

Appendix D
Air Quality URBEMIS Models
and Assumptions

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\300 Airport Construction All 1 Phase.urb924

Project Name: 300 Aripot Construction All 1 Phase - Revised 9-2011

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>
2012 TOTALS (lbs/day unmitigated)	10.87	84.13	50.40	0.02	295.04	4.74	299.78	61.62	4.36	65.99	9,509.54
2012 TOTALS (lbs/day mitigated)	10.87	68.52	50.40	0.02	61.48	2.71	64.19	12.85	2.49	15.34	9,509.54
2013 TOTALS (lbs/day unmitigated)	197.08	81.03	154.95	0.21	295.04	4.36	299.40	61.62	4.01	65.63	25,867.20
2013 TOTALS (lbs/day mitigated)	39.32	74.14	154.95	0.21	61.48	3.05	63.97	12.85	2.77	15.13	25,867.20
2014 TOTALS (lbs/day unmitigated)	196.13	69.21	144.26	0.21	0.96	3.69	4.65	0.34	3.35	3.69	25,417.53
2014 TOTALS (lbs/day mitigated)	150.15	63.70	144.26	0.21	0.96	2.78	3.74	0.34	2.51	2.85	25,417.53

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

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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 6/1/2012-10/4/2012 Active Days: 90	8.15	62.13	37.90	0.01	195.03	3.67	198.70	40.74	3.37	44.11	7,160.19
Asphalt 06/01/2012-01/10/2013	2.79	16.48	12.34	0.00	0.01	1.42	1.43	0.00	1.30	1.31	1,675.62
Paving Off-Gas	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.65	16.20	10.06	0.00	0.00	1.41	1.41	0.00	1.29	1.29	1,418.44
Paving On Road Diesel	0.01	0.15	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.60
Paving Worker Trips	0.07	0.12	2.22	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.58
Mass Grading 06/01/2012-01/10/2013	3.52	30.35	16.57	0.01	195.02	1.52	196.53	40.73	1.39	42.13	3,667.89
Mass Grading Dust	0.00	0.00	0.00	0.00	194.97	0.00	194.97	40.72	0.00	40.72	0.00
Mass Grading Off Road Diesel	3.11	24.67	13.48	0.00	0.00	1.31	1.31	0.00	1.21	1.21	2,533.84
Mass Grading On Road Diesel	0.37	5.62	1.85	0.01	0.04	0.20	0.24	0.01	0.19	0.20	1,006.50
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-01/10/2013	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 10/5/2012-12/31/2012	<u>10.87</u>	<u>84.13</u>	<u>50.40</u>	<u>0.02</u>	<u>295.04</u>	<u>4.74</u>	<u>299.78</u>	<u>61.62</u>	<u>4.36</u>	<u>65.99</u>	<u>9,509.54</u>
Active Days: 62											
Asphalt 06/01/2012-01/10/2013	2.79	16.48	12.34	0.00	0.01	1.42	1.43	0.00	1.30	1.31	1,675.62
Paving Off-Gas	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.65	16.20	10.06	0.00	0.00	1.41	1.41	0.00	1.29	1.29	1,418.44
Paving On Road Diesel	0.01	0.15	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.60
Paving Worker Trips	0.07	0.12	2.22	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.58
Fine Grading 10/05/2012-07/11/2013	2.72	22.00	12.50	0.00	100.00	1.07	101.08	20.89	0.99	21.87	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Mass Grading 06/01/2012-01/10/2013	3.52	30.35	16.57	0.01	195.02	1.52	196.53	40.73	1.39	42.13	3,667.89
Mass Grading Dust	0.00	0.00	0.00	0.00	194.97	0.00	194.97	40.72	0.00	40.72	0.00
Mass Grading Off Road Diesel	3.11	24.67	13.48	0.00	0.00	1.31	1.31	0.00	1.21	1.21	2,533.84
Mass Grading On Road Diesel	0.37	5.62	1.85	0.01	0.04	0.20	0.24	0.01	0.19	0.20	1,006.50
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-01/10/2013	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 1/1/2013-1/10/2013	10.25	78.53	48.82	0.02	<u>295.04</u>	<u>4.36</u>	<u>299.40</u>	<u>61.62</u>	<u>4.01</u>	<u>65.63</u>	9,509.86
Active Days: 8											
Asphalt 06/01/2012-01/10/2013	2.62	15.61	12.07	0.00	0.01	1.31	1.32	0.00	1.21	1.21	1,675.75
Paving Off-Gas	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.36	9.98	0.00	0.00	1.30	1.30	0.00	1.20	1.20	1,418.44
Paving On Road Diesel	0.01	0.14	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	27.60
Paving Worker Trips	0.06	0.11	2.05	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.71
Fine Grading 10/05/2012-07/11/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Mass Grading 06/01/2012-01/10/2013	3.31	28.14	15.86	0.01	195.02	1.38	196.39	40.73	1.27	42.00	3,667.96
Mass Grading Dust	0.00	0.00	0.00	0.00	194.97	0.00	194.97	40.72	0.00	40.72	0.00
Mass Grading Off Road Diesel	2.94	23.09	13.05	0.00	0.00	1.20	1.20	0.00	1.10	1.10	2,533.84
Mass Grading On Road Diesel	0.34	4.98	1.67	0.01	0.04	0.18	0.21	0.01	0.16	0.18	1,006.50
Mass Grading Worker Trips	0.04	0.06	1.14	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.62
Trenching 06/01/2012-01/10/2013	1.74	14.17	8.88	0.00	0.00	0.68	0.68	0.00	0.63	0.63	1,816.73
Trenching Off Road Diesel	1.72	14.12	7.97	0.00	0.00	0.68	0.68	0.00	0.62	0.62	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 1/11/2013-2/21/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Active Days: 30											
Fine Grading 10/05/2012-07/11/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 2/22/2013-7/11/2013	11.77	<u>81.03</u>	152.93	0.21	100.94	3.73	104.67	21.21	3.39	24.60	<u>25,867.20</u>
Active Days: 100											
Building 02/22/2013-07/17/2014	9.20	60.42	140.92	0.21	0.94	2.74	3.67	0.33	2.48	2.81	23,517.79
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	3.25	41.20	32.36	0.10	0.39	1.53	1.92	0.13	1.40	1.53	10,856.49
Building Worker Trips	3.07	5.31	98.36	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,040.10
Fine Grading 10/05/2012-07/11/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 7/12/2013-11/21/2013	9.20	60.42	140.92	0.21	0.94	2.74	3.67	0.33	2.48	2.81	23,517.79
Active Days: 95											
Building 02/22/2013-07/17/2014	9.20	60.42	140.92	0.21	0.94	2.74	3.67	0.33	2.48	2.81	23,517.79
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	3.25	41.20	32.36	0.10	0.39	1.53	1.92	0.13	1.40	1.53	10,856.49
Building Worker Trips	3.07	5.31	98.36	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,040.10

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Time Slice 11/22/2013-12/31/2013	197.08	76.12	154.95	0.21	0.96	4.06	5.01	0.34	3.69	4.03	25,411.19
Active Days: 28											
Asphalt 11/22/2013-07/17/2014	2.61	15.59	12.07	0.00	0.01	1.31	1.32	0.00	1.21	1.21	1,672.72
Paving Off-Gas	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.36	9.98	0.00	0.00	1.30	1.30	0.00	1.20	1.20	1,418.44
Paving On Road Diesel	0.01	0.12	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	24.57
Paving Worker Trips	0.06	0.11	2.05	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.71
Building 02/22/2013-07/17/2014	9.20	60.42	140.92	0.21	0.94	2.74	3.67	0.33	2.48	2.81	23,517.79
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	3.25	41.20	32.36	0.10	0.39	1.53	1.92	0.13	1.40	1.53	10,856.49
Building Worker Trips	3.07	5.31	98.36	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,040.10
Coating 11/22/2013-07/17/2014	185.28	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.68
Architectural Coating	185.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.68

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Time Slice 1/1/2014-7/17/2014	<u>196.13</u>	<u>69.21</u>	<u>144.26</u>	<u>0.21</u>	<u>0.96</u>	<u>3.69</u>	<u>4.65</u>	<u>0.34</u>	<u>3.35</u>	<u>3.69</u>	<u>25,417.53</u>
Active Days: 142											
Asphalt 11/22/2013-07/17/2014	2.46	14.77	11.82	0.00	0.01	1.22	1.23	0.00	1.12	1.12	1,672.84
Paving Off-Gas	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.56	9.90	0.00	0.00	1.21	1.21	0.00	1.11	1.11	1,418.44
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.57
Paving Worker Trips	0.06	0.10	1.88	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.82
Building 02/22/2013-07/17/2014	8.40	54.34	130.62	0.21	0.94	2.47	3.40	0.33	2.23	2.56	23,523.89
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	2.99	36.54	30.15	0.10	0.39	1.37	1.76	0.13	1.25	1.38	10,857.07
Building Worker Trips	2.78	4.83	90.58	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,045.63
Coating 11/22/2013-07/17/2014	185.27	0.10	1.81	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.79
Architectural Coating	185.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.10	1.81	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.79

Phase Assumptions

- Phase: Fine Grading 10/5/2012 - 7/11/2013 - Type Your Description Here
- Total Acres Disturbed: 14
- Maximum Daily Acreage Disturbed: 5
- Fugitive Dust Level of Detail: Default
- 20 lbs per acre-day
- On Road Truck Travel (VMT): 0
- Off-Road Equipment:
- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Mass Grading 6/1/2012 - 1/10/2013 - Default Fine Site Grading Description

Total Acres Disturbed: 14

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 233 cubic yards/day; Offsite Cut/Fill: 267 cubic yards/day

On Road Truck Travel (VMT): 250

Off-Road Equipment:

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

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

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: Trenching 6/1/2012 - 1/10/2013 - Default Building Construction Description

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 6/1/2012 - 1/10/2013 - Default Paving Description

Acres to be Paved: 3.7

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

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

Phase: Paving 11/22/2013 - 7/17/2014 - Type Your Description Here

Acres to be Paved: 3.5

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

Phase: Building Construction 2/22/2013 - 7/17/2014 - Default Architectural Coating Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 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 11/22/2013 - 7/17/2014 - Type Your Description Here

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 6/1/2012-10/4/2012	8.15	50.91	37.90	0.01	40.65	2.12	42.77	8.50	1.95	10.44	7,160.19
Active Days: 90											
Asphalt 06/01/2012-01/10/2013	2.79	13.24	12.34	0.00	0.01	0.78	0.80	0.00	0.72	0.73	1,675.62
Paving Off-Gas	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.65	12.96	10.06	0.00	0.00	0.77	0.77	0.00	0.71	0.71	1,418.44
Paving On Road Diesel	0.01	0.15	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.60
Paving Worker Trips	0.07	0.12	2.22	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.58
Mass Grading 06/01/2012-01/10/2013	3.52	25.42	16.57	0.01	40.64	0.93	41.56	8.49	0.85	9.34	3,667.89
Mass Grading Dust	0.00	0.00	0.00	0.00	40.60	0.00	40.60	8.48	0.00	8.48	0.00
Mass Grading Off Road Diesel	3.11	19.73	13.48	0.00	0.00	0.72	0.72	0.00	0.66	0.66	2,533.84
Mass Grading On Road Diesel	0.37	5.62	1.85	0.01	0.04	0.20	0.24	0.01	0.19	0.20	1,006.50
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-01/10/2013	1.84	12.25	9.00	0.00	0.00	0.41	0.41	0.00	0.37	0.37	1,816.67
Trenching Off Road Diesel	1.80	12.19	8.01	0.00	0.00	0.40	0.40	0.00	0.37	0.37	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 10/5/2012-12/31/2012	<u>10.87</u>	<u>68.52</u>	<u>50.40</u>	<u>0.02</u>	<u>61.48</u>	<u>2.71</u>	<u>64.19</u>	<u>12.85</u>	<u>2.49</u>	<u>15.34</u>	<u>9,509.54</u>
Active Days: 62											
Asphalt 06/01/2012-01/10/2013	2.79	13.24	12.34	0.00	0.01	0.78	0.80	0.00	0.72	0.73	1,675.62
Paving Off-Gas	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.65	12.96	10.06	0.00	0.00	0.77	0.77	0.00	0.71	0.71	1,418.44
Paving On Road Diesel	0.01	0.15	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	27.60
Paving Worker Trips	0.07	0.12	2.22	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.58
Fine Grading 10/05/2012-07/11/2013	2.72	17.61	12.50	0.00	20.83	0.59	21.42	4.35	0.54	4.89	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.69	17.56	11.51	0.00	0.00	0.59	0.59	0.00	0.54	0.54	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Mass Grading 06/01/2012-01/10/2013	3.52	25.42	16.57	0.01	40.64	0.93	41.56	8.49	0.85	9.34	3,667.89
Mass Grading Dust	0.00	0.00	0.00	0.00	40.60	0.00	40.60	8.48	0.00	8.48	0.00
Mass Grading Off Road Diesel	3.11	19.73	13.48	0.00	0.00	0.72	0.72	0.00	0.66	0.66	2,533.84
Mass Grading On Road Diesel	0.37	5.62	1.85	0.01	0.04	0.20	0.24	0.01	0.19	0.20	1,006.50
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-01/10/2013	1.84	12.25	9.00	0.00	0.00	0.41	0.41	0.00	0.37	0.37	1,816.67
Trenching Off Road Diesel	1.80	12.19	8.01	0.00	0.00	0.40	0.40	0.00	0.37	0.37	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 1/1/2013-1/10/2013	10.25	63.90	48.82	0.02	<u>61.48</u>	2.49	<u>63.97</u>	<u>12.85</u>	2.29	<u>15.13</u>	9,509.86
Active Days: 8											
Asphalt 06/01/2012-01/10/2013	2.62	12.54	12.07	0.00	0.01	0.73	0.74	0.00	0.67	0.67	1,675.75
Paving Off-Gas	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	12.29	9.98	0.00	0.00	0.72	0.72	0.00	0.66	0.66	1,418.44
Paving On Road Diesel	0.01	0.14	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	27.60
Paving Worker Trips	0.06	0.11	2.05	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.71
Fine Grading 10/05/2012-07/11/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Mass Grading 06/01/2012-01/10/2013	3.31	23.52	15.86	0.01	40.64	0.84	41.48	8.49	0.77	9.26	3,667.96
Mass Grading Dust	0.00	0.00	0.00	0.00	40.60	0.00	40.60	8.48	0.00	8.48	0.00
Mass Grading Off Road Diesel	2.94	18.47	13.05	0.00	0.00	0.66	0.66	0.00	0.61	0.61	2,533.84
Mass Grading On Road Diesel	0.34	4.98	1.67	0.01	0.04	0.18	0.21	0.01	0.16	0.18	1,006.50
Mass Grading Worker Trips	0.04	0.06	1.14	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.62
Trenching 06/01/2012-01/10/2013	1.74	11.34	8.88	0.00	0.00	0.38	0.38	0.00	0.34	0.35	1,816.73
Trenching Off Road Diesel	1.72	11.29	7.97	0.00	0.00	0.37	0.37	0.00	0.34	0.34	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 1/11/2013-2/21/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Active Days: 30											
Fine Grading 10/05/2012-07/11/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 2/22/2013-7/11/2013	11.77	<u>74.14</u>	152.93	0.21	21.76	2.86	24.63	4.68	2.60	7.28	<u>25,867.20</u>
Active Days: 100											
Building 02/22/2013-07/17/2014	9.20	57.64	140.92	0.21	0.94	2.32	3.25	0.33	2.10	2.42	23,517.79
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	3.25	41.20	32.36	0.10	0.39	1.53	1.92	0.13	1.40	1.53	10,856.49
Building Worker Trips	3.07	5.31	98.36	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,040.10
Fine Grading 10/05/2012-07/11/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 7/12/2013-11/21/2013	9.20	57.64	140.92	0.21	0.94	2.32	3.25	0.33	2.10	2.42	23,517.79
Active Days: 95											
Building 02/22/2013-07/17/2014	9.20	57.64	140.92	0.21	0.94	2.32	3.25	0.33	2.10	2.42	23,517.79
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	3.25	41.20	32.36	0.10	0.39	1.53	1.92	0.13	1.40	1.53	10,856.49
Building Worker Trips	3.07	5.31	98.36	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,040.10

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Time Slice 11/22/2013-12/31/2013	<u>39.32</u>	70.27	<u>154.95</u>	<u>0.21</u>	0.96	<u>3.05</u>	4.01	0.34	<u>2.77</u>	3.10	25,411.19
Active Days: 28											
Asphalt 11/22/2013-07/17/2014	2.61	12.52	12.07	0.00	0.01	0.73	0.74	0.00	0.67	0.67	1,672.72
Paving Off-Gas	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	12.29	9.98	0.00	0.00	0.72	0.72	0.00	0.66	0.66	1,418.44
Paving On Road Diesel	0.01	0.12	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	24.57
Paving Worker Trips	0.06	0.11	2.05	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.71
Building 02/22/2013-07/17/2014	9.20	57.64	140.92	0.21	0.94	2.32	3.25	0.33	2.10	2.42	23,517.79
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	3.25	41.20	32.36	0.10	0.39	1.53	1.92	0.13	1.40	1.53	10,856.49
Building Worker Trips	3.07	5.31	98.36	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,040.10
Coating 11/22/2013-07/17/2014	27.52	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.68
Architectural Coating	27.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.68

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Time Slice 1/1/2014-7/17/2014	<u>150.15</u>	<u>63.70</u>	<u>144.26</u>	<u>0.21</u>	<u>0.96</u>	<u>2.78</u>	<u>3.74</u>	<u>0.34</u>	<u>2.51</u>	<u>2.85</u>	<u>25,417.53</u>
Active Days: 142											
Asphalt 11/22/2013-07/17/2014	2.46	11.86	11.82	0.00	0.01	0.67	0.68	0.00	0.62	0.62	1,672.84
Paving Off-Gas	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	11.65	9.90	0.00	0.00	0.66	0.66	0.00	0.61	0.61	1,418.44
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.57
Paving Worker Trips	0.06	0.10	1.88	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.82
Building 02/22/2013-07/17/2014	8.40	51.75	130.62	0.21	0.94	2.10	3.03	0.33	1.89	2.22	23,523.89
Building Off Road Diesel	2.63	10.38	9.89	0.00	0.00	0.45	0.45	0.00	0.42	0.42	1,621.20
Building Vendor Trips	2.99	36.54	30.15	0.10	0.39	1.37	1.76	0.13	1.25	1.38	10,857.07
Building Worker Trips	2.78	4.83	90.58	0.11	0.54	0.28	0.82	0.19	0.23	0.42	11,045.63
Coating 11/22/2013-07/17/2014	139.30	0.10	1.81	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.79
Architectural Coating	139.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.10	1.81	0.00	0.01	0.01	0.02	0.00	0.00	0.01	220.79

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 10/5/2012 - 7/11/2013 - Type Your Description Here

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

PM10: 63% PM25: 63%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Mass Grading 6/1/2012 - 1/10/2013 - Default Fine Site Grading Description

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

PM10: 63% PM25: 63%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Trenching 6/1/2012 - 1/10/2013 - Default Building Construction Description

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

NOX: 20% PM10: 45% PM25: 45%

For Other General Industrial Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Paving 6/1/2012 - 1/10/2013 - Default Paving Description

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

NOX: 20% PM10: 45% PM25: 45%

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

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NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Paving 11/22/2013 - 7/17/2014 - Type Your Description Here

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Building Construction 2/22/2013 - 7/17/2014 - Default Architectural Coating Description

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Architectural Coating 11/22/2013 - 7/17/2014 - Type Your Description Here

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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:

ROG: 10%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\300 Airport Operational.urb924

Project Name: 300 Airport Operational FINAL

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:

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)	5.49	5.44	12.22	0.00	0.04	0.04	6,423.28
TOTALS (lbs/day, mitigated)	5.41	4.37	11.32	0.00	0.04	0.04	5,141.44
Percent Reduction	1.46	19.67	7.36	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)	41.17	46.02	482.16	0.63	111.37	21.17	62,805.58

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)	46.66	51.46	494.38	0.63	111.41	21.21	69,228.86

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

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	0.39	5.34	4.49	0.00	0.01	0.01	6,409.24
Hearth - No Summer Emissions							
Landscape	0.61	0.10	7.73	0.00	0.03	0.03	14.04
Consumer Products	0.00						
Architectural Coatings	4.49						
TOTALS (lbs/day, unmitigated)	5.49	5.44	12.22	0.00	0.04	0.04	6,423.28

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	0.31	4.27	3.59	0.00	0.01	0.01	5,127.40
Hearth - No Summer Emissions							
Landscape	0.61	0.10	7.73	0.00	0.03	0.03	14.04
Consumer Products	0.00						
Architectural Coatings	4.49						
TOTALS (lbs/day, mitigated)	5.41	4.37	11.32	0.00	0.04	0.04	5,141.44

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Day-care center	1.27	1.61	16.47	0.02	3.87	0.74	2,176.44
Racquetball/health	1.77	2.09	21.39	0.03	5.03	0.96	2,826.27
High turnover (sit-down) rest.	6.13	7.91	81.13	0.11	19.08	3.62	10,719.30
Strip mall	1.71	2.07	21.20	0.03	5.00	0.95	2,807.43
General office building	30.29	32.34	341.97	0.44	78.39	14.90	44,276.14
TOTALS (lbs/day, unmitigated)	41.17	46.02	482.16	0.63	111.37	21.17	62,805.58

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 85 Season: Summer

Erfac: Version : Erfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Day-care center		37.83	1000 sq ft	8.00	302.64	2,256.94
Racquetball/health		15.72	1000 sq ft	25.00	393.00	2,930.80
High turnover (sit-down) rest.		60.69	1000 sq ft	24.56	1,490.55	11,115.75
Strip mall		20.49	1000 sq ft	19.23	394.02	2,913.01
General office building		8.17	1000 sq ft	689.81	5,635.75	45,663.65
					8,215.96	64,880.15

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.2	99.6	0.2
Light Truck < 3750 lbs	12.7	0.8	96.8	2.4
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	0.4	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			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						
Day-care center				5.0	2.5	92.5
Racquetball/health				5.0	2.5	92.5
High turnover (sit-down) rest.				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

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\Parking Only\300 AirportConstruction all 1 Phase Parking Only.urb924

Project Name: 300 Aripot Construction All 1 Phase - Parking Garage Only

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>
2013 TOTALS (lbs/day unmitigated)	88.65	0.05	0.94	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.59
2013 TOTALS (lbs/day mitigated)	13.17	0.05	0.94	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.59
2014 TOTALS (lbs/day unmitigated)	88.65	0.05	0.87	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.64
2014 TOTALS (lbs/day mitigated)	66.65	0.05	0.87	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.64

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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 11/22/2013-12/31/2013 Active Days: 28	<u>88.65</u>	<u>0.05</u>	<u>0.94</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>105.59</u>
Coating 11/22/2013-07/17/2014	88.65	0.05	0.94	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.59
Architectural Coating	88.62	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	0.05	0.94	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.59
Time Slice 1/1/2014-7/17/2014 Active Days: 142	<u>88.65</u>	<u>0.05</u>	<u>0.87</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>105.64</u>
Coating 11/22/2013-07/17/2014	88.65	0.05	0.87	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.64
Architectural Coating	88.62	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	0.05	0.87	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.64

Phase Assumptions

- Phase: Architectural Coating 11/22/2013 - 7/17/2014 - Type Your Description Here
- 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 11/22/2013-12/31/2013 Active Days: 28	<u>13.17</u>	<u>0.05</u>	<u>0.94</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>105.59</u>
Coating 11/22/2013-07/17/2014	13.17	0.05	0.94	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.59
Architectural Coating	13.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.05	0.94	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.59
Time Slice 1/1/2014-7/17/2014 Active Days: 142	<u>66.65</u>	<u>0.05</u>	<u>0.87</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>105.64</u>
Coating 11/22/2013-07/17/2014	66.65	0.05	0.87	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.64
Architectural Coating	66.62	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	0.05	0.87	0.00	0.01	0.00	0.01	0.00	0.00	0.00	105.64

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Architectural Coating 11/22/2013 - 7/17/2014 - Type Your Description Here

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:
 ROG: 10%

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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 4/2/2013-9/30/2013 Active Days: 130	<u>37.31</u>	<u>0.02</u>	<u>0.40</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>44.44</u>
Coating 04/02/2013-09/30/2013	37.31	0.02	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.44
Architectural Coating	37.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.44

Phase Assumptions

- Phase: Architectural Coating 4/2/2013 - 9/30/2013 - 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 4/2/2013-9/30/2013 Active Days: 130	33.58	0.02	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.44
Coating 04/02/2013-09/30/2013	33.58	0.02	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.44
Architectural Coating	33.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.44

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Architectural Coating 4/2/2013 - 9/30/2013 - 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:

ROG: 10%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\Parking Only\300 Airport Construction Phase 2 Parking Only.urb924

Project Name: 300 Airport Phase 2 Construction Parking Only

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>
2015 TOTALS (lbs/day unmitigated)	78.61	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.72
2015 TOTALS (lbs/day mitigated)	70.75	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.72

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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 3/4/2015-9/1/2015 Active Days: 130	<u>78.61</u>	<u>0.04</u>	<u>0.71</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>93.72</u>
Coating 03/04/2015-09/01/2015	78.61	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.72
Architectural Coating	78.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.72

Phase Assumptions

- Phase: Architectural Coating 3/4/2015 - 9/1/2015 - 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 3/4/2015-9/1/2015 Active Days: 130	<u>70.75</u>	<u>0.04</u>	<u>0.71</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>93.72</u>
Coating 03/04/2015-09/01/2015	70.75	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.72
Architectural Coating	70.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.72

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Architectural Coating 3/4/2015 - 9/1/2015 - 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:

ROG: 10%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\300 Airport Phase 1 Construction .urb924

Project Name: 300 Airport Phase 1 Construction - Revised 9-2011

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>
2012 TOTALS (lbs/day unmitigated)	10.36	79.75	74.19	0.07	222.53	4.49	227.02	46.48	4.13	50.61	11,682.43
2012 TOTALS (lbs/day mitigated)	10.36	64.51	74.19	0.07	46.37	2.53	48.90	9.69	2.32	12.01	11,682.43
2013 TOTALS (lbs/day unmitigated)	101.44	64.04	81.21	0.08	100.35	3.69	104.04	21.01	3.38	24.39	13,285.51
2013 TOTALS (lbs/day mitigated)	92.29	54.43	81.21	0.08	21.17	2.31	23.48	4.47	2.11	6.58	13,285.51

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 6/1/2012-8/16/2012	7.64	57.76	35.76	0.01	122.53	3.41	125.94	25.59	3.14	28.73	6,539.46
Active Days: 55											
Asphalt 06/01/2012-12/14/2012	2.44	14.54	10.99	0.00	0.01	1.25	1.26	0.00	1.15	1.15	1,490.33
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.22
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Mass Grading 06/01/2012-12/14/2012	3.36	27.92	15.77	0.01	122.51	1.43	123.94	25.59	1.31	26.90	3,232.45
Mass Grading Dust	0.00	0.00	0.00	0.00	122.49	0.00	122.49	25.58	0.00	25.58	0.00
Mass Grading Off Road Diesel	3.11	24.67	13.48	0.00	0.00	1.31	1.31	0.00	1.21	1.21	2,533.84
Mass Grading On Road Diesel	0.21	3.19	1.05	0.01	0.02	0.11	0.13	0.01	0.11	0.11	571.07
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-12/14/2012	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 8/17/2012-12/14/2012	<u>10.36</u>	<u>79.75</u>	48.26	0.01	<u>222.53</u>	<u>4.49</u>	<u>227.02</u>	<u>46.48</u>	<u>4.13</u>	<u>50.61</u>	8,888.81
Active Days: 86											
Asphalt 06/01/2012-12/14/2012	2.44	14.54	10.99	0.00	0.01	1.25	1.26	0.00	1.15	1.15	1,490.33
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.22
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Fine Grading 08/17/2012-04/25/2013	2.72	22.00	12.50	0.00	100.00	1.07	101.08	20.89	0.99	21.87	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Mass Grading 06/01/2012-12/14/2012	3.36	27.92	15.77	0.01	122.51	1.43	123.94	25.59	1.31	26.90	3,232.45
Mass Grading Dust	0.00	0.00	0.00	0.00	122.49	0.00	122.49	25.58	0.00	25.58	0.00
Mass Grading Off Road Diesel	3.11	24.67	13.48	0.00	0.00	1.31	1.31	0.00	1.21	1.21	2,533.84
Mass Grading On Road Diesel	0.21	3.19	1.05	0.01	0.02	0.11	0.13	0.01	0.11	0.11	571.07
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-12/14/2012	1.84	15.30	9.00	0.00	0.00	0.74	0.74	0.00	0.68	0.68	1,816.67
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 12/17/2012-12/27/2012	2.72	22.00	12.50	0.00	100.00	1.07	101.08	20.89	0.99	21.87	2,349.35
Active Days: 9											
Fine Grading 08/17/2012-04/25/2013	2.72	22.00	12.50	0.00	100.00	1.07	101.08	20.89	0.99	21.87	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Time Slice 12/28/2012-12/31/2012	8.29	54.43	<u>74.19</u>	<u>0.07</u>	100.34	2.79	103.12	21.00	2.55	23.55	<u>11,682.43</u>
Active Days: 2											
Building 12/28/2012-09/30/2013	5.57	32.43	61.69	0.07	0.33	1.71	2.04	0.12	1.56	1.68	9,333.08
Building Off Road Diesel	3.14	14.81	10.52	0.00	0.00	1.04	1.04	0.00	0.95	0.95	1,621.20
Building Vendor Trips	1.18	15.46	11.64	0.03	0.13	0.57	0.70	0.04	0.52	0.57	3,626.08
Building Worker Trips	1.26	2.16	39.53	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,085.80
Fine Grading 08/17/2012-04/25/2013	2.72	22.00	12.50	0.00	100.00	1.07	101.08	20.89	0.99	21.87	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 1/1/2013-4/1/2013 Active Days: 65	7.68	50.21	69.48	0.07	100.34	2.53	102.87	21.00	2.32	23.32	11,684.91
Building 12/28/2012-09/30/2013	5.10	29.60	57.47	0.07	0.33	1.54	1.88	0.12	1.41	1.52	9,335.50
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	1.08	13.73	10.85	0.03	0.13	0.51	0.64	0.04	0.47	0.51	3,626.21
Building Worker Trips	1.14	1.97	36.42	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,088.10
Fine Grading 08/17/2012-04/25/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 4/2/2013-4/25/2013	<u>101.44</u>	<u>64.04</u>	<u>81.21</u>	<u>0.08</u>	<u>100.35</u>	<u>3.69</u>	<u>104.04</u>	<u>21.01</u>	<u>3.38</u>	<u>24.39</u>	<u>13,285.51</u>
Active Days: 18											
Asphalt 04/02/2013-09/30/2013	2.29	13.77	10.76	0.00	0.01	1.15	1.16	0.00	1.06	1.06	1,491.65
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.42
Paving Worker Trips	0.06	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.19
Building 12/28/2012-09/30/2013	5.10	29.60	57.47	0.07	0.33	1.54	1.88	0.12	1.41	1.52	9,335.50
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	1.08	13.73	10.85	0.03	0.13	0.51	0.64	0.04	0.47	0.51	3,626.21
Building Worker Trips	1.14	1.97	36.42	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,088.10
Coating 04/02/2013-09/30/2013	91.47	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95
Architectural Coating	91.44	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	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95
Fine Grading 08/17/2012-04/25/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 4/26/2013-9/30/2013	98.86	43.43	69.20	0.08	0.35	2.70	3.05	0.12	2.47	2.59	10,936.10
Active Days: 112											
Asphalt 04/02/2013-09/30/2013	2.29	13.77	10.76	0.00	0.01	1.15	1.16	0.00	1.06	1.06	1,491.65
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	13.60	8.91	0.00	0.00	1.15	1.15	0.00	1.05	1.05	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.42
Paving Worker Trips	0.06	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.19
Building 12/28/2012-09/30/2013	5.10	29.60	57.47	0.07	0.33	1.54	1.88	0.12	1.41	1.52	9,335.50
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	1.08	13.73	10.85	0.03	0.13	0.51	0.64	0.04	0.47	0.51	3,626.21
Building Worker Trips	1.14	1.97	36.42	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,088.10
Coating 04/02/2013-09/30/2013	91.47	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95
Architectural Coating	91.44	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	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95

Phase Assumptions

- Phase: Fine Grading 8/17/2012 - 4/25/2013 - Type Your Description Here
- Total Acres Disturbed: 6.72
- Maximum Daily Acreage Disturbed: 5
- Fugitive Dust Level of Detail: Default
- 20 lbs per acre-day
- On Road Truck Travel (VMT): 0
- Off-Road Equipment:
- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Mass Grading 6/1/2012 - 12/14/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 6.72

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 116.5 cubic yards/day; Offsite Cut/Fill: 133.5 cubic yards/day

On Road Truck Travel (VMT): 141.84

Off-Road Equipment:

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

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

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: Trenching 6/1/2012 - 12/14/2012 - Default Trenching Description

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 6/1/2012 - 12/14/2012 - Default Paving Description

Acres to be Paved: 1.68

Off-Road Equipment:

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

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

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

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

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

Phase: Paving 4/2/2013 - 9/30/2013 - Type Your Description Here

Acres to be Paved: 1.68

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Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 12/28/2012 - 9/30/2013 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 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 4/2/2013 - 9/30/2013 - 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 6/1/2012-8/16/2012 Active Days: 55	7.64	46.90	35.76	0.01	25.55	1.93	27.48	5.34	1.78	7.12	6,539.46
Asphalt 06/01/2012-12/14/2012	2.44	11.67	10.99	0.00	0.01	0.69	0.70	0.00	0.63	0.64	1,490.33
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	11.48	8.99	0.00	0.00	0.68	0.68	0.00	0.63	0.63	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.22
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Mass Grading 06/01/2012-12/14/2012	3.36	22.99	15.77	0.01	25.53	0.84	26.37	5.33	0.77	6.11	3,232.45
Mass Grading Dust	0.00	0.00	0.00	0.00	25.50	0.00	25.50	5.33	0.00	5.33	0.00
Mass Grading Off Road Diesel	3.11	19.73	13.48	0.00	0.00	0.72	0.72	0.00	0.66	0.66	2,533.84
Mass Grading On Road Diesel	0.21	3.19	1.05	0.01	0.02	0.11	0.13	0.01	0.11	0.11	571.07
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-12/14/2012	1.84	12.25	9.00	0.00	0.00	0.41	0.41	0.00	0.37	0.37	1,816.67
Trenching Off Road Diesel	1.80	12.19	8.01	0.00	0.00	0.40	0.40	0.00	0.37	0.37	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 8/17/2012-12/14/2012	<u>10.36</u>	<u>64.51</u>	48.26	0.01	<u>46.37</u>	<u>2.53</u>	<u>48.90</u>	<u>9.69</u>	<u>2.32</u>	<u>12.01</u>	8,888.81
Active Days: 86											
Asphalt 06/01/2012-12/14/2012	2.44	11.67	10.99	0.00	0.01	0.69	0.70	0.00	0.63	0.64	1,490.33
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	11.48	8.99	0.00	0.00	0.68	0.68	0.00	0.63	0.63	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.22
Paving Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.07
Fine Grading 08/17/2012-04/25/2013	2.72	17.61	12.50	0.00	20.83	0.59	21.42	4.35	0.54	4.89	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.69	17.56	11.51	0.00	0.00	0.59	0.59	0.00	0.54	0.54	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Mass Grading 06/01/2012-12/14/2012	3.36	22.99	15.77	0.01	25.53	0.84	26.37	5.33	0.77	6.11	3,232.45
Mass Grading Dust	0.00	0.00	0.00	0.00	25.50	0.00	25.50	5.33	0.00	5.33	0.00
Mass Grading Off Road Diesel	3.11	19.73	13.48	0.00	0.00	0.72	0.72	0.00	0.66	0.66	2,533.84
Mass Grading On Road Diesel	0.21	3.19	1.05	0.01	0.02	0.11	0.13	0.01	0.11	0.11	571.07
Mass Grading Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.54
Trenching 06/01/2012-12/14/2012	1.84	12.25	9.00	0.00	0.00	0.41	0.41	0.00	0.37	0.37	1,816.67
Trenching Off Road Diesel	1.80	12.19	8.01	0.00	0.00	0.40	0.40	0.00	0.37	0.37	1,714.64
Trenching Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 12/17/2012-12/27/2012	2.72	17.61	12.50	0.00	20.83	0.59	21.42	4.35	0.54	4.89	2,349.35
Active Days: 9											
Fine Grading 08/17/2012-04/25/2013	2.72	17.61	12.50	0.00	20.83	0.59	21.42	4.35	0.54	4.89	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.69	17.56	11.51	0.00	0.00	0.59	0.59	0.00	0.54	0.54	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04
Time Slice 12/28/2012-12/31/2012	8.29	47.08	<u>74.19</u>	<u>0.07</u>	21.16	1.84	23.00	4.47	1.68	6.14	<u>11,682.43</u>
Active Days: 2											
Building 12/28/2012-09/30/2013	5.57	29.47	61.69	0.07	0.33	1.25	1.58	0.12	1.13	1.25	9,333.08
Building Off Road Diesel	3.14	11.85	10.52	0.00	0.00	0.57	0.57	0.00	0.52	0.52	1,621.20
Building Vendor Trips	1.18	15.46	11.64	0.03	0.13	0.57	0.70	0.04	0.52	0.57	3,626.08
Building Worker Trips	1.26	2.16	39.53	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,085.80
Fine Grading 08/17/2012-04/25/2013	2.72	17.61	12.50	0.00	20.83	0.59	21.42	4.35	0.54	4.89	2,349.35
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.69	17.56	11.51	0.00	0.00	0.59	0.59	0.00	0.54	0.54	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.99	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.04

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Time Slice 1/1/2013-4/1/2013 Active Days: 65	7.68	43.32	69.48	0.07	21.16	1.67	22.83	4.47	1.52	5.99	11,684.91
Building 12/28/2012-09/30/2013	5.10	26.82	57.47	0.07	0.33	1.12	1.46	0.12	1.02	1.14	9,335.50
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	1.08	13.73	10.85	0.03	0.13	0.51	0.64	0.04	0.47	0.51	3,626.21
Building Worker Trips	1.14	1.97	36.42	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,088.10
Fine Grading 08/17/2012-04/25/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 4/2/2013-4/25/2013	<u>92.29</u>	<u>54.43</u>	<u>81.21</u>	<u>0.08</u>	<u>21.17</u>	<u>2.31</u>	<u>23.48</u>	<u>4.47</u>	<u>2.11</u>	<u>6.58</u>	<u>13,285.51</u>
Active Days: 18											
Asphalt 04/02/2013-09/30/2013	2.29	11.05	10.76	0.00	0.01	0.64	0.65	0.00	0.59	0.59	1,491.65
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	10.88	8.91	0.00	0.00	0.63	0.63	0.00	0.58	0.58	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.42
Paving Worker Trips	0.06	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.19
Building 12/28/2012-09/30/2013	5.10	26.82	57.47	0.07	0.33	1.12	1.46	0.12	1.02	1.14	9,335.50
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	1.08	13.73	10.85	0.03	0.13	0.51	0.64	0.04	0.47	0.51	3,626.21
Building Worker Trips	1.14	1.97	36.42	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,088.10
Coating 04/02/2013-09/30/2013	82.33	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95
Architectural Coating	82.30	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	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95
Fine Grading 08/17/2012-04/25/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 4/26/2013-9/30/2013 Active Days: 112	89.72	37.93	69.20	0.08	0.35	1.77	2.11	0.12	1.61	1.73	10,936.10
Asphalt 04/02/2013-09/30/2013	2.29	11.05	10.76	0.00	0.01	0.64	0.65	0.00	0.59	0.59	1,491.65
Paving Off-Gas	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.19	10.88	8.91	0.00	0.00	0.63	0.63	0.00	0.58	0.58	1,272.04
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.42
Paving Worker Trips	0.06	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.19
Building 12/28/2012-09/30/2013	5.10	26.82	57.47	0.07	0.33	1.12	1.46	0.12	1.02	1.14	9,335.50
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	1.08	13.73	10.85	0.03	0.13	0.51	0.64	0.04	0.47	0.51	3,626.21
Building Worker Trips	1.14	1.97	36.42	0.04	0.20	0.10	0.30	0.07	0.08	0.16	4,088.10
Coating 04/02/2013-09/30/2013	82.33	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95
Architectural Coating	82.30	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	0.05	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.00	108.95

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 8/17/2012 - 4/25/2013 - Type Your Description Here

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

PM10: 63% PM25: 63%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Mass Grading 6/1/2012 - 12/14/2012 - Default Fine Site Grading Description

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

PM10: 63% PM25: 63%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Trenching 6/1/2012 - 12/14/2012 - Default Trenching Description

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

NOX: 20% PM10: 45% PM25: 45%

For Other General Industrial Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Paving 6/1/2012 - 12/14/2012 - Default Paving Description

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

NOX: 20% PM10: 45% PM25: 45%

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

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NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Paving 4/2/2013 - 9/30/2013 - Type Your Description Here

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Building Construction 12/28/2012 - 9/30/2013 - Default Building Construction Description

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Architectural Coating 4/2/2013 - 9/30/2013 - Default Architectural Coating Description

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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:

ROG: 10%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\300 Airport Phase 2 Construction.urb924

Project Name: 300 Airport Phase 2 Construction - Revised 2011

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>
2013 TOTALS (lbs/day unmitigated)	7.90	66.79	38.05	0.02	222.57	3.18	225.75	46.49	2.93	49.42	8,616.94
2013 TOTALS (lbs/day mitigated)	7.90	55.24	38.05	0.02	46.26	1.90	48.15	10.11	1.74	11.85	8,616.94
2014 TOTALS (lbs/day unmitigated)	8.81	59.50	98.54	0.14	100.61	2.80	103.41	21.10	2.55	23.65	18,156.81
2014 TOTALS (lbs/day mitigated)	8.81	53.09	98.54	0.14	21.28	2.03	23.31	4.97	1.84	6.81	18,156.81
2015 TOTALS (lbs/day unmitigated)	158.65	48.75	92.55	0.14	0.62	2.74	3.37	0.22	2.50	2.72	17,483.47
2015 TOTALS (lbs/day mitigated)	143.57	43.93	92.55	0.14	0.62	1.96	2.58	0.22	1.78	2.00	17,483.47

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

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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 10/1/2013-12/2/2013 Active Days: 45	<u>7.90</u>	<u>66.79</u>	<u>38.05</u>	<u>0.02</u>	<u>222.57</u>	<u>3.18</u>	<u>225.75</u>	<u>46.49</u>	<u>2.93</u>	<u>49.42</u>	<u>8,616.94</u>
Fine Grading 10/01/2013-07/21/2014	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Mass Grading 10/01/2013-12/02/2013	3.58	32.01	17.16	0.02	122.56	1.52	124.07	25.60	1.39	27.00	4,450.80
Mass Grading Dust	0.00	0.00	0.00	0.00	122.49	0.00	122.49	25.58	0.00	25.58	0.00
Mass Grading Off Road Diesel	2.94	23.09	13.05	0.00	0.00	1.20	1.20	0.00	1.10	1.10	2,533.84
Mass Grading On Road Diesel	0.61	8.86	2.97	0.02	0.06	0.32	0.38	0.02	0.29	0.31	1,789.34
Mass Grading Worker Trips	0.04	0.06	1.14	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.62
Trenching 10/01/2013-12/02/2013	1.74	14.17	8.88	0.00	0.00	0.68	0.68	0.00	0.63	0.63	1,816.73
Trenching Off Road Diesel	1.72	14.12	7.97	0.00	0.00	0.68	0.68	0.00	0.62	0.62	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 12/3/2013-12/31/2013 Active Days: 21	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading 10/01/2013-07/21/2014	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 1/1/2014-5/26/2014	2.44	19.12	11.57	0.00	100.00	0.89	100.89	20.89	0.82	21.70	2,349.46
Active Days: 104											
Fine Grading 10/01/2013-07/21/2014	2.44	19.12	11.57	0.00	100.00	0.89	100.89	20.89	0.82	21.70	2,349.46
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	19.08	10.74	0.00	0.00	0.89	0.89	0.00	0.82	0.82	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	0.84	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.14
Time Slice 5/27/2014-7/21/2014	<u>8.81</u>	<u>59.50</u>	<u>98.54</u>	<u>0.14</u>	<u>100.61</u>	<u>2.80</u>	<u>103.41</u>	<u>21.10</u>	<u>2.55</u>	<u>23.65</u>	<u>18,156.81</u>
Active Days: 40											
Building 05/27/2014-06/09/2015	6.37	40.38	86.97	0.13	0.60	1.91	2.51	0.21	1.73	1.94	15,807.34
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	1.99	24.36	20.04	0.07	0.26	0.91	1.17	0.09	0.83	0.92	7,230.66
Building Worker Trips	1.75	3.04	57.04	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,955.49
Fine Grading 10/01/2013-07/21/2014	2.44	19.12	11.57	0.00	100.00	0.89	100.89	20.89	0.82	21.70	2,349.46
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.41	19.08	10.74	0.00	0.00	0.89	0.89	0.00	0.82	0.82	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	0.84	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.14
Time Slice 7/22/2014-12/31/2014	6.37	40.38	86.97	0.13	0.60	1.91	2.51	0.21	1.73	1.94	15,807.34
Active Days: 117											
Building 05/27/2014-06/09/2015	6.37	40.38	86.97	0.13	0.60	1.91	2.51	0.21	1.73	1.94	15,807.34
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	1.99	24.36	20.04	0.07	0.26	0.91	1.17	0.09	0.83	0.92	7,230.66
Building Worker Trips	1.75	3.04	57.04	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,955.49

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Time Slice 1/1/2015-3/3/2015 Active Days: 44	5.82	36.46	80.85	0.13	0.60	1.75	2.36	0.21	1.59	1.80	15,810.56
Building 05/27/2014-06/09/2015	5.82	36.46	80.85	0.13	0.60	1.75	2.36	0.21	1.59	1.80	15,810.56
Building Off Road Diesel	2.40	12.04	9.62	0.00	0.00	0.76	0.76	0.00	0.70	0.70	1,621.20
Building Vendor Trips	1.84	21.66	18.69	0.07	0.26	0.81	1.08	0.09	0.74	0.83	7,231.12
Building Worker Trips	1.58	2.77	52.54	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,958.24
Time Slice 3/4/2015-6/9/2015 Active Days: 70	<u>158.65</u>	<u>48.75</u>	<u>92.55</u>	<u>0.14</u>	<u>0.62</u>	<u>2.74</u>	<u>3.37</u>	<u>0.22</u>	<u>2.50</u>	<u>2.72</u>	<u>17,483.47</u>
Asphalt 03/04/2015-09/01/2015	2.02	12.22	10.34	0.00	0.01	0.98	1.00	0.00	0.91	0.91	1,493.11
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.93	12.07	8.78	0.00	0.00	0.98	0.98	0.00	0.90	0.90	1,272.04
Paving On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.71
Paving Worker Trips	0.05	0.08	1.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.37
Building 05/27/2014-06/09/2015	5.82	36.46	80.85	0.13	0.60	1.75	2.36	0.21	1.59	1.80	15,810.56
Building Off Road Diesel	2.40	12.04	9.62	0.00	0.00	0.76	0.76	0.00	0.70	0.70	1,621.20
Building Vendor Trips	1.84	21.66	18.69	0.07	0.26	0.81	1.08	0.09	0.74	0.83	7,231.12
Building Worker Trips	1.58	2.77	52.54	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,958.24
Coating 03/04/2015-09/01/2015	150.81	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79
Architectural Coating	150.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79

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Time Slice 6/10/2015-9/1/2015	152.83	12.29	11.70	0.00	0.02	0.99	1.01	0.01	0.91	0.92	1,672.91
Active Days: 60											
Asphalt 03/04/2015-09/01/2015	2.02	12.22	10.34	0.00	0.01	0.98	1.00	0.00	0.91	0.91	1,493.11
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.93	12.07	8.78	0.00	0.00	0.98	0.98	0.00	0.90	0.90	1,272.04
Paving On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.71
Paving Worker Trips	0.05	0.08	1.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.37
Coating 03/04/2015-09/01/2015	150.81	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79
Architectural Coating	150.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79

Phase Assumptions

Phase: Fine Grading 10/1/2013 - 7/21/2014 - Type Your Description Here
 Total Acres Disturbed: 7.27
 Maximum Daily Acreage Disturbed: 5
 Fugitive Dust Level of Detail: Default
 20 lbs per acre-day
 On Road Truck Travel (VMT): 0
 Off-Road Equipment:
 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 10/1/2013 - 12/2/2013 - Default Fine Site Grading Description
 Total Acres Disturbed: 7.27
 Maximum Daily Acreage Disturbed: 5
 Fugitive Dust Level of Detail: Low

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Onsite Cut/Fill: 116.5 cubic yards/day; Offsite Cut/Fill: 133.5 cubic yards/day

On Road Truck Travel (VMT): 444.44

Off-Road Equipment:

- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 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: Trenching 10/1/2013 - 12/2/2013 - Type Your Description Here

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 3/4/2015 - 9/1/2015 - Default Paving Description

Acres to be Paved: 1.82

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 5/27/2014 - 6/9/2015 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 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

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- Phase: Architectural Coating 3/4/2015 - 9/1/2015 - 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 10/1/2013-12/2/2013 Active Days: 45	<u>7.90</u>	<u>55.24</u>	<u>38.05</u>	<u>0.02</u>	<u>46.26</u>	<u>1.90</u>	<u>48.15</u>	<u>10.11</u>	<u>1.74</u>	<u>11.85</u>	<u>8,616.94</u>
Fine Grading 10/01/2013-07/21/2014	2.58	16.50	12.01	0.00	20.68	0.54	21.22	4.76	0.50	5.26	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.67	0.00	20.67	4.76	0.00	4.76	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Mass Grading 10/01/2013-12/02/2013	3.58	27.39	17.16	0.02	25.57	0.98	26.55	5.35	0.90	6.25	4,450.80
Mass Grading Dust	0.00	0.00	0.00	0.00	25.50	0.00	25.50	5.33	0.00	5.33	0.00
Mass Grading Off Road Diesel	2.94	18.47	13.05	0.00	0.00	0.66	0.66	0.00	0.61	0.61	2,533.84
Mass Grading On Road Diesel	0.61	8.86	2.97	0.02	0.06	0.32	0.38	0.02	0.29	0.31	1,789.34
Mass Grading Worker Trips	0.04	0.06	1.14	0.00	0.01	0.00	0.01	0.00	0.00	0.00	127.62
Trenching 10/01/2013-12/02/2013	1.74	11.34	8.88	0.00	0.00	0.38	0.38	0.00	0.34	0.35	1,816.73
Trenching Off Road Diesel	1.72	11.29	7.97	0.00	0.00	0.37	0.37	0.00	0.34	0.34	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 12/3/2013-12/31/2013 Active Days: 21	2.58	16.50	12.01	0.00	20.68	0.54	21.22	4.76	0.50	5.26	2,349.41
Fine Grading 10/01/2013-07/21/2014	2.58	16.50	12.01	0.00	20.68	0.54	21.22	4.76	0.50	5.26	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.67	0.00	20.67	4.76	0.00	4.76	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 1/1/2014-5/26/2014	2.44	15.31	11.57	0.00	20.68	0.49	21.17	4.76	0.45	5.21	2,349.46
Active Days: 104											
Fine Grading 10/01/2013-07/21/2014	2.44	15.31	11.57	0.00	20.68	0.49	21.17	4.76	0.45	5.21	2,349.46
Fine Grading Dust	0.00	0.00	0.00	0.00	20.67	0.00	20.67	4.76	0.00	4.76	0.00
Fine Grading Off Road Diesel	2.41	15.26	10.74	0.00	0.00	0.49	0.49	0.00	0.45	0.45	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	0.84	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.14
Time Slice 5/27/2014-7/21/2014	<u>8.81</u>	<u>53.09</u>	<u>98.54</u>	<u>0.14</u>	<u>21.28</u>	<u>2.03</u>	<u>23.31</u>	<u>4.97</u>	<u>1.84</u>	<u>6.81</u>	<u>18,156.81</u>
Active Days: 40											
Building 05/27/2014-06/09/2015	6.37	37.78	86.97	0.13	0.60	1.54	2.14	0.21	1.39	1.60	15,807.34
Building Off Road Diesel	2.63	10.38	9.89	0.00	0.00	0.45	0.45	0.00	0.42	0.42	1,621.20
Building Vendor Trips	1.99	24.36	20.04	0.07	0.26	0.91	1.17	0.09	0.83	0.92	7,230.66
Building Worker Trips	1.75	3.04	57.04	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,955.49
Fine Grading 10/01/2013-07/21/2014	2.44	15.31	11.57	0.00	20.68	0.49	21.17	4.76	0.45	5.21	2,349.46
Fine Grading Dust	0.00	0.00	0.00	0.00	20.67	0.00	20.67	4.76	0.00	4.76	0.00
Fine Grading Off Road Diesel	2.41	15.26	10.74	0.00	0.00	0.49	0.49	0.00	0.45	0.45	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	0.84	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.14
Time Slice 7/22/2014-12/31/2014	6.37	37.78	86.97	0.13	0.60	1.54	2.14	0.21	1.39	1.60	15,807.34
Active Days: 117											
Building 05/27/2014-06/09/2015	6.37	37.78	86.97	0.13	0.60	1.54	2.14	0.21	1.39	1.60	15,807.34
Building Off Road Diesel	2.63	10.38	9.89	0.00	0.00	0.45	0.45	0.00	0.42	0.42	1,621.20
Building Vendor Trips	1.99	24.36	20.04	0.07	0.26	0.91	1.17	0.09	0.83	0.92	7,230.66
Building Worker Trips	1.75	3.04	57.04	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,955.49

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Time Slice 1/1/2015-3/3/2015 Active Days: 44	5.82	34.05	80.85	0.13	0.60	1.41	2.01	0.21	1.27	1.48	15,810.56
Building 05/27/2014-06/09/2015	5.82	34.05	80.85	0.13	0.60	1.41	2.01	0.21	1.27	1.48	15,810.56
Building Off Road Diesel	2.40	9.63	9.62	0.00	0.00	0.42	0.42	0.00	0.39	0.39	1,621.20
Building Vendor Trips	1.84	21.66	18.69	0.07	0.26	0.81	1.08	0.09	0.74	0.83	7,231.12
Building Worker Trips	1.58	2.77	52.54	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,958.24
Time Slice 3/4/2015-6/9/2015 Active Days: 70	<u>143.57</u>	<u>43.93</u>	<u>92.55</u>	<u>0.14</u>	<u>0.62</u>	<u>1.96</u>	<u>2.58</u>	<u>0.22</u>	<u>1.78</u>	<u>2.00</u>	<u>17,483.47</u>
Asphalt 03/04/2015-09/01/2015	2.02	9.80	10.34	0.00	0.01	0.55	0.56	0.00	0.50	0.50	1,493.11
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.93	9.66	8.78	0.00	0.00	0.54	0.54	0.00	0.49	0.49	1,272.04
Paving On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.71
Paving Worker Trips	0.05	0.08	1.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.37
Building 05/27/2014-06/09/2015	5.82	34.05	80.85	0.13	0.60	1.41	2.01	0.21	1.27	1.48	15,810.56
Building Off Road Diesel	2.40	9.63	9.62	0.00	0.00	0.42	0.42	0.00	0.39	0.39	1,621.20
Building Vendor Trips	1.84	21.66	18.69	0.07	0.26	0.81	1.08	0.09	0.74	0.83	7,231.12
Building Worker Trips	1.58	2.77	52.54	0.07	0.34	0.18	0.52	0.12	0.14	0.27	6,958.24
Coating 03/04/2015-09/01/2015	135.73	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79
Architectural Coating	135.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79

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Time Slice 6/10/2015-9/1/2015	137.75	9.87	11.70	0.00	0.02	0.55	0.57	0.01	0.50	0.51	1,672.91
Active Days: 60											
Asphalt 03/04/2015-09/01/2015	2.02	9.80	10.34	0.00	0.01	0.55	0.56	0.00	0.50	0.50	1,493.11
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.93	9.66	8.78	0.00	0.00	0.54	0.54	0.00	0.49	0.49	1,272.04
Paving On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.71
Paving Worker Trips	0.05	0.08	1.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.37
Coating 03/04/2015-09/01/2015	135.73	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79
Architectural Coating	135.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.07	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	179.79

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 10/1/2013 - 7/21/2014 - Type Your Description Here

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

PM10: 63.6% 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 Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Mass Grading 10/1/2013 - 12/2/2013 - Default Fine Site Grading Description

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

PM10: 63% PM25: 63%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Trenching 10/1/2013 - 12/2/2013 - Type Your Description Here

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

NOX: 20% PM10: 45% PM25: 45%

For Other General Industrial Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Paving 3/4/2015 - 9/1/2015 - Default Paving Description

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Building Construction 5/27/2014 - 6/9/2015 - Default Building Construction Description

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Architectural Coating 3/4/2015 - 9/1/2015 - 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:

ROG: 10%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\350 Construction Updated 9.13.11.urb924

Project Name: 350 Airport Boulevard Construction - Revised 2011

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>
2013 TOTALS (lbs/day unmitigated)	178.10	20.61	33.97	0.03	100.00	1.07	100.99	20.89	0.98	21.80	4,668.78
2013 TOTALS (lbs/day mitigated)	78.39	16.50	33.97	0.03	20.83	0.65	21.37	4.35	0.59	4.85	4,668.78
2014 TOTALS (lbs/day unmitigated)	178.09	13.34	10.65	0.00	0.01	1.08	1.09	0.00	0.99	1.00	1,558.72
2014 TOTALS (lbs/day mitigated)	81.95	10.76	10.65	0.00	0.01	0.60	0.61	0.00	0.55	0.56	1,558.72

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 3/1/2013-5/31/2013 Active Days: 66	2.58	<u>20.61</u>	12.01	0.00	<u>100.00</u>	0.99	<u>100.99</u>	<u>20.89</u>	0.91	<u>21.80</u>	2,349.41
Fine Grading 03/01/2013-06/01/2013	2.58	20.61	12.01	0.00	100.00	0.99	100.99	20.89	0.91	21.80	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	100.00	0.00	100.00	20.88	0.00	20.88	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09
Time Slice 6/3/2013-11/29/2013 Active Days: 130	3.73	17.23	<u>33.97</u>	<u>0.03</u>	0.14	<u>1.07</u>	1.22	0.05	<u>0.98</u>	1.03	<u>4,668.78</u>
Building 06/02/2013-12/01/2013	3.73	17.23	33.97	0.03	0.14	1.07	1.22	0.05	0.98	1.03	4,668.78
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	0.18	2.15	1.99	0.01	0.02	0.08	0.10	0.01	0.07	0.08	603.89
Building Worker Trips	0.68	1.18	21.77	0.02	0.12	0.06	0.18	0.04	0.05	0.09	2,443.69
Time Slice 12/2/2013-12/31/2013 Active Days: 22	<u>178.10</u>	0.10	1.89	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.13
Coating 12/02/2013-02/01/2014	178.10	0.10	1.89	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.13
Architectural Coating	178.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.10	1.89	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.13
Time Slice 1/1/2014-1/31/2014 Active Days: 23	<u>178.09</u>	0.09	1.74	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.23
Coating 12/02/2013-02/01/2014	178.09	0.09	1.74	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.23
Architectural Coating	178.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.05	0.09	1.74	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.23

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Time Slice 2/3/2014-3/14/2014	2.32	<u>13.34</u>	<u>10.65</u>	<u>0.00</u>	<u>0.01</u>	<u>1.08</u>	<u>1.09</u>	<u>0.00</u>	<u>0.99</u>	<u>1.00</u>	<u>1,558.72</u>
Active Days: 30											
Asphalt 02/02/2014-03/15/2014	2.32	13.34	10.65	0.00	0.01	1.08	1.09	0.00	0.99	1.00	1,558.72
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.06	12.89	8.85	0.00	0.00	1.06	1.06	0.00	0.98	0.98	1,272.04
Paving On Road Diesel	0.03	0.36	0.12	0.00	0.00	0.01	0.02	0.00	0.01	0.01	82.39
Paving Worker Trips	0.05	0.09	1.68	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.29

Phase Assumptions

Phase: Fine Grading 3/1/2013 - 6/1/2013 - Default Fine Site Grading Description
 Total Acres Disturbed: 8.58
 Maximum Daily Acreage Disturbed: 5
 Fugitive Dust Level of Detail: Default
 20 lbs per acre-day
 On Road Truck Travel (VMT): 0
 Off-Road Equipment:
 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 2/2/2014 - 3/15/2014 - Default Paving Description
 Acres to be Paved: 2.14
 Off-Road Equipment:
 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

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Phase: Building Construction 6/2/2013 - 12/1/2013 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 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 12/2/2013 - 2/1/2014 - 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>
Time Slice 3/1/2013-5/31/2013 Active Days: 66	2.58	<u>16.50</u>	12.01	0.00	<u>20.83</u>	0.54	<u>21.37</u>	<u>4.35</u>	0.50	<u>4.85</u>	2,349.41
Fine Grading 03/01/2013-06/01/2013	2.58	16.50	12.01	0.00	20.83	0.54	21.37	4.35	0.50	4.85	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	20.82	0.00	20.82	4.35	0.00	4.35	0.00
Fine Grading Off Road Diesel	2.55	16.45	11.10	0.00	0.00	0.54	0.54	0.00	0.50	0.50	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

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Time Slice 6/3/2013-11/29/2013 Active Days: 130	3.73	14.45	<u>33.97</u>	<u>0.03</u>	0.14	<u>0.65</u>	0.80	0.05	<u>0.59</u>	0.65	<u>4,668.78</u>
Building 06/02/2013-12/01/2013	3.73	14.45	33.97	0.03	0.14	0.65	0.80	0.05	0.59	0.65	4,668.78
Building Off Road Diesel	2.88	11.12	10.20	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,621.20
Building Vendor Trips	0.18	2.15	1.99	0.01	0.02	0.08	0.10	0.01	0.07	0.08	603.89
Building Worker Trips	0.68	1.18	21.77	0.02	0.12	0.06	0.18	0.04	0.05	0.09	2,443.69
Time Slice 12/2/2013-12/31/2013 Active Days: 22	<u>78.39</u>	0.10	1.89	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.13
Coating 12/02/2013-02/01/2014	78.39	0.10	1.89	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.13
Architectural Coating	78.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.10	1.89	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.13
Time Slice 1/1/2014-1/31/2014 Active Days: 23	<u>81.95</u>	0.09	1.74	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.23
Coating 12/02/2013-02/01/2014	81.95	0.09	1.74	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.23
Architectural Coating	81.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.05	0.09	1.74	0.00	0.01	0.01	0.02	0.00	0.00	0.01	212.23
Time Slice 2/3/2014-3/14/2014 Active Days: 30	2.32	<u>10.76</u>	<u>10.65</u>	<u>0.00</u>	<u>0.01</u>	<u>0.60</u>	<u>0.61</u>	<u>0.00</u>	<u>0.55</u>	<u>0.56</u>	<u>1,558.72</u>
Asphalt 02/02/2014-03/15/2014	2.32	10.76	10.65	0.00	0.01	0.60	0.61	0.00	0.55	0.56	1,558.72
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.06	10.31	8.85	0.00	0.00	0.58	0.58	0.00	0.54	0.54	1,272.04
Paving On Road Diesel	0.03	0.36	0.12	0.00	0.00	0.01	0.02	0.00	0.01	0.01	82.39
Paving Worker Trips	0.05	0.09	1.68	0.00	0.01	0.01	0.02	0.00	0.00	0.01	204.29

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/1/2013 - 6/1/2013 - Default Fine Site Grading Description

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

PM10: 63% PM25: 63%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Paving 2/2/2014 - 3/15/2014 - Default Paving Description

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Building Construction 6/2/2013 - 12/1/2013 - Default Building Construction Description

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

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

NOX: 20% PM10: 45% PM25: 45%

The following mitigation measures apply to Phase: Architectural Coating 12/2/2013 - 2/1/2014 - 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:

ROG: 10%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\24396\Application Data\Urbemis\Version9a\Projects\300 Airport HD\350 Operation Updated 9.13.11.urb924

Project Name: 350 Airport 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:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	2.49	2.51	3.64	0.00	0.01	0.01	2,994.81
TOTALS (lbs/day, mitigated)	2.45	2.01	3.23	0.00	0.01	0.01	2,396.41
Percent Reduction	1.61	19.92	11.26	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)	17.06	18.37	194.26	0.25	44.53	8.47	25,151.48

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)	19.55	20.88	197.90	0.25	44.54	8.48	28,146.29

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

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	0.18	2.49	2.09	0.00	0.00	0.00	2,992.00
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	2.19						
TOTALS (lbs/day, unmitigated)	2.49	2.51	3.64	0.00	0.01	0.01	2,994.81

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	0.14	1.99	1.68	0.00	0.00	0.00	2,393.60
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	2.19						
TOTALS (lbs/day, mitigated)	2.45	2.01	3.23	0.00	0.01	0.01	2,396.41

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
General office building	17.06	18.37	194.26	0.25	44.53	8.47	25,151.48
TOTALS (lbs/day, unmitigated)	17.06	18.37	194.26	0.25	44.53	8.47	25,151.48

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General office building		8.56	1000 sq ft	374.00	3,201.44	25,939.67
					3,201.44	25,939.67

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.8	0.2	99.6	0.2
Light Truck < 3750 lbs	12.7	0.8	96.8	2.4
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

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
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)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General office building				35.0	17.5	47.5

300/350 Airport Boulevard Assumptions

300 Airport Boulevard

General Assumptions	2015	
	Traffic Study ²	URBEMIS ³
Average Speed ¹		35 Miles/Hour
Day Care-Center Trip Rate	39.63	37.83 Trips/Day
Raquetball/Health Trip Rate	16.47	15.72 Trips/Day
High turnover (Sit-down Restaurant) Trip Rate	63.58	60.69 Trips/Day
Strip Mall (Retail) Trip Rate	21.47	20.49 Trips/Day
Office building trip Rate	8.56	8.17 Trips/Day
Total Trips	8,346	8,215.96 Trips
Total VMT	-	64,880.15 VMT
Average miles per trip Home⁴		
Home-based Work	-	10.8
Home-based Shop	-	7.3
Home-based Other	-	7.5
Average milse per trip Commercial⁴		
Commercial-based Commute	-	9.5
Commercial-based Non-Work	-	7.4
Commercial-based Customer	-	7.4

350 Airport Boulevard

General Assumptions	2015	
	Traffic Study ²	URBEMIS ³
Average Speed ¹		35 Miles/Hour
Office building trip Rate ⁴	-	8.56 Trips/Day
Total Trips	-	3,201.44 Trips
Total VMT	-	25,939.67 VMT
Average miles per trip Home⁵		
Home-based Work	-	10.8
Home-based Shop	-	7.3
Home-based Other	-	7.5
Average milse per trip Commercial⁵		
Commercial-based Commute	-	9.5
Commercial-based Non-Work	-	7.4
Commercial-based Customer	-	7.4

NOTES

1. Urbemis default

2. Trip rates were provided in the Traffic Report prepared by Hexagon Transportation Consultants included as Appendix C.

- 3.** Due to rounding in Urbemis, the average trip rate was adjusted (multiplied by 0.9545) so the URBEMIS output reflected the total daily trips provided in the traffic report. This is because URBEMIS determines emissions by total vehicle miles traveled which is determined by total number of daily trips.
- 4.** A trip rate was not specifically provided for 350 Airport Blvd in the Traffic Study. However, because an Office land use was evaluated under 300 Airport Blvd, and the land use for 350 Airport Blvd is also office, the same trip rate was applied. In this case however, no changes to the trip rate were applied as the traffic report did not provide a total daily trip for this site.
- 5.** Average miles per trip were determined by averaging the default miles per trip type for both home and commercial categories as provided in URBEMIS.