

# ***APPENDIX R***

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***REVISED URBEMIS FILES***

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Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

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Project Name: Point Molate - Alt A Construction and Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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>
2011 TOTALS (tons/year unmitigated)	1.70	26.68	8.52	0.03	19.44	0.93	20.37	4.08	0.85	4.93	3,746.00
2011 TOTALS (tons/year mitigated)	1.70	26.32	8.52	0.03	1.54	0.82	2.36	0.34	0.75	1.09	3,746.00
Percent Reduction	0.00	1.34	0.00	0.00	92.08	11.91	88.43	91.74	11.91	77.93	0.00
2012 TOTALS (tons/year unmitigated)	1.94	25.98	12.18	0.04	30.70	0.93	31.64	6.43	0.86	7.29	4,363.97
2012 TOTALS (tons/year mitigated)	1.94	25.52	12.18	0.04	2.28	0.80	3.07	0.49	0.73	1.23	4,363.97
Percent Reduction	0.00	1.78	0.00	0.00	92.58	14.58	90.28	92.32	14.60	83.18	0.00
2013 TOTALS (tons/year unmitigated)	8.91	5.51	14.70	0.02	0.10	0.27	0.37	0.04	0.25	0.28	2,244.37
2013 TOTALS (tons/year mitigated)	5.60	5.51	14.70	0.02	0.10	0.27	0.37	0.04	0.25	0.28	2,244.37
Percent Reduction	37.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014 TOTALS (tons/year unmitigated)	4.73	2.04	3.93	0.01	0.03	0.13	0.15	0.01	0.11	0.12	646.66
2014 TOTALS (tons/year mitigated)	1.76	1.93	3.93	0.01	0.03	0.07	0.10	0.01	0.07	0.08	646.66
Percent Reduction	62.82	5.27	0.00	0.00	0.00	41.92	34.61	0.00	42.24	39.03	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)	1.47	2.53	2.84	0.00	0.00	0.00	3,029.89
TOTALS (tons/year, mitigated)	1.31	2.03	2.42	0.00	0.00	0.00	2,424.16
Percent Reduction	10.88	19.76	14.79	NaN	NaN	NaN	19.99

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## 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)	32.28	49.15	361.15	0.44	94.37	17.90	45,684.28
TOTALS (tons/year, mitigated)	31.70	48.16	353.92	0.44	92.47	17.54	44,770.60
Percent Reduction	1.80	2.01	2.00	0.00	2.01	2.01	2.00

## 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)	33.75	51.68	363.99	0.44	94.37	17.90	48,714.17
TOTALS (tons/year, mitigated)	33.01	50.19	356.34	0.44	92.47	17.54	47,194.76
Percent Reduction	2.19	2.88	2.10	0.00	2.01	2.01	3.12

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt A Construction and Operation.urb924

Project Name: Point Molate - Alt A Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (lbs/day unmitigated)	25.32	401.33	126.65	0.50	295.68	13.82	309.49	61.97	12.71	74.68	56,569.27
2011 TOTALS (lbs/day mitigated)	25.32	396.59	126.65	0.50	22.35	12.38	34.73	4.89	11.39	16.28	56,569.27
2012 TOTALS (lbs/day unmitigated)	23.42	358.48	115.69	0.50	295.68	12.27	307.95	61.97	11.28	73.26	56,569.21
2012 TOTALS (lbs/day mitigated)	23.42	354.04	115.69	0.50	22.35	10.96	33.31	4.89	10.08	14.97	56,569.21
2013 TOTALS (lbs/day unmitigated)	73.44	35.20	94.13	0.12	0.66	1.73	2.39	0.23	1.57	1.81	14,364.38
2013 TOTALS (lbs/day mitigated)	45.35	35.20	94.13	0.12	0.66	1.73	2.39	0.23	1.57	1.81	14,364.38
2014 TOTALS (lbs/day unmitigated)	75.67	47.71	97.94	0.13	0.68	2.83	3.50	0.24	2.58	2.82	16,133.04
2014 TOTALS (lbs/day mitigated)	29.98	45.62	97.94	0.13	0.68	1.81	2.48	0.24	1.64	1.88	16,133.04

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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)	8.38	13.92	19.64	0.00	0.04	0.04	16,609.10
TOTALS (lbs/day, mitigated)	7.50	11.15	17.31	0.00	0.04	0.04	13,290.03
Percent Reduction	10.50	19.90	11.86	NaN	0.00	0.00	19.98

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)	168.81	250.94	1,911.68	2.47	517.05	98.07	251,569.54
TOTALS (lbs/day, mitigated)	165.90	245.93	1,873.44	2.40	506.70	96.10	246,538.15
Percent Reduction	1.72	2.00	2.00	2.83	2.00	2.01	2.00

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)	177.19	264.86	1,931.32	2.47	517.09	98.11	268,178.64
TOTALS (lbs/day, mitigated)	173.40	257.08	1,890.75	2.40	506.74	96.14	259,828.18
Percent Reduction	2.14	2.94	2.10	2.83	2.00	2.01	3.11

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>
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Time Slice 6/1/2011-6/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	24.34	14.46	0.00	0.00	1.50	1.50	0.00	1.38	1.38	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>25.32</u>	<u>401.33</u>	<u>126.65</u>	<u>0.50</u>	<u>295.68</u>	<u>13.82</u>	<u>309.49</u>	<u>61.97</u>	<u>12.71</u>	<u>74.68</u>	<u>56,569.27</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	25.32	401.33	126.65	0.50	295.68	13.82	309.49	61.97	12.71	74.68	56,569.27
Mass Grading Dust	0.00	0.00	0.00	0.00	293.80	0.00	293.80	61.36	0.00	61.36	0.00
Mass Grading Off Road Diesel	3.91	31.61	16.82	0.00	0.00	1.68	1.68	0.00	1.55	1.55	3,007.48
Mass Grading On Road Diesel	21.36	369.62	108.38	0.50	1.87	12.13	14.00	0.61	11.16	11.77	53,410.17
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>23.42</u>	<u>358.48</u>	<u>115.69</u>	<u>0.50</u>	<u>295.68</u>	<u>12.27</u>	<u>307.95</u>	<u>61.97</u>	<u>11.28</u>	<u>73.26</u>	<u>56,569.21</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	23.42	358.48	115.69	0.50	295.68	12.27	307.95	61.97	11.28	73.26	56,569.21
Mass Grading Dust	0.00	0.00	0.00	0.00	293.80	0.00	293.80	61.36	0.00	61.36	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	19.67	328.76	98.12	0.50	1.87	10.72	12.59	0.61	9.87	10.48	53,410.17
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 7/2/2012-9/29/2012	3.75	29.72	17.57	0.00	293.81	1.54	295.35	61.36	1.42	62.78	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	29.72	17.57	0.00	293.81	1.54	295.35	61.36	1.42	62.78	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	293.80	0.00	293.80	61.36	0.00	61.36	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	6.94	38.53	100.67	0.12	0.65	1.90	2.55	0.23	1.73	1.96	14,272.57
Active Days: 79											
Building 10/01/2012-03/31/2014	6.94	38.53	100.67	0.12	0.65	1.90	2.55	0.23	1.73	1.96	14,272.57
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.13	16.63	11.47	0.03	0.14	0.57	0.71	0.05	0.52	0.57	3,609.40
Building Worker Trips	2.55	6.03	78.20	0.09	0.51	0.25	0.76	0.18	0.21	0.40	8,916.84
Time Slice 1/1/2013-3/30/2013	6.34	35.14	93.37	0.12	0.65	1.73	2.38	0.23	1.57	1.80	14,269.50
Active Days: 77											
Building 10/01/2012-03/31/2014	6.34	35.14	93.37	0.12	0.65	1.73	2.38	0.23	1.57	1.80	14,269.50
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.05	14.78	10.68	0.03	0.14	0.50	0.64	0.05	0.46	0.51	3,609.48
Building Worker Trips	2.31	5.48	72.02	0.09	0.51	0.25	0.76	0.18	0.21	0.40	8,913.69

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Time Slice 4/1/2013-12/31/2013	<u>73.44</u>	<u>35.20</u>	<u>94.13</u>	<u>0.12</u>	<u>0.66</u>	<u>1.73</u>	<u>2.39</u>	<u>0.23</u>	<u>1.57</u>	<u>1.81</u>	<u>14,364.38</u>
Active Days: 236											
Building 10/01/2012-03/31/2014	6.34	35.14	93.37	0.12	0.65	1.73	2.38	0.23	1.57	1.80	14,269.50
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.05	14.78	10.68	0.03	0.14	0.50	0.64	0.05	0.46	0.51	3,609.48
Building Worker Trips	2.31	5.48	72.02	0.09	0.51	0.25	0.76	0.18	0.21	0.40	8,913.69
Coating 03/31/2013-05/31/2014	67.10	0.06	0.77	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.87
Architectural Coating	67.07	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	0.06	0.77	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.87
Time Slice 1/1/2014-1/31/2014	72.89	32.02	87.28	0.12	0.66	1.57	2.22	0.23	1.42	1.65	14,361.79
Active Days: 27											
Building 10/01/2012-03/31/2014	5.79	31.96	86.57	0.12	0.65	1.57	2.22	0.23	1.42	1.65	14,266.94
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	0.96	13.11	9.95	0.03	0.14	0.45	0.59	0.05	0.41	0.46	3,609.56
Building Worker Trips	2.09	4.99	66.29	0.09	0.51	0.26	0.77	0.18	0.21	0.40	8,911.06
Coating 03/31/2013-05/31/2014	67.10	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Architectural Coating	67.07	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	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85

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Time Slice 2/1/2014-3/31/2014	<u>75.67</u>	<u>47.71</u>	<u>97.94</u>	<u>0.13</u>	<u>0.68</u>	<u>2.83</u>	<u>3.50</u>	<u>0.24</u>	<u>2.58</u>	<u>2.82</u>	<u>16,133.04</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.78	15.70	10.66	0.00	0.02	1.26	1.28	0.01	1.16	1.16	1,771.25
Paving Off-Gas	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.11	1.68	0.52	0.00	0.01	0.05	0.07	0.00	0.05	0.05	347.39
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 10/01/2012-03/31/2014	5.79	31.96	86.57	0.12	0.65	1.57	2.22	0.23	1.42	1.65	14,266.94
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	0.96	13.11	9.95	0.03	0.14	0.45	0.59	0.05	0.41	0.46	3,609.56
Building Worker Trips	2.09	4.99	66.29	0.09	0.51	0.26	0.77	0.18	0.21	0.40	8,911.06
Coating 03/31/2013-05/31/2014	67.10	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Architectural Coating	67.07	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	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Time Slice 4/1/2014-5/31/2014	69.88	15.75	11.37	0.01	0.03	1.26	1.29	0.01	1.16	1.17	1,866.10
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.78	15.70	10.66	0.00	0.02	1.26	1.28	0.01	1.16	1.16	1,771.25
Paving Off-Gas	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.11	1.68	0.52	0.00	0.01	0.05	0.07	0.00	0.05	0.05	347.39
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	67.10	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Architectural Coating	67.07	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	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85

Phase Assumptions

Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

Building Volume Total (cubic feet): 398224.8

Building Volume Daily (cubic feet): 14000

On Road Truck Travel (VMT): 194.44

Off-Road Equipment:

1 Rubber Tired Dozers (357 hp) operating at a 0.59 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

Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 58.76

Maximum Daily Acreage Disturbed: 14.69

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 7/1/2011 - 6/30/2012 - Type Your Description Here

Total Acres Disturbed: 58.76

Maximum Daily Acreage Disturbed: 14.69

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 13266.28

Off-Road Equipment:

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

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- 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 2/1/2014 - 5/31/2014 - Default Paving Description

Acres to be Paved: 14.69

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 10/1/2012 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 7 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
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

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

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:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

ROG      NOx      CO      SO2      PM10 Dust      PM10 Exhaust      PM10      PM2.5 Dust      PM2.5 Exhaust      PM2.5      CO2

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Time Slice 6/1/2011-6/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	20.69	14.46	0.00	0.00	0.23	0.23	0.00	0.21	0.21	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>25.32</u>	<u>396.59</u>	<u>126.65</u>	<u>0.50</u>	<u>22.35</u>	<u>12.38</u>	<u>34.73</u>	<u>4.89</u>	<u>11.39</u>	<u>16.28</u>	<u>56,569.27</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	25.32	396.59	126.65	0.50	22.35	12.38	34.73	4.89	11.39	16.28	56,569.27
Mass Grading Dust	0.00	0.00	0.00	0.00	20.47	0.00	20.47	4.27	0.00	4.27	0.00
Mass Grading Off Road Diesel	3.91	26.86	16.82	0.00	0.00	0.25	0.25	0.00	0.23	0.23	3,007.48
Mass Grading On Road Diesel	21.36	369.62	108.38	0.50	1.87	12.13	14.00	0.61	11.16	11.77	53,410.17
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>23.42</u>	<u>354.04</u>	<u>115.69</u>	<u>0.50</u>	<u>22.35</u>	<u>10.96</u>	<u>33.31</u>	<u>4.89</u>	<u>10.08</u>	<u>14.97</u>	<u>56,569.21</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	23.42	354.04	115.69	0.50	22.35	10.96	33.31	4.89	10.08	14.97	56,569.21
Mass Grading Dust	0.00	0.00	0.00	0.00	20.47	0.00	20.47	4.27	0.00	4.27	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	3,007.48
Mass Grading On Road Diesel	19.67	328.76	98.12	0.50	1.87	10.72	12.59	0.61	9.87	10.48	53,410.17
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 7/2/2012-9/29/2012	3.75	25.27	17.57	0.00	20.48	0.24	20.71	4.28	0.22	4.49	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	25.27	17.57	0.00	20.48	0.24	20.71	4.28	0.22	4.49	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	20.47	0.00	20.47	4.27	0.00	4.27	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	6.94	38.53	100.67	0.12	0.65	1.90	2.55	0.23	1.73	1.96	14,272.57
Active Days: 79											
Building 10/01/2012-03/31/2014	6.94	38.53	100.67	0.12	0.65	1.90	2.55	0.23	1.73	1.96	14,272.57
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.13	16.63	11.47	0.03	0.14	0.57	0.71	0.05	0.52	0.57	3,609.40
Building Worker Trips	2.55	6.03	78.20	0.09	0.51	0.25	0.76	0.18	0.21	0.40	8,916.84
Time Slice 1/1/2013-3/30/2013	6.34	35.14	93.37	0.12	0.65	1.73	2.38	0.23	1.57	1.80	14,269.50
Active Days: 77											
Building 10/01/2012-03/31/2014	6.34	35.14	93.37	0.12	0.65	1.73	2.38	0.23	1.57	1.80	14,269.50
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.05	14.78	10.68	0.03	0.14	0.50	0.64	0.05	0.46	0.51	3,609.48
Building Worker Trips	2.31	5.48	72.02	0.09	0.51	0.25	0.76	0.18	0.21	0.40	8,913.69

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Time Slice 4/1/2013-12/31/2013	<u>45.35</u>	<u>35.20</u>	<u>94.13</u>	<u>0.12</u>	<u>0.66</u>	<u>1.73</u>	<u>2.39</u>	<u>0.23</u>	<u>1.57</u>	<u>1.81</u>	<u>14,364.38</u>
Active Days: 236											
Building 10/01/2012-03/31/2014	6.34	35.14	93.37	0.12	0.65	1.73	2.38	0.23	1.57	1.80	14,269.50
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.05	14.78	10.68	0.03	0.14	0.50	0.64	0.05	0.46	0.51	3,609.48
Building Worker Trips	2.31	5.48	72.02	0.09	0.51	0.25	0.76	0.18	0.21	0.40	8,913.69
Coating 03/31/2013-05/31/2014	39.01	0.06	0.77	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.87
Architectural Coating	38.98	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	0.06	0.77	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.87
Time Slice 1/1/2014-1/31/2014	27.20	32.02	87.28	0.12	0.66	1.57	2.22	0.23	1.42	1.65	14,361.79
Active Days: 27											
Building 10/01/2012-03/31/2014	5.79	31.96	86.57	0.12	0.65	1.57	2.22	0.23	1.42	1.65	14,266.94
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	0.96	13.11	9.95	0.03	0.14	0.45	0.59	0.05	0.41	0.46	3,609.56
Building Worker Trips	2.09	4.99	66.29	0.09	0.51	0.26	0.77	0.18	0.21	0.40	8,911.06
Coating 03/31/2013-05/31/2014	21.41	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Architectural Coating	21.38	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	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85

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Time Slice 2/1/2014-3/31/2014	<u>29.98</u>	<u>45.62</u>	<u>97.94</u>	<u>0.13</u>	<u>0.68</u>	<u>1.81</u>	<u>2.48</u>	<u>0.24</u>	<u>1.64</u>	<u>1.88</u>	<u>16,133.04</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.78	13.61	10.66	0.00	0.02	0.24	0.26	0.01	0.22	0.23	1,771.25
Paving Off-Gas	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.11	1.68	0.52	0.00	0.01	0.05	0.07	0.00	0.05	0.05	347.39
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 10/01/2012-03/31/2014	5.79	31.96	86.57	0.12	0.65	1.57	2.22	0.23	1.42	1.65	14,266.94
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	0.96	13.11	9.95	0.03	0.14	0.45	0.59	0.05	0.41	0.46	3,609.56
Building Worker Trips	2.09	4.99	66.29	0.09	0.51	0.26	0.77	0.18	0.21	0.40	8,911.06
Coating 03/31/2013-05/31/2014	21.41	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Architectural Coating	21.38	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	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Time Slice 4/1/2014-5/31/2014	24.19	13.66	11.37	0.01	0.03	0.24	0.27	0.01	0.22	0.23	1,866.10
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.78	13.61	10.66	0.00	0.02	0.24	0.26	0.01	0.22	0.23	1,771.25
Paving Off-Gas	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.11	1.68	0.52	0.00	0.01	0.05	0.07	0.00	0.05	0.05	347.39
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	21.41	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85
Architectural Coating	21.38	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	0.05	0.71	0.00	0.01	0.00	0.01	0.00	0.00	0.00	94.85

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading 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 Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

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For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 7/1/2011 - 6/30/2012 - Type Your Description Here

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

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

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NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 2/1/2014 - 5/31/2014 - Default Paving Description

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

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Architectural Coating 3/31/2013 - 5/31/2014 - 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%

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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	1.00	13.83	11.62	0.00	0.02	0.02	16,595.36
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	6.73						
TOTALS (lbs/day, unmitigated)	8.38	13.92	19.64	0.00	0.04	0.04	16,609.10

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## Area Source Mitigated Detail Report:

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

<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	0.80	11.06	9.29	0.00	0.02	0.02	13,276.29
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	6.05						
TOTALS (lbs/day, mitigated)	7.50	11.15	17.31	0.00	0.04	0.04	13,290.03

Area Source Mitigation Measures Selected

<u>Mitigation Description</u>	<u>Percent Reduction</u>
Residential Increase Energy Efficiency Beyond Title 24	20.00
Commercial Increase Energy Efficiency Beyond Title 24	20.00
Percent of Residential Landscape Equipment that are Electrically Powered and have Electrical Outlets at the the Front and Rear of Residences	20.00
For Nonresidential Interior Use Low VOC Coating	10.00
For Nonresidential Exterior Use Low VOC Coating	10.00

Area Source Changes to Defaults

- Percentage of residences with wood stoves changed from 35% to 0%
- Percentage of residences with wood fireplaces changed from 10% to 0%
- Percentage of residences with natural gas fireplaces changed from 55% to 50%

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	25.53	34.55	263.39	0.34	71.19	13.50	34,640.52
Strip mall	35.06	57.69	438.99	0.57	118.89	22.55	57,833.09
General office building	0.61	0.98	7.60	0.01	2.01	0.38	982.36
Casino	70.21	118.01	899.54	1.16	243.12	46.12	118,306.38
Entertainment	37.40	39.71	302.16	0.39	81.84	15.52	39,807.19
TOTALS (lbs/day, unmitigated)	168.81	250.94	1,911.68	2.47	517.05	98.07	251,569.54

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	25.13	33.86	258.12	0.33	69.76	13.23	33,947.71
Strip mall	34.39	56.54	430.21	0.55	116.52	22.10	56,676.43
General office building	0.60	0.96	7.44	0.01	1.97	0.37	962.71
Casino	68.84	115.65	881.55	1.13	238.25	45.19	115,940.25
Entertainment	36.94	38.92	296.12	0.38	80.20	15.21	39,011.05
TOTALS (lbs/day, mitigated)	165.90	245.93	1,873.44	2.40	506.70	96.10	246,538.15

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

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Nonresidential Mitigation Measures

Percent Reduction in Trips is 0%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 0.

The employment for the study area (within a 1/2 mile radius of the project) is 0.

Non-Residential Local-Serving Retail Mitigation

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Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 70 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
Hotel		2.45	rooms	1,129.00	2,766.05	41,490.75
Strip mall		15.40	1000 sq ft	300.00	4,620.00	69,300.00
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	277.52	9,446.78	141,701.71



	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0

Operational Changes to Defaults

Ambient summer temperature changed from 85 degrees F to 70 degrees F

Ambient winter temperature changed from 40 degrees F to 50 degrees F

Home-based work urban trip length changed from 10.8 miles to 15 miles

Home-based shop urban trip length changed from 7.3 miles to 15 miles

Home-based other urban trip length changed from 7.5 miles to 15 miles

Commercial-based commute urban trip length changed from 9.5 miles to 15 miles

Commercial-based non-work urban trip length changed from 7.35 miles to 15 miles

Commercial-based customer urban trip length changed from 7.35 miles to 15 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\Point Molate 11.1.2010\Point Molate - Alt A Cumulative Operation.urb924

Project Name: Point Molate - Alt A Cumulative Operation

Project Location: Bay Area Air District

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)	1.47	2.53	2.84	0.00	0.00	0.00	3,029.89
TOTALS (tons/year, mitigated)	1.31	2.03	2.42	0.00	0.00	0.00	2,424.16
Percent Reduction	10.88	19.76	14.79	NaN	NaN	NaN	19.99

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)	18.78	22.06	187.05	0.44	94.14	17.70	45,373.41
TOTALS (tons/year, mitigated)	18.43	21.62	183.31	0.44	92.25	17.36	44,465.95
Percent Reduction	1.86	1.99	2.00	0.00	2.01	1.92	2.00

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)	20.25	24.59	189.89	0.44	94.14	17.70	48,403.30
TOTALS (tons/year, mitigated)	19.74	23.65	185.73	0.44	92.25	17.36	46,890.11
Percent Reduction	2.52	3.82	2.19	0.00	2.01	1.92	3.13

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt A Cumulative Operation.urb924

Project Name: Point Molate - Alt A Cumulative Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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)	8.38	13.92	19.64	0.00	0.04	0.04	16,609.10
TOTALS (lbs/day, mitigated)	7.50	11.15	17.31	0.00	0.04	0.04	13,290.03
Percent Reduction	10.50	19.90	11.86	NaN	0.00	0.00	19.98

## 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)	99.39	112.65	996.73	2.45	515.82	96.99	249,893.98
TOTALS (lbs/day, mitigated)	97.69	110.39	976.81	2.40	505.51	95.06	244,896.10
Percent Reduction	1.71	2.01	2.00	2.04	2.00	1.99	2.00

## 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)	107.77	126.57	1,016.37	2.45	515.86	97.03	266,503.08
TOTALS (lbs/day, mitigated)	105.19	121.54	994.12	2.40	505.55	95.10	258,186.13
Percent Reduction	2.39	3.97	2.19	2.04	2.00	1.99	3.12

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## 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	1.00	13.83	11.62	0.00	0.02	0.02	16,595.36
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	6.73						
TOTALS (lbs/day, unmitigated)	8.38	13.92	19.64	0.00	0.04	0.04	16,609.10

## Area Source Mitigated Detail Report:

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

<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	0.80	11.06	9.29	0.00	0.02	0.02	13,276.29
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	6.05						
TOTALS (lbs/day, mitigated)	7.50	11.15	17.31	0.00	0.04	0.04	13,290.03

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 50%

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## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	15.18	15.51	137.32	0.34	71.02	13.35	34,409.81
Strip mall	20.40	25.90	228.91	0.56	118.61	22.30	57,447.87
General office building	0.36	0.44	3.95	0.01	2.01	0.38	975.82
Casino	40.73	52.97	468.99	1.15	242.54	45.61	117,518.44
Entertainment	22.72	17.83	157.56	0.39	81.64	15.35	39,542.04
TOTALS (lbs/day, unmitigated)	99.39	112.65	996.73	2.45	515.82	96.99	249,893.98

## Operational Mitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	14.95	15.20	134.58	0.33	69.60	13.09	33,721.61
Strip mall	20.01	25.38	224.34	0.55	116.24	21.86	56,298.91
General office building	0.35	0.43	3.87	0.01	1.97	0.37	956.31
Casino	39.93	51.91	459.61	1.13	237.69	44.70	115,168.07
Entertainment	22.45	17.47	154.41	0.38	80.01	15.04	38,751.20
TOTALS (lbs/day, mitigated)	97.69	110.39	976.81	2.40	505.51	95.06	244,896.10

## Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2025 Temperature (F): 70 Season: Summer

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Hotel		2.45	rooms	1,129.00	2,766.05	41,490.75
Strip mall		15.40	1000 sq ft	300.00	4,620.00	69,300.00
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	277.52	9,446.78	141,701.71
Entertainment		1.06	unknown	3,000.00	3,180.00	47,700.00
					20,090.93	301,363.96

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.0	0.0	100.0	0.0
Light Truck < 3750 lbs	12.6	0.0	99.2	0.8
Light Truck 3751-5750 lbs	19.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	34.4	65.6	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	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Hotel	5.0	2.5	92.5
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Casino	5.0	2.5	92.5
Entertainment	2.0	1.0	97.0

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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\Point Molate 11.1.2010\Point Molate - Alt B Construction and Operation.urb924

Project Name: Point Molate - Alt B Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (tons/year unmitigated)	1.91	30.17	9.54	0.04	26.12	1.04	27.16	5.47	0.96	6.43	4,251.18
2011 TOTALS (tons/year mitigated)	1.91	29.81	9.54	0.04	2.02	0.93	2.95	0.44	0.86	1.30	4,251.18
Percent Reduction	0.00	1.19	0.00	0.00	92.26	10.60	89.13	91.97	10.60	79.85	0.00
2012 TOTALS (tons/year unmitigated)	2.19	29.61	14.43	0.04	41.30	1.05	42.35	8.65	0.97	9.61	5,080.41
2012 TOTALS (tons/year mitigated)	2.19	29.15	14.43	0.04	3.04	0.92	3.96	0.66	0.84	1.50	5,080.41
Percent Reduction	0.00	1.56	0.00	0.00	92.64	12.92	90.66	92.40	12.94	84.41	0.00
2013 TOTALS (tons/year unmitigated)	11.84	7.42	19.60	0.03	0.14	0.34	0.48	0.05	0.31	0.36	3,100.35
2013 TOTALS (tons/year mitigated)	7.40	7.42	19.60	0.03	0.14	0.34	0.48	0.05	0.31	0.36	3,100.35
Percent Reduction	37.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014 TOTALS (tons/year unmitigated)	6.28	2.49	5.06	0.01	0.04	0.14	0.18	0.01	0.13	0.14	864.56
2014 TOTALS (tons/year mitigated)	2.29	2.38	5.06	0.01	0.04	0.09	0.13	0.01	0.08	0.09	864.56
Percent Reduction	63.46	4.32	0.00	0.00	0.00	37.06	29.38	0.00	37.41	33.95	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)	5.00	3.32	3.32	0.00	0.01	0.01	4,028.91
TOTALS (tons/year, mitigated)	4.82	2.65	2.83	0.00	0.00	0.00	3,223.55
Percent Reduction	3.60	20.18	14.76	NaN	100.00	100.00	19.99

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## 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)	34.57	51.22	378.43	0.45	97.93	18.58	47,475.08
TOTALS (tons/year, mitigated)	33.77	49.91	368.66	0.45	95.40	18.09	46,251.87
Percent Reduction	2.31	2.56	2.58	0.00	2.58	2.64	2.58

## 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)	39.57	54.54	381.75	0.45	97.94	18.59	51,503.99
TOTALS (tons/year, mitigated)	38.59	52.56	371.49	0.45	95.40	18.09	49,475.42
Percent Reduction	2.48	3.63	2.69	0.00	2.59	2.69	3.94

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt B Construction and Operation.urb924

Project Name: Point Molate - Alt B Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (lbs/day unmitigated)	28.40	454.71	142.30	0.57	397.55	15.57	413.12	83.28	14.32	97.60	64,281.93
2011 TOTALS (lbs/day mitigated)	28.40	449.97	142.30	0.57	29.70	14.13	43.83	6.46	13.00	19.46	64,281.93
2012 TOTALS (lbs/day unmitigated)	26.26	405.96	134.34	0.57	397.55	13.82	411.36	83.28	12.71	95.99	64,281.87
2012 TOTALS (lbs/day mitigated)	26.26	401.51	134.34	0.57	29.70	12.51	42.20	6.46	11.51	17.97	64,281.87
2013 TOTALS (lbs/day unmitigated)	97.82	47.41	125.48	0.18	0.92	2.17	3.09	0.33	1.97	2.29	19,841.85
2013 TOTALS (lbs/day mitigated)	60.15	47.41	125.48	0.18	0.92	2.17	3.09	0.33	1.97	2.29	19,841.85
2014 TOTALS (lbs/day unmitigated)	100.08	59.17	127.04	0.18	0.95	3.25	4.19	0.34	2.95	3.29	21,729.79
2014 TOTALS (lbs/day mitigated)	38.81	57.08	127.04	0.18	0.95	2.23	3.17	0.34	2.02	2.35	21,729.79

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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)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36
Percent Reduction	3.35	19.87	11.62	NaN	0.00	0.00	19.99

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)	180.58	261.58	2,002.17	2.56	536.56	101.79	261,429.00
TOTALS (lbs/day, mitigated)	176.57	254.83	1,950.50	2.50	522.75	99.19	254,693.27
Percent Reduction	2.22	2.58	2.58	2.34	2.57	2.55	2.58

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)	208.34	279.80	2,025.23	2.56	536.62	101.85	283,510.33
TOTALS (lbs/day, mitigated)	203.40	269.43	1,970.88	2.50	522.81	99.25	272,361.63
Percent Reduction	2.37	3.71	2.68	2.34	2.57	2.55	3.93

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>
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Time Slice 6/1/2011-6/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	24.34	14.46	0.00	0.00	1.50	1.50	0.00	1.38	1.38	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>28.40</u>	<u>454.71</u>	<u>142.30</u>	<u>0.57</u>	<u>397.55</u>	<u>15.57</u>	<u>413.12</u>	<u>83.28</u>	<u>14.32</u>	<u>97.60</u>	<u>64,281.93</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	28.40	454.71	142.30	0.57	397.55	15.57	413.12	83.28	14.32	97.60	64,281.93
Mass Grading Dust	0.00	0.00	0.00	0.00	395.40	0.00	395.40	82.58	0.00	82.58	0.00
Mass Grading Off Road Diesel	3.91	31.61	16.82	0.00	0.00	1.68	1.68	0.00	1.55	1.55	3,007.48
Mass Grading On Road Diesel	24.45	422.99	124.03	0.57	2.14	13.88	16.02	0.70	12.77	13.47	61,122.83
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>26.26</u>	<u>405.96</u>	<u>129.86</u>	<u>0.57</u>	<u>397.55</u>	<u>13.82</u>	<u>411.36</u>	<u>83.28</u>	<u>12.71</u>	<u>95.99</u>	<u>64,281.87</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	26.26	405.96	129.86	0.57	397.55	13.82	411.36	83.28	12.71	95.99	64,281.87
Mass Grading Dust	0.00	0.00	0.00	0.00	395.40	0.00	395.40	82.58	0.00	82.58	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	22.51	376.24	112.29	0.57	2.14	12.27	14.41	0.70	11.29	11.99	61,122.83
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

## 11/16/2010 4:04:02 PM

Time Slice 7/2/2012-9/29/2012	3.75	29.72	17.57	0.00	395.41	1.54	396.95	82.58	1.42	84.00	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	29.72	17.57	0.00	395.41	1.54	396.95	82.58	1.42	84.00	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	395.40	0.00	395.40	82.58	0.00	82.58	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	8.57	52.20	<u>134.34</u>	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Active Days: 79											
Building 10/01/2012-03/31/2014	8.57	52.20	134.34	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.92	28.29	19.00	0.06	0.23	0.96	1.19	0.08	0.88	0.96	6,074.01
Building Worker Trips	3.40	8.05	104.35	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,898.36
Time Slice 1/1/2013-3/30/2013	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Active Days: 77											
Building 10/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16

**11/16/2010 4:04:02 PM**

Time Slice 4/1/2013-12/31/2013	<u>97.82</u>	<u>47.41</u>	<u>125.48</u>	<u>0.18</u>	<u>0.92</u>	<u>2.17</u>	<u>3.09</u>	<u>0.33</u>	<u>1.97</u>	<u>2.29</u>	<u>19,841.85</u>
Active Days: 236											
Building 10/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16
Coating 03/31/2013-05/31/2014	89.98	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23
Time Slice 1/1/2014-1/31/2014	97.13	42.89	116.20	0.18	0.92	1.97	2.89	0.33	1.78	2.11	19,838.41
Active Days: 27											
Building 10/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	89.98	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

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Time Slice 2/1/2014-3/31/2014	<u>100.08</u>	<u>59.17</u>	<u>127.04</u>	<u>0.18</u>	<u>0.95</u>	<u>3.25</u>	<u>4.19</u>	<u>0.34</u>	<u>2.95</u>	<u>3.29</u>	<u>21,729.79</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.95	16.28	10.84	0.01	0.03	1.28	1.30	0.01	1.17	1.18	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 10/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	89.98	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Time Slice 4/1/2014-5/31/2014	92.93	16.35	11.79	0.01	0.03	1.28	1.31	0.01	1.18	1.19	2,018.58
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.95	16.28	10.84	0.01	0.03	1.28	1.30	0.01	1.17	1.18	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	89.98	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

Phase Assumptions

Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

Building Volume Total (cubic feet): 398224.8

Building Volume Daily (cubic feet): 14000

On Road Truck Travel (VMT): 194.44

Off-Road Equipment:

1 Rubber Tired Dozers (357 hp) operating at a 0.59 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

Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 79.09

Maximum Daily Acreage Disturbed: 19.77

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 7/1/2011 - 6/30/2012 - Type Your Description Here

Total Acres Disturbed: 79.09

Maximum Daily Acreage Disturbed: 19.77

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 15181.99

Off-Road Equipment:

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

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- 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 2/1/2014 - 5/31/2014 - Default Paving Description

Acres to be Paved: 19.77

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 10/1/2012 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 7 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
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

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

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:

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>
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**11/16/2010 4:04:03 PM**

Time Slice 6/1/2011-6/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	20.69	14.46	0.00	0.00	0.23	0.23	0.00	0.21	0.21	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>28.40</u>	<u>449.97</u>	<u>142.30</u>	<u>0.57</u>	<u>29.70</u>	<u>14.13</u>	<u>43.83</u>	<u>6.46</u>	<u>13.00</u>	<u>19.46</u>	<u>64,281.93</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	28.40	449.97	142.30	0.57	29.70	14.13	43.83	6.46	13.00	19.46	64,281.93
Mass Grading Dust	0.00	0.00	0.00	0.00	27.55	0.00	27.55	5.75	0.00	5.75	0.00
Mass Grading Off Road Diesel	3.91	26.86	16.82	0.00	0.00	0.25	0.25	0.00	0.23	0.23	3,007.48
Mass Grading On Road Diesel	24.45	422.99	124.03	0.57	2.14	13.88	16.02	0.70	12.77	13.47	61,122.83
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>26.26</u>	<u>401.51</u>	<u>129.86</u>	<u>0.57</u>	<u>29.70</u>	<u>12.51</u>	<u>42.20</u>	<u>6.46</u>	<u>11.51</u>	<u>17.97</u>	<u>64,281.87</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	26.26	401.51	129.86	0.57	29.70	12.51	42.20	6.46	11.51	17.97	64,281.87
Mass Grading Dust	0.00	0.00	0.00	0.00	27.55	0.00	27.55	5.75	0.00	5.75	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	3,007.48
Mass Grading On Road Diesel	22.51	376.24	112.29	0.57	2.14	12.27	14.41	0.70	11.29	11.99	61,122.83
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

**11/16/2010 4:04:03 PM**

Time Slice 7/2/2012-9/29/2012	3.75	25.27	17.57	0.00	27.56	0.24	27.79	5.76	0.22	5.97	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	25.27	17.57	0.00	27.56	0.24	27.79	5.76	0.22	5.97	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	27.55	0.00	27.55	5.75	0.00	5.75	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	8.57	52.20	<u>134.34</u>	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Active Days: 79											
Building 10/01/2012-03/31/2014	8.57	52.20	134.34	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.92	28.29	19.00	0.06	0.23	0.96	1.19	0.08	0.88	0.96	6,074.01
Building Worker Trips	3.40	8.05	104.35	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,898.36
Time Slice 1/1/2013-3/30/2013	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Active Days: 77											
Building 10/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16

**11/16/2010 4:04:03 PM**

Time Slice 4/1/2013-12/31/2013	<u>60.15</u>	<u>47.41</u>	<u>125.48</u>	<u>0.18</u>	<u>0.92</u>	<u>2.17</u>	<u>3.09</u>	<u>0.33</u>	<u>1.97</u>	<u>2.29</u>	<u>19,841.85</u>
Active Days: 236											
Building 10/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16
Coating 03/31/2013-05/31/2014	52.31	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23
Architectural Coating	52.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23
Time Slice 1/1/2014-1/31/2014	35.86	42.89	116.20	0.18	0.92	1.97	2.89	0.33	1.78	2.11	19,838.41
Active Days: 27											
Building 10/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	28.71	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	28.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

**11/16/2010 4:04:03 PM**

Time Slice 2/1/2014-3/31/2014	<u>38.81</u>	<u>57.08</u>	<u>127.04</u>	<u>0.18</u>	<u>0.95</u>	<u>2.23</u>	<u>3.17</u>	<u>0.34</u>	<u>2.02</u>	<u>2.35</u>	<u>21,729.79</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.95	14.19	10.84	0.01	0.03	0.26	0.28	0.01	0.24	0.24	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 10/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	28.71	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	28.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Time Slice 4/1/2014-5/31/2014	31.65	14.26	11.79	0.01	0.03	0.26	0.29	0.01	0.24	0.25	2,018.58
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.95	14.19	10.84	0.01	0.03	0.26	0.28	0.01	0.24	0.24	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	28.71	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	28.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading 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 Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

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For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 7/1/2011 - 6/30/2012 - Type Your Description Here

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

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

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NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 2/1/2014 - 5/31/2014 - Default Paving Description

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

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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:

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	1.33	18.11	13.44	0.00	0.03	0.03	22,064.84
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	9.02						
TOTALS (lbs/day, unmitigated)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33

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## Area Source Mitigated Detail Report:

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

<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	1.07	14.49	10.76	0.00	0.03	0.03	17,651.87
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	8.35						
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36

Area Source Mitigation Measures Selected

<u>Mitigation Description</u>	<u>Percent Reduction</u>
Residential Increase Energy Efficiency Beyond Title 24	20.00
Commercial Increase Energy Efficiency Beyond Title 24	20.00
Percent of Residential Landscape Equipment that are Electrically Powered and have Electrical Outlets at the the Front and Rear of Residences	20.00
For Nonresidential Interior Use Low VOC Coating	10.00
For Nonresidential Exterior Use Low VOC Coating	10.00

Area Source Changes to Defaults

- Percent residential using natural gas changed from 60% to 100%
- Percentage of residences with wood stoves changed from 35% to 0%
- Percentage of residences with wood fireplaces changed from 10% to 0%
- Percentage of residences with natural gas fireplaces changed from 55% to 50%

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## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	16.65	25.03	197.23	0.25	51.29	9.74	25,152.97
Hotel	25.53	34.55	263.39	0.34	71.19	13.50	34,640.52
Strip mall	29.74	42.57	326.64	0.41	85.60	16.25	41,802.08
General office building	0.61	0.98	7.60	0.01	2.01	0.38	982.36
Casino	70.65	118.74	905.15	1.16	244.63	46.40	119,043.88
Entertainment	37.40	39.71	302.16	0.39	81.84	15.52	39,807.19
TOTALS (lbs/day, unmitigated)	180.58	261.58	2,002.17	2.56	536.56	101.79	261,429.00

## Operational Mitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	16.06	24.03	189.41	0.24	49.26	9.36	24,155.37
Hotel	25.05	33.71	256.99	0.33	69.46	13.17	33,799.25
Strip mall	29.05	41.53	318.70	0.40	83.53	15.86	40,786.89
General office building	0.60	0.95	7.41	0.01	1.96	0.37	958.50
Casino	68.97	115.86	883.17	1.14	238.69	45.28	116,152.82
Entertainment	36.84	38.75	294.82	0.38	79.85	15.15	38,840.44
TOTALS (lbs/day, mitigated)	176.57	254.83	1,950.50	2.50	522.75	99.19	254,693.27

Operational Mitigation Options SelectedResidential Mitigation Measures

Residential Mix of Uses Mitigation

Operational Mitigation Options Selected

Residential Mitigation Measures

---

Percent Reduction in Trips is 0.43% (calculated as a % of 9.57 trips/day))

Note that the above percent is applied to a baseline of 9.57 and that product is subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 340.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day))

Note that the above percent is applied to a baseline of 9.57 and that product is subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

---

Percent Reduction in Trips is 0.43%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

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Nonresidential Mitigation Measures

number of residential units included in the project are 340.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 70 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
Condo/townhouse general	21.25	5.86	dwelling units	340.00	1,992.40	29,886.00
Hotel		2.45	rooms	1,129.00	2,766.05	41,490.75
Strip mall		15.40	1000 sq ft	300.00	4,620.00	49,884.22
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	279.25	9,505.67	142,585.05
Entertainment		1.06	unknown	3,000.00	3,180.00	47,700.00
					22,142.22	312,717.52

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.4	99.4	0.2
Light Truck < 3750 lbs	12.7	0.8	96.8	2.4
Light Truck 3751-5750 lbs	19.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0

Operational Changes to Defaults

Ambient summer temperature changed from 85 degrees F to 70 degrees F

Ambient winter temperature changed from 40 degrees F to 50 degrees F

Home-based work urban trip length changed from 10.8 miles to 15 miles

Home-based shop urban trip length changed from 7.3 miles to 15 miles

Home-based other urban trip length changed from 7.5 miles to 15 miles

Commercial-based commute urban trip length changed from 9.5 miles to 15 miles

Commercial-based non-work urban trip length changed from 7.35 miles to 15 miles

Commercial-based customer urban trip length changed from 7.35 miles to 15 miles

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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\Point Molate 11.1.2010\Point Molate - Alt B Cumulative Operation.urb924

Project Name: Point Molate - Alt B Cumulative Operation

Project Location: Bay Area Air District

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)	5.00	3.32	3.32	0.00	0.01	0.01	4,028.91
TOTALS (tons/year, mitigated)	4.82	2.65	2.83	0.00	0.00	0.00	3,223.55
Percent Reduction	3.60	20.18	14.76	NaN	100.00	100.00	19.99

## 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)	20.67	24.33	206.80	0.48	103.76	19.52	50,043.27
TOTALS (tons/year, mitigated)	20.19	23.69	201.47	0.48	101.10	19.01	48,758.18
Percent Reduction	2.32	2.63	2.58	0.00	2.56	2.61	2.57

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)	25.67	27.65	210.12	0.48	103.77	19.53	54,072.18
TOTALS (tons/year, mitigated)	25.01	26.34	204.30	0.48	101.10	19.01	51,981.73
Percent Reduction	2.57	4.74	2.77	0.00	2.57	2.66	3.87

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt B Cumulative Operation.urb924

Project Name: Point Molate - Alt B Cumulative Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36
Percent Reduction	3.35	19.87	11.62	NaN	0.00	0.00	19.99

## 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)	109.32	124.20	1,102.17	2.70	568.50	106.91	275,612.17
TOTALS (lbs/day, mitigated)	106.91	121.01	1,073.84	2.64	553.90	104.17	268,534.56
Percent Reduction	2.20	2.57	2.57	2.22	2.57	2.56	2.57

## 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 (lbs/day, unmitigated)	137.08	142.42	1,125.23	2.70	568.56	106.97	297,693.50
TOTALS (lbs/day, mitigated)	133.74	135.61	1,094.22	2.64	553.96	104.23	286,202.92
Percent Reduction	2.44	4.78	2.76	2.22	2.57	2.56	3.86

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## 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	1.33	18.11	13.44	0.00	0.03	0.03	22,064.84
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	9.02						
TOTALS (lbs/day, unmitigated)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33

## Area Source Mitigated Detail Report:

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

<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	1.07	14.49	10.76	0.00	0.03	0.03	17,651.87
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	8.35						
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 100%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 50%

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	9.68	11.22	102.51	0.24	51.17	9.64	24,985.60
Hotel	15.18	15.51	137.32	0.34	71.02	13.35	34,409.81
Strip mall	20.40	25.90	228.91	0.56	118.61	22.30	57,447.87
General office building	0.36	0.44	3.95	0.01	2.01	0.38	975.82
Casino	40.98	53.30	471.92	1.16	244.05	45.89	118,251.03
Entertainment	22.72	17.83	157.56	0.39	81.64	15.35	39,542.04
TOTALS (lbs/day, unmitigated)	109.32	124.20	1,102.17	2.70	568.50	106.91	275,612.17

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	9.33	10.78	98.44	0.24	49.14	9.25	23,994.64
Hotel	14.90	15.13	133.99	0.33	69.29	13.03	33,574.14
Strip mall	19.93	25.27	223.35	0.55	115.73	21.76	56,052.71
General office building	0.35	0.43	3.86	0.01	1.96	0.37	952.12
Casino	40.01	52.01	460.46	1.13	238.12	44.78	115,379.22
Entertainment	22.39	17.39	153.74	0.38	79.66	14.98	38,581.73
TOTALS (lbs/day, mitigated)	106.91	121.01	1,073.84	2.64	553.90	104.17	268,534.56

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2025 Temperature (F): 70 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
Condo/townhouse general	21.25	5.86	dwelling units	340.00	1,992.40	29,886.00
Hotel		2.45	rooms	1,129.00	2,766.05	41,490.75
Strip mall		15.40	1000 sq ft	300.00	4,620.00	69,300.00
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	279.25	9,505.67	142,585.05



	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0

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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\Point Molate 11.1.2010\Point Molate - Alt C Construction and Operation.urb924

Project Name: Point Molate - Alt C Construction and Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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>
2011 TOTALS (tons/year unmitigated)	0.99	14.26	4.88	0.02	8.95	0.52	9.47	1.88	0.48	2.36	1,952.62
2011 TOTALS (tons/year mitigated)	0.99	13.91	4.88	0.02	0.75	0.41	1.16	0.16	0.38	0.54	1,952.62
Percent Reduction	0.00	2.51	0.00	0.00	91.61	21.25	87.75	91.26	21.25	77.05	0.00
2012 TOTALS (tons/year unmitigated)	1.21	14.54	6.98	0.02	14.07	0.56	14.63	2.95	0.51	3.46	2,313.75
2012 TOTALS (tons/year mitigated)	1.21	14.08	6.98	0.02	1.05	0.42	1.47	0.23	0.39	0.62	2,313.75
Percent Reduction	0.00	3.18	0.00	0.00	92.56	24.39	89.96	92.28	24.41	82.22	0.00
2013 TOTALS (tons/year unmitigated)	4.29	3.77	7.58	0.01	0.05	0.21	0.25	0.02	0.19	0.20	1,166.71
2013 TOTALS (tons/year mitigated)	2.79	3.77	7.58	0.01	0.05	0.21	0.25	0.02	0.19	0.20	1,166.71
Percent Reduction	34.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014 TOTALS (tons/year unmitigated)	2.25	1.53	2.26	0.00	0.01	0.10	0.11	0.00	0.09	0.10	367.49
2014 TOTALS (tons/year mitigated)	0.91	1.44	2.26	0.00	0.01	0.06	0.07	0.00	0.05	0.06	367.49
Percent Reduction	59.77	5.83	0.00	0.00	0.00	43.57	38.72	0.00	43.77	41.74	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)	0.69	1.02	1.57	0.00	0.00	0.00	1,213.26
TOTALS (tons/year, mitigated)	0.62	0.82	1.40	0.00	0.00	0.00	970.86
Percent Reduction	10.14	19.61	10.83	NaN	NaN	NaN	19.98

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## 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)	18.63	29.09	214.02	0.26	55.85	10.60	27,040.75
TOTALS (tons/year, mitigated)	18.23	28.40	208.82	0.26	54.48	10.33	26,384.03
Percent Reduction	2.15	2.37	2.43	0.00	2.45	2.55	2.43

## 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)	19.32	30.11	215.59	0.26	55.85	10.60	28,254.01
TOTALS (tons/year, mitigated)	18.85	29.22	210.22	0.26	54.48	10.33	27,354.89
Percent Reduction	2.43	2.96	2.49	0.00	2.45	2.55	3.18

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt C Construction and Operation.urb924

Project Name: Point Molate - Alt C Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (lbs/day unmitigated)	14.37	211.85	71.09	0.24	135.52	7.60	143.12	28.41	6.99	35.40	29,189.33
2011 TOTALS (lbs/day mitigated)	14.37	207.11	71.09	0.24	10.30	6.17	16.46	2.26	5.67	7.93	29,189.33
2012 TOTALS (lbs/day unmitigated)	13.33	189.94	65.39	0.24	135.52	6.77	142.29	28.41	6.23	34.64	29,189.26
2012 TOTALS (lbs/day mitigated)	13.33	185.50	65.39	0.24	10.30	5.46	15.76	2.26	5.02	7.29	29,189.26
2013 TOTALS (lbs/day unmitigated)	34.92	24.09	48.50	0.06	0.30	1.32	1.61	0.11	1.20	1.31	7,465.58
2013 TOTALS (lbs/day mitigated)	22.19	24.09	48.50	0.06	0.30	1.32	1.61	0.11	1.20	1.31	7,465.58
2014 TOTALS (lbs/day unmitigated)	36.80	35.21	55.21	0.06	0.32	2.23	2.55	0.11	2.05	2.16	8,997.81
2014 TOTALS (lbs/day mitigated)	16.09	33.48	55.21	0.06	0.32	1.39	1.71	0.11	1.27	1.38	8,997.81

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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)	4.10	5.62	12.67	0.00	0.03	0.03	6,654.94
TOTALS (lbs/day, mitigated)	3.71	4.52	11.74	0.00	0.03	0.03	5,326.70
Percent Reduction	9.51	19.57	7.34	NaN	0.00	0.00	19.96

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)	96.23	148.60	1,132.83	1.46	305.97	58.03	148,905.05
TOTALS (lbs/day, mitigated)	94.13	144.98	1,105.32	1.43	298.54	56.63	145,288.79
Percent Reduction	2.18	2.44	2.43	2.05	2.43	2.41	2.43

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)	100.33	154.22	1,145.50	1.46	306.00	58.06	155,559.99
TOTALS (lbs/day, mitigated)	97.84	149.50	1,117.06	1.43	298.57	56.66	150,615.49
Percent Reduction	2.48	3.06	2.48	2.05	2.43	2.41	3.18

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>
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Time Slice 6/1/2011-6/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	24.34	14.46	0.00	0.00	1.50	1.50	0.00	1.38	1.38	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>14.37</u>	<u>211.85</u>	<u>71.09</u>	<u>0.24</u>	<u>135.52</u>	<u>7.60</u>	<u>143.12</u>	<u>28.41</u>	<u>6.99</u>	<u>35.40</u>	<u>29,189.33</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	14.37	211.85	71.09	0.24	135.52	7.60	143.12	28.41	6.99	35.40	29,189.33
Mass Grading Dust	0.00	0.00	0.00	0.00	134.60	0.00	134.60	28.11	0.00	28.11	0.00
Mass Grading Off Road Diesel	3.91	31.61	16.82	0.00	0.00	1.68	1.68	0.00	1.55	1.55	3,007.48
Mass Grading On Road Diesel	10.41	180.14	52.82	0.24	0.91	5.91	6.82	0.30	5.44	5.74	26,030.23
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>13.33</u>	<u>189.94</u>	<u>65.39</u>	<u>0.24</u>	<u>135.52</u>	<u>6.77</u>	<u>142.29</u>	<u>28.41</u>	<u>6.23</u>	<u>34.64</u>	<u>29,189.26</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	13.33	189.94	65.39	0.24	135.52	6.77	142.29	28.41	6.23	34.64	29,189.26
Mass Grading Dust	0.00	0.00	0.00	0.00	134.60	0.00	134.60	28.11	0.00	28.11	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	9.58	160.23	47.82	0.24	0.91	5.23	6.14	0.30	4.81	5.11	26,030.23
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 7/2/2012-9/29/2012	3.75	29.72	17.57	0.00	134.61	1.54	136.15	28.11	1.42	29.53	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	29.72	17.57	0.00	134.61	1.54	136.15	28.11	1.42	29.53	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	134.60	0.00	134.60	28.11	0.00	28.11	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	4.92	26.14	51.64	0.06	0.29	1.45	1.75	0.11	1.33	1.43	7,423.97
Active Days: 79											
Building 10/01/2012-03/31/2014	4.92	26.14	51.64	0.06	0.29	1.45	1.75	0.11	1.33	1.43	7,423.97
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	0.51	7.54	5.20	0.02	0.06	0.26	0.32	0.02	0.24	0.26	1,636.00
Building Worker Trips	1.15	2.73	35.44	0.04	0.23	0.12	0.35	0.08	0.10	0.18	4,041.65
Time Slice 1/1/2013-3/30/2013	4.51	24.07	48.15	0.06	0.29	1.31	1.61	0.11	1.20	1.30	7,422.58
Active Days: 77											
Building 10/01/2012-03/31/2014	4.51	24.07	48.15	0.06	0.29	1.31	1.61	0.11	1.20	1.30	7,422.58
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	0.47	6.70	4.84	0.02	0.06	0.23	0.29	0.02	0.21	0.23	1,636.03
Building Worker Trips	1.05	2.49	32.64	0.04	0.23	0.12	0.35	0.08	0.10	0.18	4,040.22





Phase Assumptions

Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

Building Volume Total (cubic feet): 398224.8

Building Volume Daily (cubic feet): 14000

On Road Truck Travel (VMT): 194.44

Off-Road Equipment:

1 Rubber Tired Dozers (357 hp) operating at a 0.59 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

Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 26.92

Maximum Daily Acreage Disturbed: 6.73

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 7/1/2011 - 6/30/2012 - Type Your Description Here

Total Acres Disturbed: 26.92

Maximum Daily Acreage Disturbed: 6.73

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 6465.52

Off-Road Equipment:

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

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- 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 2/1/2014 - 5/31/2014 - Default Paving Description

Acres to be Paved: 6.73

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 10/1/2012 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 7 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
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

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

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:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

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	<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 6/1/2011-6/30/2011 Active Days: 26	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Demolition 06/01/2011- 06/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	20.69	14.46	0.00	0.00	0.23	0.23	0.00	0.21	0.21	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011 Active Days: 131	<u>14.37</u>	<u>207.11</u>	<u>71.09</u>	<u>0.24</u>	<u>10.30</u>	<u>6.17</u>	<u>16.46</u>	<u>2.26</u>	<u>5.67</u>	<u>7.93</u>	<u>29,189.33</u>
Mass Grading 07/01/2011- 06/30/2012	14.37	207.11	71.09	0.24	10.30	6.17	16.46	2.26	5.67	7.93	29,189.33
Mass Grading Dust	0.00	0.00	0.00	0.00	9.38	0.00	9.38	1.96	0.00	1.96	0.00
Mass Grading Off Road Diesel	3.91	26.86	16.82	0.00	0.00	0.25	0.25	0.00	0.23	0.23	3,007.48
Mass Grading On Road Diesel	10.41	180.14	52.82	0.24	0.91	5.91	6.82	0.30	5.44	5.74	26,030.23
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012 Active Days: 130	<u>13.33</u>	<u>185.50</u>	<u>65.39</u>	<u>0.24</u>	<u>10.30</u>	<u>5.46</u>	<u>15.76</u>	<u>2.26</u>	<u>5.02</u>	<u>7.29</u>	<u>29,189.26</u>
Mass Grading 07/01/2011- 06/30/2012	13.33	185.50	65.39	0.24	10.30	5.46	15.76	2.26	5.02	7.29	29,189.26
Mass Grading Dust	0.00	0.00	0.00	0.00	9.38	0.00	9.38	1.96	0.00	1.96	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	3,007.48
Mass Grading On Road Diesel	9.58	160.23	47.82	0.24	0.91	5.23	6.14	0.30	4.81	5.11	26,030.23
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 7/2/2012-9/29/2012	3.75	25.27	17.57	0.00	9.39	0.24	9.62	1.96	0.22	2.18	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	25.27	17.57	0.00	9.39	0.24	9.62	1.96	0.22	2.18	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	9.38	0.00	9.38	1.96	0.00	1.96	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	4.92	26.14	51.64	0.06	0.29	1.45	1.75	0.11	1.33	1.43	7,423.97
Active Days: 79											
Building 10/01/2012-03/31/2014	4.92	26.14	51.64	0.06	0.29	1.45	1.75	0.11	1.33	1.43	7,423.97
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	0.51	7.54	5.20	0.02	0.06	0.26	0.32	0.02	0.24	0.26	1,636.00
Building Worker Trips	1.15	2.73	35.44	0.04	0.23	0.12	0.35	0.08	0.10	0.18	4,041.65
Time Slice 1/1/2013-3/30/2013	4.51	24.07	48.15	0.06	0.29	1.31	1.61	0.11	1.20	1.30	7,422.58
Active Days: 77											
Building 10/01/2012-03/31/2014	4.51	24.07	48.15	0.06	0.29	1.31	1.61	0.11	1.20	1.30	7,422.58
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	0.47	6.70	4.84	0.02	0.06	0.23	0.29	0.02	0.21	0.23	1,636.03
Building Worker Trips	1.05	2.49	32.64	0.04	0.23	0.12	0.35	0.08	0.10	0.18	4,040.22





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Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading 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 Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

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For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 7/1/2011 - 6/30/2012 - Type Your Description Here

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

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

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NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 2/1/2014 - 5/31/2014 - Default Paving Description

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

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Architectural Coating 3/31/2013 - 5/31/2014 - 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%

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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	0.40	5.53	4.65	0.00	0.01	0.01	6,641.20
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	3.05						
TOTALS (lbs/day, unmitigated)	4.10	5.62	12.67	0.00	0.03	0.03	6,654.94

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## Area Source Mitigated Detail Report:

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

<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	0.32	4.43	3.72	0.00	0.01	0.01	5,312.96
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	2.74						
TOTALS (lbs/day, mitigated)	3.71	4.52	11.74	0.00	0.03	0.03	5,326.70

Area Source Mitigation Measures Selected

<u>Mitigation Description</u>	<u>Percent Reduction</u>
Residential Increase Energy Efficiency Beyond Title 24	20.00
Commercial Increase Energy Efficiency Beyond Title 24	20.00
Percent of Residential Landscape Equipment that are Electrically Powered and have Electrical Outlets at the the Front and Rear of Residences	20.00
For Nonresidential Interior Use Low VOC Coating	10.00
For Nonresidential Exterior Use Low VOC Coating	10.00

Area Source Changes to Defaults

- Percent residential using natural gas changed from 60% to 0%
- Percentage of residences with wood stoves changed from 35% to 0%
- Percentage of residences with wood fireplaces changed from 10% to 0%
- Percentage of residences with natural gas fireplaces changed from 55% to 50%

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	9.08	12.06	91.91	0.12	24.84	4.71	12,088.27
Strip mall	0.87	0.87	6.80	0.01	1.62	0.31	801.32
General office building	0.61	0.98	7.60	0.01	2.01	0.38	982.36
Casino	70.65	118.74	905.15	1.16	244.63	46.40	119,043.88
Entertainment	15.02	15.95	121.37	0.16	32.87	6.23	15,989.22
TOTALS (lbs/day, unmitigated)	96.23	148.60	1,132.83	1.46	305.97	58.03	148,905.05

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	8.91	11.76	89.68	0.12	24.24	4.60	11,794.70
Strip mall	0.85	0.85	6.64	0.01	1.58	0.30	781.86
General office building	0.60	0.95	7.41	0.01	1.96	0.37	958.50
Casino	68.97	115.86	883.17	1.14	238.69	45.28	116,152.82
Entertainment	14.80	15.56	118.42	0.15	32.07	6.08	15,600.91
TOTALS (lbs/day, mitigated)	94.13	144.98	1,105.32	1.43	298.54	56.63	145,288.79

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

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Nonresidential Mitigation Measures

Percent Reduction in Trips is 0.43%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 340.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 70 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
Hotel		2.25	rooms	429.00	965.25	14,478.75
Strip mall		8.15	1000 sq ft	20.00	163.00	944.26
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	279.25	9,505.67	142,585.05



Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0

Operational Changes to Defaults

Ambient summer temperature changed from 85 degrees F to 70 degrees F

Ambient winter temperature changed from 40 degrees F to 50 degrees F

Home-based work urban trip length changed from 10.8 miles to 15 miles

Home-based shop urban trip length changed from 7.3 miles to 15 miles

Home-based other urban trip length changed from 7.5 miles to 15 miles

Commercial-based commute urban trip length changed from 9.5 miles to 15 miles

Commercial-based non-work urban trip length changed from 7.35 miles to 15 miles

Commercial-based customer urban trip length changed from 7.35 miles to 15 miles

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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\Point Molate 11.1.2010\Point Molate - Alt C Cumulative Operation.urb924

Project Name: Point Molate - Alt C Cumulative Operation

Project Location: Bay Area Air District

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)	0.69	1.02	1.57	0.00	0.00	0.00	1,213.26
TOTALS (tons/year, mitigated)	0.62	0.82	1.40	0.00	0.00	0.00	970.86
Percent Reduction	10.14	19.61	10.83	NaN	NaN	NaN	19.98

## 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)	10.97	13.33	113.02	0.27	56.85	10.70	27,407.60
TOTALS (tons/year, mitigated)	10.71	12.99	110.27	0.27	55.48	10.43	26,741.99
Percent Reduction	2.37	2.55	2.43	0.00	2.41	2.52	2.43

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)	11.66	14.35	114.59	0.27	56.85	10.70	28,620.86
TOTALS (tons/year, mitigated)	11.33	13.81	111.67	0.27	55.48	10.43	27,712.85
Percent Reduction	2.83	3.76	2.55	0.00	2.41	2.52	3.17

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt C Cumulative Operation.urb924

Project Name: Point Molate - Alt C Cumulative Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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)	4.10	5.62	12.67	0.00	0.03	0.03	6,654.94
TOTALS (lbs/day, mitigated)	3.71	4.52	11.74	0.00	0.03	0.03	5,326.70
Percent Reduction	9.51	19.57	7.34	NaN	0.00	0.00	19.96

## 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)	57.24	68.04	602.34	1.49	311.54	58.59	150,947.19
TOTALS (lbs/day, mitigated)	55.99	66.39	587.72	1.44	303.98	57.17	147,281.33
Percent Reduction	2.18	2.43	2.43	3.36	2.43	2.42	2.43

## 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)	61.34	73.66	615.01	1.49	311.57	58.62	157,602.13
TOTALS (lbs/day, mitigated)	59.70	70.91	599.46	1.44	304.01	57.20	152,608.03
Percent Reduction	2.67	3.73	2.53	3.36	2.43	2.42	3.17

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## 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	0.40	5.53	4.65	0.00	0.01	0.01	6,641.20
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	3.05						
TOTALS (lbs/day, unmitigated)	4.10	5.62	12.67	0.00	0.03	0.03	6,654.94

## Area Source Mitigated Detail Report:

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

<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	0.32	4.43	3.72	0.00	0.01	0.01	5,312.96
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	0.00						
Architectural Coatings	2.74						
TOTALS (lbs/day, mitigated)	3.71	4.52	11.74	0.00	0.03	0.03	5,326.70

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 0%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 50%

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	5.41	5.41	47.92	0.12	24.78	4.66	12,007.76
Strip mall	1.36	1.73	15.26	0.04	7.91	1.49	3,829.86
General office building	0.36	0.44	3.95	0.01	2.01	0.38	975.82
Casino	40.98	53.30	471.92	1.16	244.05	45.89	118,251.03
Entertainment	9.13	7.16	63.29	0.16	32.79	6.17	15,882.72
TOTALS (lbs/day, unmitigated)	57.24	68.04	602.34	1.49	311.54	58.59	150,947.19

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Hotel	5.31	5.28	46.76	0.11	24.18	4.55	11,716.14
Strip mall	1.33	1.68	14.89	0.04	7.72	1.45	3,736.85
General office building	0.35	0.43	3.86	0.01	1.96	0.37	952.12
Casino	40.01	52.01	460.46	1.13	238.12	44.78	115,379.22
Entertainment	8.99	6.99	61.75	0.15	32.00	6.02	15,497.00
TOTALS (lbs/day, mitigated)	55.99	66.39	587.72	1.44	303.98	57.17	147,281.33

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2025 Temperature (F): 70 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
Hotel		2.25	rooms	429.00	965.25	14,478.75
Strip mall		15.40	1000 sq ft	20.00	308.00	4,620.00
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	279.25	9,505.67	142,585.05
Entertainment		1.06	unknown	1,205.00	1,277.30	19,159.50
					12,134.32	182,014.80

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.0	0.0	100.0	0.0
Light Truck < 3750 lbs	12.6	0.0	99.2	0.8
Light Truck 3751-5750 lbs	19.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	34.4	65.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0

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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\Point Molate 11.1.2010\Point Molate - Alt D Construction and Operation.urb924

Project Name: Point Molate - Alt D Construction and Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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>
2011 TOTALS (tons/year unmitigated)	0.73	9.82	3.58	0.01	25.88	0.37	26.26	5.41	0.34	5.75	1,311.04
2011 TOTALS (tons/year mitigated)	0.73	9.47	3.58	0.01	1.91	0.26	2.17	0.40	0.24	0.65	1,311.04
Percent Reduction	0.00	3.64	0.00	0.00	92.62	29.52	91.72	92.54	29.52	88.78	0.00
2012 TOTALS (tons/year unmitigated)	1.14	12.13	9.15	0.02	40.99	0.48	41.47	8.57	0.44	9.01	2,239.60
2012 TOTALS (tons/year mitigated)	1.14	11.66	9.15	0.02	2.93	0.35	3.27	0.62	0.32	0.94	2,239.60
Percent Reduction	0.00	3.81	0.00	0.00	92.86	28.19	92.11	92.75	28.27	89.58	0.00
2013 TOTALS (tons/year unmitigated)	11.51	9.09	19.90	0.03	0.15	0.40	0.55	0.05	0.36	0.41	3,404.40
2013 TOTALS (tons/year mitigated)	7.24	9.09	19.90	0.03	0.15	0.40	0.55	0.05	0.36	0.41	3,404.40
Percent Reduction	37.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014 TOTALS (tons/year unmitigated)	6.06	2.86	5.13	0.01	0.04	0.15	0.19	0.01	0.14	0.15	939.06
2014 TOTALS (tons/year mitigated)	2.24	2.75	5.13	0.01	0.04	0.10	0.14	0.01	0.09	0.11	939.06
Percent Reduction	63.06	3.77	0.00	0.00	0.00	34.14	27.18	0.00	34.42	31.32	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)	11.69	3.00	2.19	0.00	0.01	0.01	3,785.78
TOTALS (tons/year, mitigated)	11.62	2.40	1.89	0.00	0.00	0.00	3,029.26
Percent Reduction	0.60	20.00	13.70	NaN	100.00	100.00	19.98

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## 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)	13.30	20.58	153.76	0.19	39.41	7.48	19,153.92
TOTALS (tons/year, mitigated)	13.27	20.50	153.28	0.19	39.28	7.46	19,094.92
Percent Reduction	0.23	0.39	0.31	0.00	0.33	0.27	0.31

## 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)	24.99	23.58	155.95	0.19	39.42	7.49	22,939.70
TOTALS (tons/year, mitigated)	24.89	22.90	155.17	0.19	39.28	7.46	22,124.18
Percent Reduction	0.40	2.88	0.50	0.00	0.36	0.40	3.56

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt D Construction and Operation.urb924

Project Name: Point Molate - Alt D Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (lbs/day unmitigated)	10.45	144.07	51.21	0.15	393.98	5.37	399.35	82.35	4.94	87.29	19,394.25
2011 TOTALS (lbs/day mitigated)	10.45	139.33	51.21	0.15	27.99	3.94	31.93	5.91	3.63	9.54	19,394.25
2012 TOTALS (lbs/day unmitigated)	9.73	129.65	136.40	0.19	393.98	4.80	398.78	82.35	4.42	86.77	21,665.14
2012 TOTALS (lbs/day mitigated)	9.73	125.21	136.40	0.19	27.99	3.49	31.48	5.91	3.21	9.13	21,665.14
2013 TOTALS (lbs/day unmitigated)	94.79	58.12	127.39	0.19	0.98	2.53	3.51	0.35	2.29	2.64	21,783.39
2013 TOTALS (lbs/day mitigated)	58.64	58.12	127.39	0.19	0.98	2.53	3.51	0.35	2.29	2.64	21,783.39
2014 TOTALS (lbs/day unmitigated)	97.00	68.64	128.86	0.20	1.01	3.56	4.57	0.36	3.25	3.60	23,669.18
2014 TOTALS (lbs/day mitigated)	38.20	66.55	128.86	0.20	1.01	2.54	3.55	0.36	2.31	2.66	23,669.18

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)	64.37	16.48	16.06	0.00	0.05	0.05	20,740.34
TOTALS (lbs/day, mitigated)	64.00	13.20	14.45	0.00	0.04	0.04	16,595.02
Percent Reduction	0.57	19.90	10.02	NaN	20.00	20.00	19.99

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)	68.87	105.07	814.80	1.03	215.90	40.98	105,472.61
TOTALS (lbs/day, mitigated)	68.68	104.74	812.27	1.02	215.23	40.85	105,147.80
Percent Reduction	0.28	0.31	0.31	0.97	0.31	0.32	0.31

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)	133.24	121.55	830.86	1.03	215.95	41.03	126,212.95
TOTALS (lbs/day, mitigated)	132.68	117.94	826.72	1.02	215.27	40.89	121,742.82
Percent Reduction	0.42	2.97	0.50	0.97	0.31	0.34	3.54

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>
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Time Slice 6/1/2011-6/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	29.85	17.20	0.01	5.91	1.69	7.60	1.23	1.55	2.79	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	24.34	14.46	0.00	0.00	1.50	1.50	0.00	1.38	1.38	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>10.45</u>	<u>144.07</u>	<u>51.21</u>	<u>0.15</u>	<u>393.98</u>	<u>5.37</u>	<u>399.35</u>	<u>82.35</u>	<u>4.94</u>	<u>87.29</u>	<u>19,394.25</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	10.45	144.07	51.21	0.15	393.98	5.37	399.35	82.35	4.94	87.29	19,394.25
Mass Grading Dust	0.00	0.00	0.00	0.00	393.40	0.00	393.40	82.16	0.00	82.16	0.00
Mass Grading Off Road Diesel	3.91	31.61	16.82	0.00	0.00	1.68	1.68	0.00	1.55	1.55	3,007.48
Mass Grading On Road Diesel	6.49	112.35	32.94	0.15	0.57	3.69	4.25	0.19	3.39	3.58	16,235.15
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>9.73</u>	<u>129.65</u>	<u>47.39</u>	<u>0.15</u>	<u>393.98</u>	<u>4.80</u>	<u>398.78</u>	<u>82.35</u>	<u>4.42</u>	<u>86.77</u>	<u>19,394.19</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	9.73	129.65	47.39	0.15	393.98	4.80	398.78	82.35	4.42	86.77	19,394.19
Mass Grading Dust	0.00	0.00	0.00	0.00	393.40	0.00	393.40	82.16	0.00	82.16	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	5.98	99.93	29.83	0.15	0.57	3.26	3.83	0.19	3.00	3.19	16,235.15
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 7/2/2012-9/29/2012 Active Days: 78	3.75	29.72	17.57	0.00	393.41	1.54	394.95	82.16	1.42	83.58	3,159.03
Fine Grading 07/01/2012- 09/30/2012	3.75	29.72	17.57	0.00	393.41	1.54	394.95	82.16	1.42	83.58	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	393.40	0.00	393.40	82.16	0.00	82.16	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012 Active Days: 79	9.22	64.27	<u>136.40</u>	<u>0.19</u>	0.98	2.78	3.76	0.35	2.53	2.88	<u>21,665.14</u>
Building 10/01/2012-03/31/2014	9.22	64.27	136.40	0.19	0.98	2.78	3.76	0.35	2.53	2.88	21,665.14
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	2.75	40.77	26.45	0.08	0.33	1.38	1.71	0.11	1.27	1.38	8,636.18
Building Worker Trips	3.22	7.63	98.95	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,282.63
Time Slice 1/1/2013-3/30/2013 Active Days: 77	8.44	58.05	126.41	0.19	0.98	2.52	3.50	0.35	2.29	2.64	21,661.30
Building 10/01/2012-03/31/2014	8.44	58.05	126.41	0.19	0.98	2.52	3.50	0.35	2.29	2.64	21,661.30
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	2.53	36.23	24.61	0.08	0.33	1.23	1.56	0.11	1.13	1.24	8,636.33
Building Worker Trips	2.92	6.94	91.12	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,278.64

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Time Slice 4/1/2013-12/31/2013	<u>94.79</u>	<u>58.12</u>	<u>t27.39</u>	<u>0.19</u>	<u>0.98</u>	<u>2.53</u>	<u>3.51</u>	<u>0.35</u>	<u>2.29</u>	<u>2.64</u>	<u>21,783.39</u>
Active Days: 236											
Building 10/01/2012-03/31/2014	8.44	58.05	126.41	0.19	0.98	2.52	3.50	0.35	2.29	2.64	21,661.30
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	2.53	36.23	24.61	0.08	0.33	1.23	1.56	0.11	1.13	1.24	8,636.33
Building Worker Trips	2.92	6.94	91.12	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,278.64
Coating 03/31/2013-05/31/2014	86.34	0.08	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.09
Architectural Coating	86.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.08	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.09
Time Slice 1/1/2014-1/31/2014	94.05	52.38	118.02	0.19	0.98	2.29	3.27	0.35	2.07	2.42	21,780.16
Active Days: 27											
Building 10/01/2012-03/31/2014	7.71	52.31	117.11	0.19	0.98	2.28	3.26	0.35	2.07	2.41	21,658.11
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	2.33	32.13	22.89	0.08	0.33	1.10	1.43	0.11	1.01	1.12	8,636.47
Building Worker Trips	2.65	6.32	83.88	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,275.31
Coating 03/31/2013-05/31/2014	86.34	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Architectural Coating	86.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05

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Time Slice 2/1/2014-3/31/2014	<u>97.00</u>	<u>68.64</u>	<u>128.86</u>	<u>0.20</u>	<u>1.01</u>	<u>3.56</u>	<u>4.57</u>	<u>0.36</u>	<u>3.25</u>	<u>3.60</u>	<u>23,669.18</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.95	16.27	10.84	0.01	0.02	1.28	1.30	0.01	1.17	1.18	1,889.02
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.14	2.25	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	465.15
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 10/01/2012-03/31/2014	7.71	52.31	117.11	0.19	0.98	2.28	3.26	0.35	2.07	2.41	21,658.11
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	2.33	32.13	22.89	0.08	0.33	1.10	1.43	0.11	1.01	1.12	8,636.47
Building Worker Trips	2.65	6.32	83.88	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,275.31
Coating 03/31/2013-05/31/2014	86.34	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Architectural Coating	86.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Time Slice 4/1/2014-5/31/2014	89.29	16.34	11.75	0.01	0.03	1.28	1.31	0.01	1.18	1.19	2,011.08
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.95	16.27	10.84	0.01	0.02	1.28	1.30	0.01	1.17	1.18	1,889.02
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.14	2.25	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	465.15
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	86.34	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Architectural Coating	86.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05

Phase Assumptions

Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

Building Volume Total (cubic feet): 398224.8

Building Volume Daily (cubic feet): 14000

On Road Truck Travel (VMT): 194.44

Off-Road Equipment:

1 Rubber Tired Dozers (357 hp) operating at a 0.59 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

Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 78.69

Maximum Daily Acreage Disturbed: 19.67

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 7/1/2011 - 6/30/2012 - Type Your Description Here

Total Acres Disturbed: 78.69

Maximum Daily Acreage Disturbed: 19.67

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 4032.57

Off-Road Equipment:

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

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- 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 2/1/2014 - 5/31/2014 - Default Paving Description

Acres to be Paved: 19.67

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 10/1/2012 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 7 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
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

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

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:

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>
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Time Slice 6/1/2011-6/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Active Days: 26											
Demolition 06/01/2011-06/30/2011	3.55	26.19	17.20	0.01	5.91	0.41	6.32	1.23	0.37	1.61	3,132.10
Fugitive Dust	0.00	0.00	0.00	0.00	5.88	0.00	5.88	1.22	0.00	1.22	0.00
Demo Off Road Diesel	3.20	20.69	14.46	0.00	0.00	0.23	0.23	0.00	0.21	0.21	2,227.97
Demo On Road Diesel	0.31	5.42	1.59	0.01	0.03	0.18	0.21	0.01	0.16	0.17	782.84
Demo Worker Trips	0.04	0.09	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	121.30
Time Slice 7/1/2011-12/30/2011	<u>10.45</u>	<u>139.33</u>	<u>51.21</u>	<u>0.15</u>	<u>27.99</u>	<u>3.94</u>	<u>31.93</u>	<u>5.91</u>	<u>3.63</u>	<u>9.54</u>	<u>19,394.25</u>
Active Days: 131											
Mass Grading 07/01/2011-06/30/2012	10.45	139.33	51.21	0.15	27.99	3.94	31.93	5.91	3.63	9.54	19,394.25
Mass Grading Dust	0.00	0.00	0.00	0.00	27.41	0.00	27.41	5.72	0.00	5.72	0.00
Mass Grading Off Road Diesel	3.91	26.86	16.82	0.00	0.00	0.25	0.25	0.00	0.23	0.23	3,007.48
Mass Grading On Road Diesel	6.49	112.35	32.94	0.15	0.57	3.69	4.25	0.19	3.39	3.58	16,235.15
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-6/29/2012	<u>9.73</u>	<u>125.21</u>	<u>47.39</u>	<u>0.15</u>	<u>27.99</u>	<u>3.49</u>	<u>31.48</u>	<u>5.91</u>	<u>3.21</u>	<u>9.13</u>	<u>19,394.19</u>
Active Days: 130											
Mass Grading 07/01/2011-06/30/2012	9.73	125.21	47.39	0.15	27.99	3.49	31.48	5.91	3.21	9.13	19,394.19
Mass Grading Dust	0.00	0.00	0.00	0.00	27.41	0.00	27.41	5.72	0.00	5.72	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	3,007.48
Mass Grading On Road Diesel	5.98	99.93	29.83	0.15	0.57	3.26	3.83	0.19	3.00	3.19	16,235.15
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 7/2/2012-9/29/2012	3.75	25.27	17.57	0.00	27.42	0.24	27.65	5.73	0.22	5.94	3,159.03
Active Days: 78											
Fine Grading 07/01/2012-09/30/2012	3.75	25.27	17.57	0.00	27.42	0.24	27.65	5.73	0.22	5.94	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	27.41	0.00	27.41	5.72	0.00	5.72	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 10/1/2012-12/31/2012	9.22	64.27	<u>136.40</u>	<u>0.19</u>	0.98	2.78	3.76	0.35	2.53	2.88	<u>21,665.14</u>
Active Days: 79											
Building 10/01/2012-03/31/2014	9.22	64.27	136.40	0.19	0.98	2.78	3.76	0.35	2.53	2.88	21,665.14
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	2.75	40.77	26.45	0.08	0.33	1.38	1.71	0.11	1.27	1.38	8,636.18
Building Worker Trips	3.22	7.63	98.95	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,282.63
Time Slice 1/1/2013-3/30/2013	8.44	58.05	126.41	0.19	0.98	2.52	3.50	0.35	2.29	2.64	21,661.30
Active Days: 77											
Building 10/01/2012-03/31/2014	8.44	58.05	126.41	0.19	0.98	2.52	3.50	0.35	2.29	2.64	21,661.30
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	2.53	36.23	24.61	0.08	0.33	1.23	1.56	0.11	1.13	1.24	8,636.33
Building Worker Trips	2.92	6.94	91.12	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,278.64

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Time Slice 4/1/2013-12/31/2013	<u>58.64</u>	<u>58.12</u>	<u>127.39</u>	<u>0.19</u>	<u>0.98</u>	<u>2.53</u>	<u>3.51</u>	<u>0.35</u>	<u>2.29</u>	<u>2.64</u>	<u>21,783.39</u>
Active Days: 236											
Building 10/01/2012-03/31/2014	8.44	58.05	126.41	0.19	0.98	2.52	3.50	0.35	2.29	2.64	21,661.30
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	2.53	36.23	24.61	0.08	0.33	1.23	1.56	0.11	1.13	1.24	8,636.33
Building Worker Trips	2.92	6.94	91.12	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,278.64
Coating 03/31/2013-05/31/2014	50.20	0.08	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.09
Architectural Coating	50.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.08	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.09
Time Slice 1/1/2014-1/31/2014	35.26	52.38	118.02	0.19	0.98	2.29	3.27	0.35	2.07	2.42	21,780.16
Active Days: 27											
Building 10/01/2012-03/31/2014	7.71	52.31	117.11	0.19	0.98	2.28	3.26	0.35	2.07	2.41	21,658.11
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	2.33	32.13	22.89	0.08	0.33	1.10	1.43	0.11	1.01	1.12	8,636.47
Building Worker Trips	2.65	6.32	83.88	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,275.31
Coating 03/31/2013-05/31/2014	27.55	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Architectural Coating	27.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05

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Time Slice 2/1/2014-3/31/2014	<u>38.20</u>	<u>66.55</u>	<u>128.86</u>	<u>0.20</u>	<u>1.01</u>	<u>2.54</u>	<u>3.55</u>	<u>0.36</u>	<u>2.31</u>	<u>2.66</u>	<u>23,669.18</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.95	14.18	10.84	0.01	0.02	0.26	0.28	0.01	0.24	0.24	1,889.02
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.14	2.25	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	465.15
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 10/01/2012-03/31/2014	7.71	52.31	117.11	0.19	0.98	2.28	3.26	0.35	2.07	2.41	21,658.11
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	2.33	32.13	22.89	0.08	0.33	1.10	1.43	0.11	1.01	1.12	8,636.47
Building Worker Trips	2.65	6.32	83.88	0.11	0.65	0.32	0.97	0.23	0.27	0.50	11,275.31
Coating 03/31/2013-05/31/2014	27.55	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Architectural Coating	27.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Time Slice 4/1/2014-5/31/2014	30.49	14.25	11.75	0.01	0.03	0.26	0.29	0.01	0.24	0.25	2,011.08
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.95	14.18	10.84	0.01	0.02	0.26	0.28	0.01	0.24	0.24	1,889.02
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.14	2.25	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	465.15
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	27.55	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05
Architectural Coating	27.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.01	122.05

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 6/1/2011 - 6/30/2011 - Type Your Description Here

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Fine Grading 7/1/2012 - 9/30/2012 - Default Fine Site Grading 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 Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

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For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 7/1/2011 - 6/30/2012 - Type Your Description Here

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

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

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NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 2/1/2014 - 5/31/2014 - Default Paving Description

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

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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:

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	1.25	16.39	8.04	0.00	0.03	0.03	20,726.60
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	53.82						
Architectural Coatings	8.65						
TOTALS (lbs/day, unmitigated)	64.37	16.48	16.06	0.00	0.05	0.05	20,740.34

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## Area Source Mitigated Detail Report:

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

<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	1.00	13.11	6.43	0.00	0.02	0.02	16,581.28
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	53.82						
Architectural Coatings	8.53						
TOTALS (lbs/day, mitigated)	64.00	13.20	14.45	0.00	0.04	0.04	16,595.02

Area Source Mitigation Measures Selected

<u>Mitigation Description</u>	<u>Percent Reduction</u>
Residential Increase Energy Efficiency Beyond Title 24	20.00
Commercial Increase Energy Efficiency Beyond Title 24	20.00
Percent of Residential Landscape Equipment that are Electrically Powered and have Electrical Outlets at the the Front and Rear of Residences	20.00
For Nonresidential Interior Use Low VOC Coating	10.00
For Nonresidential Exterior Use Low VOC Coating	10.00

Area Source Changes to Defaults

- Percent residential using natural gas changed from 60% to 100%
- Percentage of residences with wood stoves changed from 35% to 0%
- Percentage of residences with wood fireplaces changed from 10% to 0%
- Percentage of residences with natural gas fireplaces changed from 55% to 50%

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## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	37.28	53.33	420.32	0.53	109.31	20.76	53,603.44
Quality resturant	16.44	27.79	212.23	0.27	57.24	10.86	27,864.35
Hotel	1.53	1.41	10.71	0.01	2.90	0.55	1,408.89
Strip mall	13.49	22.33	169.89	0.22	46.01	8.73	22,382.16
General office building	0.13	0.21	1.65	0.00	0.44	0.08	213.77
TOTALS (lbs/day, unmitigated)	68.87	105.07	814.80	1.03	215.90	40.98	105,472.61

## Operational Mitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	37.14	53.10	418.49	0.52	108.83	20.67	53,369.82
Quality resturant	16.41	27.74	211.85	0.27	57.14	10.84	27,815.37
Hotel	1.53	1.40	10.69	0.01	2.89	0.55	1,406.41
Strip mall	13.47	22.29	169.59	0.22	45.93	8.71	22,342.81
General office building	0.13	0.21	1.65	0.00	0.44	0.08	213.39
TOTALS (lbs/day, mitigated)	68.68	104.74	812.27	1.02	215.23	40.85	105,147.80

Operational Mitigation Options SelectedResidential Mitigation Measures

## Residential Mix of Uses Mitigation

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NOTE this mitigation measure INCREASES Trips by 1.82%

Operational Mitigation Options Selected

Residential Mitigation Measures

Note that the above percent is applied to a baseline of 9.57 and that product is subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1100.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

-----

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day))

Note that the above percent is applied to a baseline of 9.57 and that product is subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

-----

NOTE this mitigation measure INCREASES Trips by 1.82%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1100.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 70 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
Condo/townhouse general	68.75	3.86	dwelling units	1,100.00	4,246.00	63,690.00
Quality resturant		55.60	1000 sq ft	40.00	2,224.00	33,360.00
Hotel		0.75	rooms	150.00	112.50	1,687.50
Strip mall		17.88	1000 sq ft	100.00	1,788.00	26,820.00
General office building		11.33	1000 sq ft	1.50	16.99	254.92
					8,387.49	125,812.42

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.4	99.4	0.2
Light Truck < 3750 lbs	12.7	0.8	96.8	2.4
Light Truck 3751-5750 lbs	19.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

Operational Changes to Defaults

- Ambient summer temperature changed from 85 degrees F to 70 degrees F
- Ambient winter temperature changed from 40 degrees F to 50 degrees F
- Home-based work urban trip length changed from 10.8 miles to 15 miles
- Home-based shop urban trip length changed from 7.3 miles to 15 miles
- Home-based other urban trip length changed from 7.5 miles to 15 miles
- Commercial-based commute urban trip length changed from 9.5 miles to 15 miles
- Commercial-based non-work urban trip length changed from 7.35 miles to 15 miles
- Commercial-based customer urban trip length changed from 7.35 miles to 15 miles

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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\Point Molate 11.1.2010\Point Molate - Alt D Cumulative Operation.urb924

Project Name: Point Molate - Alt D Cumulative Operation

Project Location: Bay Area Air District

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)	11.69	3.00	2.19	0.00	0.01	0.01	3,785.78
TOTALS (tons/year, mitigated)	11.62	2.40	1.89	0.00	0.00	0.00	3,029.26
Percent Reduction	0.60	20.00	13.70	NaN	100.00	100.00	19.98

## 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)	7.67	9.22	79.53	0.19	39.31	7.40	19,023.66
TOTALS (tons/year, mitigated)	7.64	9.20	79.28	0.18	39.19	7.37	18,965.07
Percent Reduction	0.39	0.22	0.31	5.26	0.31	0.41	0.31

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)	19.36	12.22	81.72	0.19	39.32	7.41	22,809.44
TOTALS (tons/year, mitigated)	19.26	11.60	81.17	0.18	39.19	7.37	21,994.33
Percent Reduction	0.52	5.07	0.67	5.26	0.33	0.54	3.57

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt D Cumulative Operation.urb924

Project Name: Point Molate - Alt D Cumulative Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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)	64.37	16.48	16.06	0.00	0.05	0.05	20,740.34
TOTALS (lbs/day, mitigated)	64.00	13.20	14.45	0.00	0.04	0.04	16,595.02
Percent Reduction	0.57	19.90	10.02	NaN	20.00	20.00	19.99

## 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)	40.18	47.13	424.12	1.02	215.38	40.53	104,770.47
TOTALS (lbs/day, mitigated)	40.06	47.00	422.81	1.02	214.72	40.41	104,447.83
Percent Reduction	0.30	0.28	0.31	0.00	0.31	0.30	0.31

## 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)	104.55	63.61	440.18	1.02	215.43	40.58	125,510.81
TOTALS (lbs/day, mitigated)	104.06	60.20	437.26	1.02	214.76	40.45	121,042.85
Percent Reduction	0.47	5.36	0.66	0.00	0.31	0.32	3.56

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## 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	1.25	16.39	8.04	0.00	0.03	0.03	20,726.60
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	53.82						
Architectural Coatings	8.65						
TOTALS (lbs/day, unmitigated)	64.37	16.48	16.06	0.00	0.05	0.05	20,740.34

## Area Source Mitigated Detail Report:

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

<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	1.00	13.11	6.43	0.00	0.02	0.02	16,581.28
Hearth - No Summer Emissions							
Landscape	0.65	0.09	8.02	0.00	0.02	0.02	13.74
Consumer Products	53.82						
Architectural Coatings	8.53						
TOTALS (lbs/day, mitigated)	64.00	13.20	14.45	0.00	0.04	0.04	16,595.02

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 100%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 50%

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	21.79	23.91	218.45	0.52	109.05	20.54	53,246.76
Quality resturant	9.52	12.47	110.63	0.27	57.10	10.74	27,678.79
Hotel	0.94	0.63	5.59	0.01	2.89	0.54	1,399.51
Strip mall	7.85	10.02	88.59	0.22	45.90	8.63	22,233.07
General office building	0.08	0.10	0.86	0.00	0.44	0.08	212.34
TOTALS (lbs/day, unmitigated)	40.18	47.13	424.12	1.02	215.38	40.53	104,770.47

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## Operational Mitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	21.71	23.81	217.50	0.52	108.58	20.45	53,014.69
Quality resturant	9.50	12.45	110.43	0.27	57.00	10.72	27,630.13
Hotel	0.94	0.63	5.58	0.01	2.88	0.54	1,397.05
Strip mall	7.83	10.01	88.44	0.22	45.82	8.62	22,193.99
General office building	0.08	0.10	0.86	0.00	0.44	0.08	211.97
TOTALS (lbs/day, mitigated)	40.06	47.00	422.81	1.02	214.72	40.41	104,447.83

## Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2025 Temperature (F): 70 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
Condo/townhouse general	68.75	3.86	dwelling units	1,100.00	4,246.00	63,690.00
Quality resturant		55.60	1000 sq ft	40.00	2,224.00	33,360.00
Hotel		0.75	rooms	150.00	112.50	1,687.50
Strip mall		17.88	1000 sq ft	100.00	1,788.00	26,820.00
General office building		11.33	1000 sq ft	1.50	16.99	254.92
					8,387.49	125,812.42

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.0	0.0	100.0	0.0
Light Truck <.3750 lbs	12.6	0.0	99.2	0.8
Light Truck 3751-5750 lbs	19.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	34.4	65.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

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\Point Molate 11.1.2010\Point Molate - Alt E Construction and Operation.urb924

Project Name: Point Molate - Alt E Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (tons/year unmitigated)	0.03	0.21	0.14	0.00	0.00	0.02	0.02	0.00	0.02	0.02	19.57
2011 TOTALS (tons/year mitigated)	0.03	0.16	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.57
Percent Reduction	0.00	21.45	0.00	0.00	0.00	73.79	73.11	0.00	73.81	73.55	0.00

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)	1.35	1.95	13.99	0.01	2.85	0.54	1,382.90
TOTALS (tons/year, mitigated)	1.35	1.94	13.97	0.01	2.85	0.54	1,381.09
Percent Reduction	0.00	0.51	0.14	0.00	0.00	0.00	0.13

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)	1.35	1.95	13.99	0.01	2.85	0.54	1,382.90

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt E Construction and Operation.urb924

Project Name: Point Molate - Alt E Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (lbs/day unmitigated)	2.82	17.39	11.66	0.00	0.01	1.50	1.51	0.00	1.38	1.38	1,631.15
2011 TOTALS (lbs/day mitigated)	2.82	13.66	11.66	0.00	0.01	0.39	0.41	0.00	0.36	0.37	1,631.15

## 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)	7.21	9.94	73.71	0.07	15.63	2.97	7,614.56
TOTALS (lbs/day, mitigated)	7.20	9.93	73.62	0.07	15.61	2.97	7,604.64
Percent Reduction	0.14	0.10	0.12	0.00	0.13	0.00	0.13

## 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)	7.21	9.94	73.71	0.07	15.63	2.97	7,614.56

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

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## 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>
Time Slice 3/1/2011-4/1/2011 Active Days: 24	<b>2.82</b>	<b>17.39</b>	<b>11.66</b>	<b>0.00</b>	<b>0.01</b>	<b>1.50</b>	<b>1.51</b>	<b>0.00</b>	<b>1.38</b>	<b>1.38</b>	<b>1,631.15</b>
Asphalt 03/01/2011-04/01/2011	2.82	17.39	11.66	0.00	0.01	1.50	1.51	0.00	1.38	1.38	1,631.15
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.72	16.56	9.72	0.00	0.00	1.47	1.47	0.00	1.35	1.35	1,347.72
Paving On Road Diesel	0.04	0.70	0.21	0.00	0.00	0.02	0.03	0.00	0.02	0.02	101.49
Paving Worker Trips	0.06	0.14	1.73	0.00	0.01	0.01	0.02	0.00	0.00	0.01	181.95

Phase Assumptions

Phase: Paving 3/1/2011 - 4/1/2011 - Type Your Description Here

Acres to be Paved: 1

Off-Road Equipment:

1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

## 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>
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Time Slice 3/1/2011-4/1/2011 Active Days: 24	<u>2.82</u>	<u>13.66</u>	<u>11.66</u>	<u>0.00</u>	<u>0.01</u>	<u>0.39</u>	<u>0.41</u>	<u>0.00</u>	<u>0.36</u>	<u>0.37</u>	<u>1,631.15</u>
Asphalt 03/01/2011-04/01/2011	2.82	13.66	11.66	0.00	0.01	0.39	0.41	0.00	0.36	0.37	1,631.15
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.72	12.83	9.72	0.00	0.00	0.36	0.36	0.00	0.34	0.34	1,347.72
Paving On Road Diesel	0.04	0.70	0.21	0.00	0.00	0.02	0.03	0.00	0.02	0.02	101.49
Paving Worker Trips	0.06	0.14	1.73	0.00	0.01	0.01	0.02	0.00	0.00	0.01	181.95

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Paving 3/1/2011 - 4/1/2011 - Type Your Description Here

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 Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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 Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Parkland	7.21	9.94	73.71	0.07	15.63	2.97	7,614.56
TOTALS (lbs/day, unmitigated)	7.21	9.94	73.71	0.07	15.63	2.97	7,614.56

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Parkland	7.20	9.93	73.62	0.07	15.61	2.97	7,604.64
TOTALS (lbs/day, mitigated)	7.20	9.93	73.62	0.07	15.61	2.97	7,604.64

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

-----

Percent Reduction in Trips is 0%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

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Nonresidential Mitigation Measures

Percent Reduction in Trips is 0.1%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 4

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 4

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 0.03%

Inputs Selected:

The Number of Intersections per Square Mile is 0

The Percent of Streets with Sidewalks on One Side is 0%

The Percent of Streets with Sidewalks on Both Sides is 0%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 1%

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 70 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Parkland				0.5	0.3	99.3

Operational Changes to Defaults

Ambient summer temperature changed from 85 degrees F to 70 degrees F

Ambient winter temperature changed from 40 degrees F to 50 degrees F

Home-based work urban trip length changed from 10.8 miles to 15 miles

Home-based shop urban trip length changed from 7.3 miles to 15 miles

Home-based other urban trip length changed from 7.5 miles to 15 miles

Commercial-based commute urban trip length changed from 9.5 miles to 15 miles

Commercial-based non-work urban trip length changed from 7.35 miles to 15 miles

Commercial-based customer urban trip length changed from 7.35 miles to 15 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\Point Molate 11.1.2010\Point Molate - Alt E Cumulative.urb924

Project Name: Point Molate - Alt E Cumulative

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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)	0.64	0.67	5.66	0.01	2.84	0.53	1,370.44
TOTALS (tons/year, mitigated)	0.64	0.67	5.66	0.01	2.84	0.53	1,368.65
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.13

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)	0.64	0.67	5.66	0.01	2.84	0.53	1,370.44

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt E Cumulative.urb924

Project Name: Point Molate - Alt E Cumulative

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

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)	3.48	3.41	30.15	0.07	15.58	2.93	7,547.69
TOTALS (lbs/day, mitigated)	3.48	3.41	30.11	0.07	15.56	2.93	7,537.85
Percent Reduction	0.00	0.00	0.13	0.00	0.13	0.00	0.13

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)	3.48	3.41	30.15	0.07	15.58	2.93	7,547.69

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Parkland	3.48	3.41	30.15	0.07	15.58	2.93	7,547.69
TOTALS (lbs/day, unmitigated)	3.48	3.41	30.15	0.07	15.58	2.93	7,547.69

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Parkland	3.48	3.41	30.11	0.07	15.56	2.93	7,537.85
TOTALS (lbs/day, mitigated)	3.48	3.41	30.11	0.07	15.56	2.93	7,537.85

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2025 Temperature (F): 70 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
Parkland		2.28	acres	280.00	638.40	9,101.99
					638.40	9,101.99

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.0	0.0	100.0	0.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Truck < 3750 lbs	12.6	0.0	99.2	0.8
Light Truck 3751-5750 lbs	19.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	34.4	65.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Parkland				0.5	0.3	99.3

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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\Point Molate 11.1.2010\Point Molate - Alt G Construction and Operation.urb924

Project Name: Point Molate - Alt G Construction and Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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>
2011 TOTALS (tons/year unmitigated)	2.59	42.01	13.00	0.05	30.45	1.43	31.88	6.38	1.31	7.70	5,961.93
2011 TOTALS (tons/year mitigated)	2.59	41.65	13.00	0.05	2.31	1.32	3.63	0.51	1.21	1.72	5,961.93
Percent Reduction	0.00	0.86	0.00	0.00	92.42	7.67	88.62	92.07	7.67	77.67	0.00
2012 TOTALS (tons/year unmitigated)	2.28	30.33	16.04	0.05	36.96	1.08	38.04	7.74	0.99	8.73	5,356.99
2012 TOTALS (tons/year mitigated)	2.28	29.92	16.04	0.05	2.75	0.96	3.71	0.60	0.88	1.48	5,356.99
Percent Reduction	0.00	1.36	0.00	0.00	92.56	11.28	90.25	92.27	11.30	83.09	0.00
2013 TOTALS (tons/year unmitigated)	11.84	7.42	19.60	0.03	0.14	0.34	0.48	0.05	0.31	0.36	3,100.35
2013 TOTALS (tons/year mitigated)	7.40	7.42	19.60	0.03	0.14	0.34	0.48	0.05	0.31	0.36	3,100.35
Percent Reduction	37.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014 TOTALS (tons/year unmitigated)	6.28	2.49	5.06	0.01	0.04	0.14	0.18	0.01	0.13	0.14	864.56
2014 TOTALS (tons/year mitigated)	2.29	2.38	5.06	0.01	0.04	0.09	0.13	0.01	0.08	0.09	864.56
Percent Reduction	63.46	4.32	0.00	0.00	0.00	37.06	29.38	0.00	37.41	33.95	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)	5.00	3.32	3.32	0.00	0.01	0.01	4,028.91
TOTALS (tons/year, mitigated)	4.82	2.65	2.83	0.00	0.00	0.00	3,223.55
Percent Reduction	3.60	20.18	14.76	NaN	100.00	100.00	19.99

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## 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)	34.57	51.22	378.43	0.45	97.93	18.58	47,475.08
TOTALS (tons/year, mitigated)	33.77	49.91	368.66	0.45	95.40	18.09	46,251.87
Percent Reduction	2.31	2.56	2.58	0.00	2.58	2.64	2.58

## 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)	39.57	54.54	381.75	0.45	97.94	18.59	51,503.99
TOTALS (tons/year, mitigated)	38.59	52.56	371.49	0.45	95.40	18.09	49,475.42
Percent Reduction	2.48	3.63	2.69	0.00	2.59	2.69	3.94

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\equinn\Application Data\Urbemis\Version9a\Projects\Point Molate 11.1.2010\Point Molate - Alt G Construction and Operation.urb924

Project Name: Point Molate - Alt G Construction and Operation

Project Location: Bay Area Air District

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>
2011 TOTALS (lbs/day unmitigated)	33.86	549.18	170.00	0.70	398.03	18.67	416.69	83.44	17.17	100.61	77,933.69
2011 TOTALS (lbs/day mitigated)	33.86	544.44	170.00	0.70	30.17	17.23	47.41	6.62	15.86	22.47	77,933.69
2012 TOTALS (lbs/day unmitigated)	31.28	489.99	154.94	0.70	398.03	16.56	414.58	83.44	15.23	98.67	77,933.63
2012 TOTALS (lbs/day mitigated)	31.28	485.55	154.94	0.70	30.17	15.25	45.42	6.62	14.03	20.64	77,933.63
2013 TOTALS (lbs/day unmitigated)	97.82	47.41	125.48	0.18	0.92	2.17	3.09	0.33	1.97	2.29	19,841.85
2013 TOTALS (lbs/day mitigated)	60.15	47.41	125.48	0.18	0.92	2.17	3.09	0.33	1.97	2.29	19,841.85
2014 TOTALS (lbs/day unmitigated)	100.08	59.17	127.04	0.18	0.95	3.25	4.19	0.34	2.95	3.29	21,729.79
2014 TOTALS (lbs/day mitigated)	38.81	57.08	127.04	0.18	0.95	2.23	3.17	0.34	2.02	2.35	21,729.79

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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)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36
Percent Reduction	3.35	19.87	11.62	NaN	0.00	0.00	19.99

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)	180.58	261.58	2,002.17	2.56	536.56	101.79	261,429.00
TOTALS (lbs/day, mitigated)	176.57	254.83	1,950.50	2.50	522.75	99.19	254,693.27
Percent Reduction	2.22	2.58	2.58	2.34	2.57	2.55	2.58

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)	208.34	279.80	2,025.23	2.56	536.62	101.85	283,510.33
TOTALS (lbs/day, mitigated)	203.40	269.43	1,970.88	2.50	522.81	99.25	272,361.63
Percent Reduction	2.37	3.71	2.68	2.34	2.57	2.55	3.93

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>
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Time Slice 6/1/2011-12/30/2011	<u>33.86</u>	<u>549.18</u>	<u>170.00</u>	<u>0.70</u>	<u>398.03</u>	<u>18.67</u>	<u>416.69</u>	<u>83.44</u>	<u>17.17</u>	<u>100.61</u>	<u>77,933.69</u>
Active Days: 153											
Mass Grading 06/01/2011-05/30/2012	33.86	549.18	170.00	0.70	398.03	18.67	416.69	83.44	17.17	100.61	77,933.69
Mass Grading Dust	0.00	0.00	0.00	0.00	395.40	0.00	395.40	82.58	0.00	82.58	0.00
Mass Grading Off Road Diesel	3.91	31.61	16.82	0.00	0.00	1.68	1.68	0.00	1.55	1.55	3,007.48
Mass Grading On Road Diesel	29.90	517.46	151.73	0.70	2.62	16.98	19.60	0.86	15.62	16.48	74,774.59
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-5/30/2012	<u>31.28</u>	<u>489.99</u>	<u>154.94</u>	<u>0.70</u>	<u>398.03</u>	<u>16.56</u>	<u>414.58</u>	<u>83.44</u>	<u>15.23</u>	<u>98.67</u>	<u>77,933.63</u>
Active Days: 108											
Mass Grading 06/01/2011-05/30/2012	31.28	489.99	154.94	0.70	398.03	16.56	414.58	83.44	15.23	98.67	77,933.63
Mass Grading Dust	0.00	0.00	0.00	0.00	395.40	0.00	395.40	82.58	0.00	82.58	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	27.53	460.27	137.37	0.70	2.62	15.01	17.63	0.86	13.81	14.67	74,774.59
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 6/1/2012-8/30/2012	<u>3.75</u>	<u>29.72</u>	<u>17.57</u>	<u>0.00</u>	<u>395.41</u>	<u>1.54</u>	<u>396.95</u>	<u>82.58</u>	<u>1.42</u>	<u>84.00</u>	<u>3,159.03</u>
Active Days: 78											
Fine Grading 06/01/2012-08/30/2012	3.75	29.72	17.57	0.00	395.41	1.54	396.95	82.58	1.42	84.00	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	395.40	0.00	395.40	82.58	0.00	82.58	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 9/1/2012-12/31/2012	8.57	52.20	134.34	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Active Days: 104											
Building 09/01/2012-03/31/2014	8.57	52.20	134.34	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.92	28.29	19.00	0.06	0.23	0.96	1.19	0.08	0.88	0.96	6,074.01
Building Worker Trips	3.40	8.05	104.35	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,898.36
Time Slice 1/1/2013-3/30/2013	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Active Days: 77											
Building 09/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16
Time Slice 4/1/2013-12/31/2013	<u>97.82</u>	<u>47.41</u>	<u>125.48</u>	<u>0.18</u>	<u>0.92</u>	<u>2.17</u>	<u>3.09</u>	<u>0.33</u>	<u>1.97</u>	<u>2.29</u>	<u>19,841.85</u>
Active Days: 236											
Building 09/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16
Coating 03/31/2013-05/31/2014	89.98	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23

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Time Slice 1/1/2014-1/31/2014	97.13	42.89	116.20	0.18	0.92	1.97	2.89	0.33	1.78	2.11	19,838.41
Active Days: 27											
Building 09/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	89.98	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Time Slice 2/1/2014-3/31/2014	<u>100.08</u>	<u>59.17</u>	<u>127.04</u>	<u>0.18</u>	<u>0.95</u>	<u>3.25</u>	<u>4.19</u>	<u>0.34</u>	<u>2.95</u>	<u>3.29</u>	<u>21,729.79</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.95	16.28	10.84	0.01	0.03	1.28	1.30	0.01	1.17	1.18	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 09/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	89.98	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

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Time Slice 4/1/2014-5/31/2014	92.93	16.35	11.79	0.01	0.03	1.28	1.31	0.01	1.18	1.19	2,018.58
Active Days: 53											
Asphalt 02/01/2014-05/31/2014	2.95	16.28	10.84	0.01	0.03	1.28	1.30	0.01	1.17	1.18	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	13.94	9.01	0.00	0.00	1.20	1.20	0.00	1.10	1.10	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	89.98	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	89.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

Phase Assumptions

Phase: Fine Grading 6/1/2012 - 8/30/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 79.09

Maximum Daily Acreage Disturbed: 19.77

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 6/1/2011 - 5/30/2012 - Type Your Description Here

Total Acres Disturbed: 79.09

Maximum Daily Acreage Disturbed: 19.77

Fugitive Dust Level of Detail: Default

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20 lbs per acre-day

On Road Truck Travel (VMT): 18572.88

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: Paving 2/1/2014 - 5/31/2014 - Default Paving Description

Acres to be Paved: 19.77

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 9/1/2012 - 3/31/2014 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 7 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
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

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

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

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

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## 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 6/1/2011-12/30/2011	<u>33.86</u>	<u>544.44</u>	<u>170.00</u>	<u>0.70</u>	<u>30.17</u>	<u>17.23</u>	<u>47.41</u>	<u>6.62</u>	<u>15.86</u>	<u>22.47</u>	<u>77,933.69</u>
Active Days: 153											
Mass Grading 06/01/2011-05/30/2012	33.86	544.44	170.00	0.70	30.17	17.23	47.41	6.62	15.86	22.47	77,933.69
Mass Grading Dust	0.00	0.00	0.00	0.00	27.55	0.00	27.55	5.75	0.00	5.75	0.00
Mass Grading Off Road Diesel	3.91	26.86	16.82	0.00	0.00	0.25	0.25	0.00	0.23	0.23	3,007.48
Mass Grading On Road Diesel	29.90	517.46	151.73	0.70	2.62	16.98	19.60	0.86	15.62	16.48	74,774.59
Mass Grading Worker Trips	0.05	0.11	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.62
Time Slice 1/2/2012-5/30/2012	<u>31.28</u>	<u>485.55</u>	<u>154.94</u>	<u>0.70</u>	<u>30.17</u>	<u>15.25</u>	<u>45.42</u>	<u>6.62</u>	<u>14.03</u>	<u>20.64</u>	<u>77,933.63</u>
Active Days: 108											
Mass Grading 06/01/2011-05/30/2012	31.28	485.55	154.94	0.70	30.17	15.25	45.42	6.62	14.03	20.64	77,933.63
Mass Grading Dust	0.00	0.00	0.00	0.00	27.55	0.00	27.55	5.75	0.00	5.75	0.00
Mass Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	3,007.48
Mass Grading On Road Diesel	27.53	460.27	137.37	0.70	2.62	15.01	17.63	0.86	13.81	14.67	74,774.59
Mass Grading Worker Trips	0.04	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56
Time Slice 6/1/2012-8/30/2012	<u>3.75</u>	<u>25.27</u>	<u>17.57</u>	<u>0.00</u>	<u>27.56</u>	<u>0.24</u>	<u>27.79</u>	<u>5.76</u>	<u>0.22</u>	<u>5.97</u>	<u>3,159.03</u>
Active Days: 78											
Fine Grading 06/01/2012-08/30/2012	3.75	25.27	17.57	0.00	27.56	0.24	27.79	5.76	0.22	5.97	3,159.03
Fine Grading Dust	0.00	0.00	0.00	0.00	27.55	0.00	27.55	5.75	0.00	5.75	0.00
Fine Grading Off Road Diesel	3.71	25.17	16.24	0.00	0.00	0.23	0.23	0.00	0.21	0.21	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	0.10	1.33	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.56

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Time Slice 9/1/2012-12/31/2012	8.57	52.20	134.34	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Active Days: 104											
Building 09/01/2012-03/31/2014	8.57	52.20	134.34	0.18	0.92	2.38	3.30	0.33	2.16	2.49	19,718.70
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.92	28.29	19.00	0.06	0.23	0.96	1.19	0.08	0.88	0.96	6,074.01
Building Worker Trips	3.40	8.05	104.35	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,898.36
Time Slice 1/1/2013-3/30/2013	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Active Days: 77											
Building 09/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16
Time Slice 4/1/2013-12/31/2013	<u>60.15</u>	<u>47.41</u>	<u>125.48</u>	<u>0.18</u>	<u>0.92</u>	<u>2.17</u>	<u>3.09</u>	<u>0.33</u>	<u>1.97</u>	<u>2.29</u>	<u>19,841.85</u>
Active Days: 236											
Building 09/01/2012-03/31/2014	7.84	47.34	124.45	0.18	0.92	2.17	3.08	0.33	1.96	2.29	19,714.62
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.77	25.13	17.68	0.06	0.23	0.86	1.09	0.08	0.78	0.86	6,074.13
Building Worker Trips	3.08	7.32	96.10	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,894.16
Coating 03/31/2013-05/31/2014	52.31	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23
Architectural Coating	52.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.08	1.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.23

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Time Slice 1/1/2014-1/31/2014	35.86	42.89	116.20	0.18	0.92	1.97	2.89	0.33	1.78	2.11	19,838.41
Active Days: 27											
Building 09/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	28.71	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	28.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Time Slice 2/1/2014-3/31/2014	<u>38.81</u>	<u>57.08</u>	<u>127.04</u>	<u>0.18</u>	<u>0.95</u>	<u>2.23</u>	<u>3.17</u>	<u>0.34</u>	<u>2.02</u>	<u>2.35</u>	<u>21,729.79</u>
Active Days: 50											
Asphalt 02/01/2014-05/31/2014	2.95	14.19	10.84	0.01	0.03	0.26	0.28	0.01	0.24	0.24	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Building 09/01/2012-03/31/2014	7.16	42.82	115.25	0.18	0.92	1.97	2.88	0.33	1.78	2.10	19,711.21
Building Off Road Diesel	2.74	13.86	10.34	0.00	0.00	0.86	0.86	0.00	0.79	0.79	1,746.33
Building Vendor Trips	1.62	22.29	16.46	0.06	0.23	0.77	1.00	0.08	0.70	0.78	6,074.24
Building Worker Trips	2.79	6.66	88.46	0.12	0.68	0.34	1.02	0.25	0.29	0.53	11,890.64
Coating 03/31/2013-05/31/2014	28.71	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	28.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19



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Time Slice 4/1/2014-5/31/2014 Active Days: 53	31.65	14.26	11.79	0.01	0.03	0.26	0.29	0.01	0.24	0.25	2,018.58
Asphalt 02/01/2014-05/31/2014	2.95	14.19	10.84	0.01	0.03	0.26	0.28	0.01	0.24	0.24	1,891.39
Paving Off-Gas	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.27	11.85	9.01	0.00	0.00	0.18	0.18	0.00	0.17	0.17	1,272.41
Paving On Road Diesel	0.15	2.26	0.70	0.00	0.02	0.07	0.09	0.01	0.07	0.07	467.52
Paving Worker Trips	0.04	0.08	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	151.46
Coating 03/31/2013-05/31/2014	28.71	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19
Architectural Coating	28.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.07	0.95	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.19

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/1/2012 - 8/30/2012 - Default Fine Site Grading 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 Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

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NOX: 15%

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 6/1/2011 - 5/30/2012 - Type Your Description Here

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

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

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 Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 2/1/2014 - 5/31/2014 - Default Paving Description

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

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Architectural Coating 3/31/2013 - 5/31/2014 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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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	1.33	18.11	13.44	0.00	0.03	0.03	22,064.84
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	9.02						
TOTALS (lbs/day, unmitigated)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33

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## Area Source Mitigated Detail Report:

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

<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	1.07	14.49	10.76	0.00	0.03	0.03	17,651.87
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	8.35						
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36

Area Source Mitigation Measures Selected

<u>Mitigation Description</u>	<u>Percent Reduction</u>
Residential Increase Energy Efficiency Beyond Title 24	20.00
Commercial Increase Energy Efficiency Beyond Title 24	20.00
Percent of Residential Landscape Equipment that are Electrically Powered and have Electrical Outlets at the the Front and Rear of Residences	20.00
For Nonresidential Interior Use Low VOC Coating	10.00
For Nonresidential Exterior Use Low VOC Coating	10.00

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 100%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 50%

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## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	16.65	25.03	197.23	0.25	51.29	9.74	25,152.97
Hotel	25.53	34.55	263.39	0.34	71.19	13.50	34,640.52
Strip mall	29.74	42.57	326.64	0.41	85.60	16.25	41,802.08
General office building	0.61	0.98	7.60	0.01	2.01	0.38	982.36
Casino	70.65	118.74	905.15	1.16	244.63	46.40	119,043.88
Entertainment	37.40	39.71	302.16	0.39	81.84	15.52	39,807.19
TOTALS (lbs/day, unmitigated)	180.58	261.58	2,002.17	2.56	536.56	101.79	261,429.00

## Operational Mitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	16.06	24.03	189.41	0.24	49.26	9.36	24,155.37
Hotel	25.05	33.71	256.99	0.33	69.46	13.17	33,799.25
Strip mall	29.05	41.53	318.70	0.40	83.53	15.86	40,786.89
General office building	0.60	0.95	7.41	0.01	1.96	0.37	958.50
Casino	68.97	115.86	883.17	1.14	238.69	45.28	116,152.82
Entertainment	36.84	38.75	294.82	0.38	79.85	15.15	38,840.44
TOTALS (lbs/day, mitigated)	176.57	254.83	1,950.50	2.50	522.75	99.19	254,693.27

Operational Mitigation Options SelectedResidential Mitigation Measures

Residential Mix of Uses Mitigation

Operational Mitigation Options Selected

Residential Mitigation Measures

---

Percent Reduction in Trips is 0.43% (calculated as a % of 9.57 trips/day))

Note that the above percent is applied to a baseline of 9.57 and that product is subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 340.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

---

Percent Reduction in Trips is 0.43%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

Nonresidential Mitigation Measures

number of residential units included in the project are 340.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 70 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
Condo/townhouse general	21.25	5.86	dwelling units	340.00	1,992.40	29,886.00
Hotel		2.45	rooms	1,129.00	2,766.05	41,490.75
Strip mall		15.40	1000 sq ft	300.00	4,620.00	49,884.22
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	279.25	9,505.67	142,585.05
Entertainment		1.06	unknown	3,000.00	3,180.00	47,700.00
					22,142.22	312,717.52

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.4	99.4	0.2
Light Truck < 3750 lbs	12.7	0.8	96.8	2.4
Light Truck 3751-5750 lbs	19.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	6.6	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.9	0.0	77.8	22.2
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.4	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.2	50.0	50.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.6	0.0	83.3	16.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	15.0	15.0	15.0	15.0	15.0	15.0
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0

Operational Changes to Defaults

Ambient summer temperature changed from 85 degrees F to 70 degrees F

Ambient winter temperature changed from 40 degrees F to 50 degrees F

Home-based work urban trip length changed from 10.8 miles to 15 miles

Home-based shop urban trip length changed from 7.3 miles to 15 miles

Home-based other urban trip length changed from 7.5 miles to 15 miles

Commercial-based commute urban trip length changed from 9.5 miles to 15 miles

Commercial-based non-work urban trip length changed from 7.35 miles to 15 miles

Commercial-based customer urban trip length changed from 7.35 miles to 15 miles

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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\Point Molate 11.1.2010\Point Molate - Alt G Cumulative Operation.urb924

Project Name: Point Molate - Alt G Cumulative Operation

Project Location: Bay Area Air District

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)	5.00	3.32	3.32	0.00	0.01	0.01	4,028.91
TOTALS (tons/year, mitigated)	4.82	2.65	2.83	0.00	0.00	0.00	3,223.55
Percent Reduction	3.60	20.18	14.76	NaN	100.00	100.00	19.99

## 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)	20.67	24.33	206.80	0.48	103.76	19.52	50,043.27
TOTALS (tons/year, mitigated)	20.19	23.69	201.47	0.48	101.10	19.01	48,758.18
Percent Reduction	2.32	2.63	2.58	0.00	2.56	2.61	2.57

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)	25.67	27.65	210.12	0.48	103.77	19.53	54,072.18
TOTALS (tons/year, mitigated)	25.01	26.34	204.30	0.48	101.10	19.01	51,981.73
Percent Reduction	2.57	4.74	2.77	0.00	2.57	2.66	3.87

Page: 1

11/16/2010 4:28:21 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\Point Molate 11.1.2010\Point Molate - Alt G Cumulative Operation.urb924

Project Name: Point Molate - Alt G Cumulative Operation

Project Location: Bay Area Air District

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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## 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)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36
Percent Reduction	3.35	19.87	11.62	NaN	0.00	0.00	19.99

## 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)	109.32	124.20	1,102.17	2.70	568.50	106.91	275,612.17
TOTALS (lbs/day, mitigated)	106.91	121.01	1,073.84	2.64	553.90	104.17	268,534.56
Percent Reduction	2.20	2.57	2.57	2.22	2.57	2.56	2.57

## 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 (lbs/day, unmitigated)	137.08	142.42	1,125.23	2.70	568.56	106.97	297,693.50
TOTALS (lbs/day, mitigated)	133.74	135.61	1,094.22	2.64	553.96	104.23	286,202.92
Percent Reduction	2.44	4.78	2.76	2.22	2.57	2.56	3.86

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## 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	1.33	18.11	13.44	0.00	0.03	0.03	22,064.84
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	9.02						
TOTALS (lbs/day, unmitigated)	27.76	18.22	23.06	0.00	0.06	0.06	22,081.33

## Area Source Mitigated Detail Report:

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

<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	1.07	14.49	10.76	0.00	0.03	0.03	17,651.87
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	16.63						
Architectural Coatings	8.35						
TOTALS (lbs/day, mitigated)	26.83	14.60	20.38	0.00	0.06	0.06	17,668.36

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 100%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 50%

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	9.68	11.22	102.51	0.24	51.17	9.64	24,985.60
Hotel	15.18	15.51	137.32	0.34	71.02	13.35	34,409.81
Strip mall	20.40	25.90	228.91	0.56	118.61	22.30	57,447.87
General office building	0.36	0.44	3.95	0.01	2.01	0.38	975.82
Casino	40.98	53.30	471.92	1.16	244.05	45.89	118,251.03
Entertainment	22.72	17.83	157.56	0.39	81.64	15.35	39,542.04
TOTALS (lbs/day, unmitigated)	109.32	124.20	1,102.17	2.70	568.50	106.91	275,612.17

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## Operational Mitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	9.33	10.78	98.44	0.24	49.14	9.25	23,994.64
Hotel	14.90	15.13	133.99	0.33	69.29	13.03	33,574.14
Strip mall	19.93	25.27	223.35	0.55	115.73	21.76	56,052.71
General office building	0.35	0.43	3.86	0.01	1.96	0.37	952.12
Casino	40.01	52.01	460.46	1.13	238.12	44.78	115,379.22
Entertainment	22.39	17.39	153.74	0.38	79.66	14.98	38,581.73
TOTALS (lbs/day, mitigated)	106.91	121.01	1,073.84	2.64	553.90	104.17	268,534.56

## Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2025 Temperature (F): 70 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
Condo/townhouse general	21.25	5.86	dwelling units	340.00	1,992.40	29,886.00
Hotel		2.45	rooms	1,129.00	2,766.05	41,490.75
Strip mall		15.40	1000 sq ft	300.00	4,620.00	69,300.00
General office building		11.00	1000 sq ft	7.10	78.10	1,171.50
Casino		34.04	1000 sq ft	279.25	9,505.67	142,585.05



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Casino				5.0	2.5	92.5
Entertainment				2.0	1.0	97.0