/2013	5.43	25.34	37.88	0.04	0.17	0.42	0.59	0.06	0.38	0.44	6,453.00
Building Off Road Diesel	4.50	18.85	16.96	0.00	0.00	0.12	0.12	0.00	0.11	0.11	2,545.06
Building Vendor Trips	0.49	5.57	4.88	0.01	0.05	0.22	0.28	0.02	0.20	0.22	1,517.33
Building Worker Trips	0.44	0.92	16.04	0.03	0.11	0.08	0.19	0.04	0.07	0.11	2,390.61
Coating 08/15/2012-03/01/2013	9.15	0.03	0.44	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.30
Architectural Coating	9.14	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	0.01	0.00	0.00	0.00	65.30
Time Slice 2/18/2013-3/1/2013	11.59	13.13	12.01	0.01	0.03	0.33	0.36	0.01	0.31	0.31	1,879.25
Active Days: 10											
Asphalt 01/01/2013-03/31/2013	2.44	13.11	11.58	0.01	0.02	0.33	0.35	0.01	0.30	0.31	1,813.95
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	11.94	8.91	0.00	0.00	0.28	0.28	0.00	0.26	0.26	1,272.04
Paving On Road Diesel	0.08	1.04	0.38	0.00	0.01	0.04	0.05	0.00	0.04	0.04	202.73
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17
Coating 08/15/2012-03/01/2013	9.15	0.03	0.44	0.00	0.00	0.00	0.01	0.00	0.00	0.00	65.30
Architectural Coating	9.14	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	0.01	0.00	0.00	0.00	65.30



8/2/2010 3:32:07 PM

Time Slice 3/4/2013-3/29/2013	2.44	13.11	11.58	0.01	0.02	0.33	0.35	0.01	0.30	0.31	1,813.95
Active Days: 20											
Asphalt 01/01/2013-03/31/2013	2.44	13.11	11.58	0.01	0.02	0.33	0.35	0.01	0.30	0.31	1,813.95
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	11.94	8.91	0.00	0.00	0.28	0.28	0.00	0.26	0.26	1,272.04
Paving On Road Diesel	0.08	1.04	0.38	0.00	0.01	0.04	0.05	0.00	0.04	0.04	202.73
Paving Worker Trips	0.06	0.13	2.28	0.00	0.02	0.01	0.03	0.01	0.01	0.02	339.17

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/15/2012 - 4/30/2012 - Default Fine Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

Page: 12

**8/2/2010 3:32:07 PM**

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Mass Grading 1/1/2012 - 3/31/2012 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

**8/2/2010 3:32:08 PM**

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Paving 1/1/2013 - 3/31/2013 - Default Paving Description

For Cement and Mortar Mixers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Building Construction 5/1/2012 - 2/15/2013 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

8/2/2010 3:32:08 PM

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Generator Sets, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Generator Sets, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Welders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Welders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Architectural Coating 8/15/2012 - 3/1/2013 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.14	1.95	1.64	0.00	0.00	0.00	2,343.18
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	1.29						
<b>TOTALS (lbs/day, unmitigated)</b>	<b>1.80</b>	<b>2.01</b>	<b>6.28</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>2,351.61</b>

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
High turnover (sit-down) rest.	11.02	20.44	146.01	0.19	31.18	6.21	18,944.78
Hotel	3.90	6.33	45.13	0.06	9.69	1.93	5,880.66
Casino	80.56	135.36	968.82	1.27	204.35	40.73	124,318.93
<b>TOTALS (lbs/day, unmitigated)</b>	<b>95.48</b>	<b>162.13</b>	<b>1,159.96</b>	<b>1.52</b>	<b>245.22</b>	<b>48.87</b>	<b>149,144.37</b>

Operational Settings:

- Includes correction for passby trips
- Does not include double counting adjustment for internal trips
- Analysis Year: 2013 Temperature (F): 80 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
High turnover (sit-down) rest.		127.15	1000 sq ft	5.86	745.10	17,927.08
Hotel		2.06	rooms	100.00	206.00	5,568.18
Casino		39.43	1000 sq ft	164.40	6,482.29	117,459.13
					<b>7,433.39</b>	<b>140,954.39</b>

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.4	0.4	99.4	0.2
Light Truck < 3750 lbs	10.0	2.0	94.0	4.0
Light Truck 3751-5750 lbs	20.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	11.4	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.0	0.0	80.0	20.0
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	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.2	54.8	45.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.4	0.0	92.9	7.1

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		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	30.0	30.0	30.0
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Casino				2.0	1.0	97.0

Operational Changes to Defaults

- The urban/rural selection has been changed from Urban to Rural
- Commercial-based commute rural trip length changed from 15.4 miles to 30 miles
- Commercial-based non-work rural trip length changed from 9.6 miles to 30 miles
- Commercial-based customer rural trip length changed from 12.6 miles to 30 miles

2/24/2009 2:27:23 PM

Urbemis 2007 Version 9.2.4

## Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt C - Construction and Operation.urb924

Project Name: Barstow Alt C - Construction and Operation

Project Location: Riverside County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

## CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	0.19	1.13	0.76	0.00	0.11	0.06	0.17	0.02	0.06	0.08	137.34
2010 TOTALS (tons/year mitigated)	0.15	0.98	0.76	0.00	0.01	0.01	0.02	0.00	0.01	0.01	137.34
Percent Reduction	21.29	13.29	0.00	0.00	87.58	84.47	86.45	86.63	84.52	85.12	0.00
2011 TOTALS (tons/year unmitigated)	0.36	0.99	0.78	0.00	0.00	0.07	0.07	0.00	0.07	0.07	130.97
2011 TOTALS (tons/year mitigated)	0.31	0.86	0.78	0.00	0.00	0.01	0.01	0.00	0.01	0.01	130.97
Percent Reduction	15.33	13.35	0.00	0.00	0.00	86.50	84.18	0.00	86.56	85.65	0.00

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.05	0.03	0.31	0.00	0.00	0.00	37.01



OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	8.67	16.61	112.39	0.13	21.91	4.37	12,791.69

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	8.72	16.64	112.70	0.13	21.91	4.37	12,828.70

Page: 1

2/24/2009 2:27:01 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt C - Construction and Operation.urb924

Project Name: Barstow Alt C - Construction and Operation

Project Location: Riverside County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

2/24/2009 2:27:01 PM

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (lbs/day unmitigated)	6.08	50.14	27.65	0.01	11.62	2.51	14.12	2.43	2.31	4.74	4,836.06
2010 TOTALS (lbs/day mitigated)	6.08	42.64	27.65	0.01	1.29	0.20	1.49	0.27	0.18	0.45	4,836.06
2011 TOTALS (lbs/day unmitigated)	7.38	22.10	17.43	0.01	0.04	1.62	1.66	0.02	1.49	1.50	2,895.09
2011 TOTALS (lbs/day mitigated)	6.33	19.13	17.43	0.01	0.04	0.21	0.26	0.02	0.20	0.21	2,895.09

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.28	0.19	1.69	0.00	0.01	0.01	202.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	43.23	85.62	629.13	0.74	120.06	23.94	72,282.72

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	43.51	85.81	630.82	0.74	120.07	23.95	72,485.53

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
--	------------	------------	-----------	------------	------------------	---------------------	-------------	-------------------	----------------------	--------------	------------

2/24/2009 2:27:01 PM

Time Slice 6/1/2010-6/30/2010	3.04	25.07	13.83	0.00	5.81	1.25	7.06	1.21	1.15	2.37	2,418.03
Active Days: 22											
Mass Grading 06/01/2010-07/01/2010	3.04	25.07	13.83	0.00	5.81	1.25	7.06	1.21	1.15	2.37	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	5.80	0.00	5.80	1.21	0.00	1.21	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Time Slice 7/1/2010-7/1/2010	<u>6.08</u>	<u>50.14</u>	<u>27.65</u>	0.00	<u>11.62</u>	<u>2.51</u>	<u>14.12</u>	<u>2.43</u>	<u>2.31</u>	<u>4.74</u>	<u>4,836.06</u>
Active Days: 1											
Fine Grading 07/01/2010-07/20/2010	3.04	25.07	13.83	0.00	5.81	1.25	7.06	1.21	1.15	2.37	2,418.03
Fine Grading Dust	0.00	0.00	0.00	0.00	5.80	0.00	5.80	1.21	0.00	1.21	0.00
Fine Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
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	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Mass Grading 06/01/2010-07/01/2010	3.04	25.07	13.83	0.00	5.81	1.25	7.06	1.21	1.15	2.37	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	5.80	0.00	5.80	1.21	0.00	1.21	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71





2/24/2009 2:27:01 PM

Time Slice 5/16/2011-5/30/2011	6.07	11.65	9.27	0.00	0.02	1.00	1.01	0.01	0.92	0.92	1,327.04
Active Days: 11											
Asphalt 02/01/2011-05/30/2011	1.91	11.64	9.21	0.00	0.02	0.99	1.01	0.01	0.91	0.92	1,318.77
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.02	0.26	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	40.83
Paving Worker Trips	0.06	0.13	2.21	0.00	0.01	0.01	0.02	0.01	0.01	0.01	298.71
Coating 12/01/2010-05/30/2011	4.15	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.27
Architectural Coating	4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.27

Phase Assumptions

Phase: Fine Grading 7/1/2010 - 7/20/2010 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 1.15

Maximum Daily Acreage Disturbed: 0.29

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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 6/1/2010 - 7/1/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1.15

Maximum Daily Acreage Disturbed: 0.29

Fugitive Dust Level of Detail: Default

Page: 7

2/24/2009 2:27:01 PM

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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: Paving 2/1/2011 - 5/30/2011 - Default Paving Description

Acres to be Paved: 0.29

Off-Road Equipment:

4 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

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 7/21/2010 - 5/15/2011 - Default Building Construction Description

Off-Road Equipment:

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 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 12/1/2010 - 5/30/2011 - 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



2/24/2009 2:27:01 PM

## Construction Mitigated Detail Report:

## CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 6/1/2010-6/30/2010 Active Days: 22	3.04	21.32	13.83	0.00	0.64	0.10	0.74	0.14	0.09	0.23	2,418.03
Mass Grading 06/01/2010- 07/01/2010	3.04	21.32	13.83	0.00	0.64	0.10	0.74	0.14	0.09	0.23	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	0.64	0.00	0.64	0.13	0.00	0.13	0.00
Mass Grading Off Road Diesel	3.00	21.24	12.46	0.00	0.00	0.09	0.09	0.00	0.09	0.09	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Time Slice 7/1/2010-7/1/2010 Active Days: 1	<u>6.08</u>	<u>42.64</u>	<u>27.65</u>	0.00	<u>1.29</u>	<u>0.20</u>	<u>1.49</u>	<u>0.27</u>	<u>0.18</u>	<u>0.45</u>	<u>4,836.06</u>
Fine Grading 07/01/2010- 07/20/2010	3.04	21.32	13.83	0.00	0.64	0.10	0.74	0.14	0.09	0.23	2,418.03
Fine Grading Dust	0.00	0.00	0.00	0.00	0.64	0.00	0.64	0.13	0.00	0.13	0.00
Fine Grading Off Road Diesel	3.00	21.24	12.46	0.00	0.00	0.09	0.09	0.00	0.09	0.09	2,247.32
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	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Mass Grading 06/01/2010- 07/01/2010	3.04	21.32	13.83	0.00	0.64	0.10	0.74	0.14	0.09	0.23	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	0.64	0.00	0.64	0.13	0.00	0.13	0.00
Mass Grading Off Road Diesel	3.00	21.24	12.46	0.00	0.00	0.09	0.09	0.00	0.09	0.09	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71





**2/24/2009 2:27:01 PM**

Time Slice 5/16/2011-5/30/2011	5.01	9.96	9.27	0.00	0.02	0.09	0.11	0.01	0.08	0.09	1,327.04
Active Days: 11											
Asphalt 02/01/2011-05/30/2011	1.91	9.96	9.21	0.00	0.02	0.09	0.11	0.01	0.08	0.09	1,318.77
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	9.57	6.91	0.00	0.00	0.07	0.07	0.00	0.07	0.07	979.23
Paving On Road Diesel	0.02	0.26	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	40.83
Paving Worker Trips	0.06	0.13	2.21	0.00	0.01	0.01	0.02	0.01	0.01	0.01	298.71
Coating 12/01/2010-05/30/2011	3.10	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.27
Architectural Coating	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.27

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 7/1/2010 - 7/20/2010 - Default Fine Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

Page: 12

**2/24/2009 2:27:01 PM**

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Mass Grading 6/1/2010 - 7/1/2010 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

**2/24/2009 2:27:02 PM**

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Paving 2/1/2011 - 5/30/2011 - Default Paving Description

For Cement and Mortar Mixers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Building Construction 7/21/2010 - 5/15/2011 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

2/24/2009 2:27:02 PM

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Architectural Coating 12/1/2010 - 5/30/2011 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.17	0.14	0.00	0.00	0.00	200.00
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.15						
TOTALS (lbs/day, unmitigated)	0.28	0.19	1.69	0.00	0.01	0.01	202.81

Area Source Changes to Defaults

2/24/2009 2:27:02 PM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Casino	43.23	85.62	629.13	0.74	120.06	23.94	72,282.72
TOTALS (lbs/day, unmitigated)	43.23	85.62	629.13	0.74	120.06	23.94	72,282.72

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 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
Casino		39.43	1000 sq ft	25.00	985.75	69,002.50
					985.75	69,002.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	45.5	0.9	98.9	0.2
Light Truck < 3750 lbs	9.6	2.1	92.7	5.2
Light Truck 3751-5750 lbs	21.8	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.1	0.8	98.4	0.8
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0



Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.8	0.0	12.5	87.5
Heavy-Heavy Truck 33,001-60,000 lbs	1.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.5	62.2	37.8	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.5	0.0	86.7	13.3

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	70.0	70.0	70.0
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)						
Casino				2.0	1.0	97.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

Commercial-based commute rural trip length changed from 15.4 miles to 70 miles

Commercial-based non-work rural trip length changed from 9.6 miles to 70 miles

Operational Changes to Defaults

Commercial-based customer rural trip length changed from 12.6 miles to 70 miles

2/19/2009 8:55:15 AM

Urbemis 2007 Version 9.2.4

## Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt D - Construction and Operation.urb924

Project Name: Barstow Alt D - Construction and Operation

Project Location: Riverside County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

## CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	0.18	0.95	0.64	0.00	1.11	0.07	1.18	0.23	0.06	0.29	91.10
2010 TOTALS (tons/year mitigated)	0.18	0.95	0.64	0.00	0.12	0.07	0.19	0.03	0.06	0.09	91.10
Percent Reduction	0.00	0.00	0.00	0.00	89.01	0.00	83.99	89.00	0.00	70.46	0.00
2011 TOTALS (tons/year unmitigated)	0.21	1.14	0.83	0.00	0.00	0.09	0.10	0.00	0.09	0.09	123.85
2011 TOTALS (tons/year mitigated)	0.21	1.14	0.83	0.00	0.00	0.09	0.10	0.00	0.09	0.09	123.85
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.02	0.00	0.28	0.00	0.00	0.00	0.51

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	13.65	25.85	174.85	0.20	34.09	6.80	19,900.92

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	13.67	25.85	175.13	0.20	34.09	6.80	19,901.43

Page: 1

2/19/2009 8:57:39 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt D - Construction and Operation.urb924

Project Name: Barstow Alt D - Construction and Operation

Project Location: Riverside County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

2/19/2009 8:57:39 AM

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (lbs/day unmitigated)	6.08	50.14	27.65	0.00	120.02	2.51	122.52	25.07	2.31	27.37	4,836.06
2010 TOTALS (lbs/day mitigated)	6.08	50.14	27.65	0.00	13.19	2.51	15.70	2.76	2.31	5.06	4,836.06
2011 TOTALS (lbs/day unmitigated)	4.78	25.81	18.90	0.01	0.03	2.13	2.16	0.01	1.96	1.97	2,821.60
2011 TOTALS (lbs/day mitigated)	4.78	25.81	18.90	0.01	0.03	2.13	2.16	0.01	1.96	1.97	2,821.60

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	68.35	133.21	978.78	1.15	186.78	37.25	112,455.26

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	68.47	133.23	980.33	1.15	186.79	37.26	112,458.07

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
------------	------------	-----------	------------	------------------	---------------------	-------------	-------------------	----------------------	--------------	------------

2/19/2009 8:57:39 AM

Time Slice 6/1/2010-6/30/2010	3.04	25.07	13.83	0.00	60.01	1.25	61.26	12.53	1.15	13.69	2,418.03
Active Days: 22											
Mass Grading 06/01/2010-07/01/2010	3.04	25.07	13.83	0.00	60.01	1.25	61.26	12.53	1.15	13.69	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	60.00	0.00	60.00	12.53	0.00	12.53	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Time Slice 7/1/2010-7/1/2010	<u>6.08</u>	<u>50.14</u>	<u>27.65</u>	<u>0.00</u>	<u>120.02</u>	<u>2.51</u>	<u>122.52</u>	<u>25.07</u>	<u>2.31</u>	<u>27.37</u>	<u>4,836.06</u>
Active Days: 1											
Fine Grading 07/01/2010-07/20/2010	3.04	25.07	13.83	0.00	60.01	1.25	61.26	12.53	1.15	13.69	2,418.03
Fine Grading Dust	0.00	0.00	0.00	0.00	60.00	0.00	60.00	12.53	0.00	12.53	0.00
Fine Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
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	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Mass Grading 06/01/2010-07/01/2010	3.04	25.07	13.83	0.00	60.01	1.25	61.26	12.53	1.15	13.69	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	60.00	0.00	60.00	12.53	0.00	12.53	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71







2/19/2009 8:57:39 AM

Time Slice 5/16/2011-5/30/2011	2.84	17.99	12.57	<u>0.01</u>	<u>0.03</u>	1.44	1.47	<u>0.01</u>	1.32	1.33	2,035.77
Active Days: 11											
Asphalt 02/01/2011-05/30/2011	2.84	17.99	12.57	0.01	0.03	1.44	1.47	0.01	1.32	1.33	2,035.77
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.20	2.69	0.97	0.00	0.01	0.10	0.12	0.00	0.09	0.10	422.34
Paving Worker Trips	0.07	0.15	2.53	0.00	0.02	0.01	0.03	0.01	0.01	0.01	341.39
Coating 12/01/2010-05/30/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Fine Grading 7/1/2010 - 7/20/2010 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 12

Maximum Daily Acreage Disturbed: 3

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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 6/1/2010 - 7/1/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 12

Maximum Daily Acreage Disturbed: 3

Fugitive Dust Level of Detail: Default

Page: 7

2/19/2009 8:57:39 AM

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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: Paving 2/1/2011 - 5/30/2011 - Default Paving Description

Acres to be Paved: 3

Off-Road Equipment:

- 4 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
- 1 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 7/21/2010 - 5/15/2011 - Default Building Construction Description

Off-Road Equipment:

- 1 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
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 12/1/2010 - 5/30/2011 - 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

2/19/2009 8:57:39 AM

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

## Construction Mitigated Detail Report:

## CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 6/1/2010-6/30/2010 Active Days: 22	3.04	25.07	13.83	0.00	6.60	1.25	7.85	1.38	1.15	2.53	2,418.03
Mass Grading 06/01/2010- 07/01/2010	3.04	25.07	13.83	0.00	6.60	1.25	7.85	1.38	1.15	2.53	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	6.59	0.00	6.59	1.38	0.00	1.38	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Time Slice 7/1/2010-7/1/2010 Active Days: 1	<u>6.08</u>	<u>50.14</u>	<u>27.65</u>	<u>0.00</u>	<u>13.19</u>	<u>2.51</u>	<u>15.70</u>	<u>2.76</u>	<u>2.31</u>	<u>5.06</u>	<u>4,836.06</u>
Fine Grading 07/01/2010- 07/20/2010	3.04	25.07	13.83	0.00	6.60	1.25	7.85	1.38	1.15	2.53	2,418.03
Fine Grading Dust	0.00	0.00	0.00	0.00	6.59	0.00	6.59	1.38	0.00	1.38	0.00
Fine Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
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	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71
Mass Grading 06/01/2010- 07/01/2010	3.04	25.07	13.83	0.00	6.60	1.25	7.85	1.38	1.15	2.53	2,418.03
Mass Grading Dust	0.00	0.00	0.00	0.00	6.59	0.00	6.59	1.38	0.00	1.38	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass 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
Mass Grading Worker Trips	0.04	0.08	1.37	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.71





2/19/2009 8:57:39 AM

Time Slice 5/16/2011-5/30/2011	2.84	17.99	12.57	<u>0.01</u>	<u>0.03</u>	1.44	1.47	<u>0.01</u>	1.32	1.33	2,035.77
Active Days: 11											
Asphalt 02/01/2011-05/30/2011	2.84	17.99	12.57	0.01	0.03	1.44	1.47	0.01	1.32	1.33	2,035.77
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.20	2.69	0.97	0.00	0.01	0.10	0.12	0.00	0.09	0.10	422.34
Paving Worker Trips	0.07	0.15	2.53	0.00	0.02	0.01	0.03	0.01	0.01	0.01	341.39
Coating 12/01/2010-05/30/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 7/1/2010 - 7/20/2010 - Default Fine Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Mass Grading 6/1/2010 - 7/1/2010 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

2/19/2009 8:57:39 AM

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

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Architectural Coating 12/1/2010 - 5/30/2011 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Campground	68.35	133.21	978.78	1.15	186.78	37.25	112,455.26
TOTALS (lbs/day, unmitigated)	68.35	133.21	978.78	1.15	186.78	37.25	112,455.26



2/19/2009 8:57:39 AM

## Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 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
Campground		7.20	unknown	213.00	1,533.60	107,352.00
					1,533.60	107,352.00

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	45.5	0.9	98.9	0.2
Light Truck < 3750 lbs	9.6	2.1	92.7	5.2
Light Truck 3751-5750 lbs	21.8	0.5	99.5	0.0
Med Truck 5751-8500 lbs	12.1	0.8	98.4	0.8
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	0.8	0.0	12.5	87.5
Heavy-Heavy Truck 33,001-60,000 lbs	1.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.5	62.2	37.8	0.0
School Bus	0.1	0.0	0.0	100.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Motor Home	1.5	0.0	86.7	13.3

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		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	70.0	70.0	70.0
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)						
Campground				2.0	1.0	97.0

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

Commercial-based commute rural trip length changed from 15.4 miles to 70 miles

Commercial-based non-work rural trip length changed from 9.6 miles to 70 miles

Commercial-based customer rural trip length changed from 12.6 miles to 70 miles

## Urbemis 2007 Version 9.2.4

## Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt A - 2030 Operation.urb924

Project Name: Barstow Alt A - 2030 Operation

Project Location: San Bernadino County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.45	0.53	1.29	0.00	0.00	0.00	628.63

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	13.98	14.10	120.21	0.36	60.05	11.66	36,201.88

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	14.43	14.63	121.50	0.36	60.05	11.66	36,830.51

5/25/2010 3:41:25 PM

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt A - 2030 Operation.urb924

Project Name: Barstow Alt A - 2030 Operation

Project Location: San Bernadino County

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

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PMt0</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	2.42	2.92	7.05	0.00	0.03	0.03	3,444.57

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	67.13	72.62	671.99	2.09	329.01	63.88	204,471.15

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	69.55	75.54	679.04	2.09	329.04	63.91	207,915.72

5/25/2010 3:41:25 PM

## Area Source Unmitigated Detail Report:

## AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.21	2.86	2.41	0.00	0.01	0.01	3,436.14
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	1.84						
TOTALS (lbs/day, unmitigated)	2.42	2.92	7.05	0.00	0.03	0.03	3,444.57

Area Source Changes to Defaults

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
High turnover (sit-down) rest.	5.68	6.77	62.65	0.20	30.96	6.01	19,221.50
Hotel	3.29	3.35	31.00	0.10	15.39	2.99	9,546.70
Casino	58.16	62.50	578.34	1.79	282.66	54.88	175,702.95
TOTALS (lbs/day, unmitigated)	67.13	72.62	671.99	2.09	329.01	63.88	204,471.15

## Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

5/25/2010 3:41:25 PM

Analysis Year: 2030 Temperature (F): 80 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
High turnover (sit-down) rest.		127.15	1000 sq ft	5.86	745.10	17,927.08
Hotel		2.06	rooms	160.00	329.60	8,909.09
Casino		39.43	1000 sq ft	229.02	9,030.26	163,628.29
					10,104.96	190,464.46

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

	<u>Travel Conditions</u>					
	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	30.0	30.0	30.0
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)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Casino				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt B - 2030 Operation.urb924

Project Name: Barstow Alt B - 2030 Operation

Project Location: San Bernadino County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.34	0.37	1.15	0.00	0.00	0.00	429.17

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	10.31	10.44	88.94	0.26	44.44	8.63	26,790.49

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	10.65	10.81	90.09	0.26	44.44	8.63	27,219.66



Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt B - 2030 Operation.urb924

Project Name: Barstow Alt B - 2030 Operation

Project Location: San Bernadino County

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

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1.80	2.01	6.28	0.00	0.02	0.02	2,351.61

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	49.49	53.74	497.19	1.54	243.48	47.28	151,315.01

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	51.29	55.75	503.47	1.54	243.50	47.30	153,666.62

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.14	1.95	1.64	0.00	0.00	0.00	2,343.18
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	1.29						
TOTALS (lbs/day, unmitigated)	1.80	2.01	6.28	0.00	0.02	0.02	2,351.61

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
High turnover (sit-down) rest.	5.68	6.77	62.65	0.20	30.96	6.01	19,221.50
Hotel	2.06	2.10	19.38	0.06	9.62	1.87	5,966.69
Casino	41.75	44.87	415.16	1.28	202.90	39.40	126,126.82
TOTALS (lbs/day, unmitigated)	49.49	53.74	497.19	1.54	243.48	47.28	151,315.01

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
High turnover (sit-down) rest.		127.15	1000 sq ft	5.86	745.10	17,927.08
Hotel		2.06	rooms	100.00	206.00	5,568.18
Casino		39.43	1000 sq ft	164.40	6,482.29	117,459.13
					7,433.39	140,954.39

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

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	30.0	30.0	30.0
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)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Casino				2.0	1.0	97.0

## Urbemis 2007 Version 9.2.4

## Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt C - 2030 Operation.urb924

Project Name: Barstow Alt C - 2030 Operation

Project Location: Riverside County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.05	0.03	0.31	0.00	0.00	0.00	37.01

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	3.76	4.49	42.13	0.13	21.75	4.22	12,977.87

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	3.81	4.52	42.44	0.13	21.75	4.22	13,014.88

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt C - 2030 Operation.urb924

Project Name: Barstow Alt C - 2030 Operation

Project Location: Riverside County

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

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.28	0.19	1.69	0.00	0.01	0.01	202.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	18.64	23.02	237.02	0.74	119.15	23.12	73,403.40

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	18.92	23.21	238.71	0.74	119.16	23.13	73,606.21

2/24/2009 2:36:39 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.17	0.14	0.00	0.00	0.00	200.00
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.15						
TOTALS (lbs/day, unmitigated)	0.28	0.19	1.69	0.00	0.01	0.01	202.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Casino	18.64	23.02	237.02	0.74	119.15	23.12	73,403.40
TOTALS (lbs/day, unmitigated)	18.64	23.02	237.02	0.74	119.15	23.12	73,403.40

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 80 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
Casino		39.43	1000 sq ft	25.00	985.75	69,002.50
					985.75	69,002.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.9	0.0	100.0	0.0
Light Truck < 3750 lbs	9.3	0.0	98.9	1.1
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	13.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	66.7	33.3
Med-Heavy Truck 14,001-33,000 lbs	0.7	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	1.7	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.8	34.2	65.8	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	70.0	70.0	70.0
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)						
Casino				2.0	1.0	97.0

2/19/2009 9:43:12 AM

Urbemis 2007 Version 9.2.4

## Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt D - 2030 Operation.urb924

Project Name: Barstow Alt D - 2030 Operation

Project Location: Riverside County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.02	0.00	0.28	0.00	0.00	0.00	0.51

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5.93	6.98	65.55	0.20	33.83	6.56	20,190.57

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5.95	6.98	65.83	0.20	33.83	6.56	20,191.08

## Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Barstow\Barstow Alt D - 2030 Operation.urb924

Project Name: Barstow Alt D - 2030 Operation

Project Location: Riverside County

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

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	29.57	35.81	368.74	1.16	185.37	35.97	114,198.78

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	29.69	35.83	370.29	1.16	185.38	35.98	114,201.59

2/19/2009 9:43:26 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Campground	29.57	35.81	368.74	1.16	185.37	35.97	114,198.78
TOTALS (lbs/day, unmitigated)	29.57	35.81	368.74	1.16	185.37	35.97	114,198.78

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 80 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
Campground		7.20	unknown	213.00	1,533.60	107,352.00
					1,533.60	107,352.00

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	43.9	0.0	100.0	0.0
Light Truck < 3750 lbs	9.3	0.0	98.9	1.1
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	13.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	66.7	33.3
Med-Heavy Truck 14,001-33,000 lbs	0.7	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	1.7	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.8	34.2	65.8	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	70.0	70.0	70.0
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)						
Campground				2.0	1.0	97.0