

Air Quality Analysis
Urbemis 2007 Version 9.2.4
January 16, 2009

Air Emissions Calculations

Project Name: Hillside House

OPERATION	Unmitigated lbs/day	Threshold Lbs/day
ROC source and operations	15.62	
NOx source and operations	11.56	
CO source and operations	99.58	
SO2 source and operations	0.06	
PM10 source and operations	12.16	80
PM2.5 source and operations	2.36	
CO2 source and operations	7645.73	
ROC PLUS NOx All sources	27.18	240
ROC Motor Vehicles Only	8.3	
NOx Motor Vehicles Only	10.53	
ROC PLUS NOx Motor Vehicles	18.83	25
CA CO2 Emissions	446334892.1	
USA CO2 Emissions	7260000000	
Project as % of CA CO2	0.001713%	
Project as % of USA CO2	0.0001053%	

CONSTRUCTION	unmitigated lbs/day	lbs/year	tons/year	Total
ROC	46.49	16968.85	8.484425	
NOx	22.03	8040.95	4.020475	
CO	22.36	8161.4	4.0807	
SO2	0.01	3.65	0.001825	
PM10	40.28	14702.2	7.3511	
PM2.5	9.18	3350.7	1.67535	
CO2	2746.15	1002344.75	501.172375	
CA CO2 Emissions	446334892.1			25.613875
USA CO2 Emissions	6586161212			
Project as % of CA CO2	0.000615%			
Project as % of USA CO2	0.0000417%			

CO2	lbs/day	lbs/year	tons/year
Operation	7645.73	2790691.45	1395.3
Construction	2746.15	1002344.75	501.2

Total CO2 Calculations	tons/yr	Threshold
Total Project CO2	1395.3	TBD
California metric tons	492000000	
USA Metric Tons	7260000000	
CA Metric tons to US tons	446334892.1	
US Metric tons to US tons	6586161212	
Project as a Percentage CA	0.0003126230%	
Project as a Percentage USA	0.0000211860%	

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Combined Summer Emissions Reports (Pounds/Day)

File Name:

Project Name: Hillside House - 121 residential Units 6500 SF Commercial

Project Location: Santa Barbara County APCD

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)	3.69	22.03	22.36	0.01	39.20	1.12	40.28	8.19	1.02	9.18	2,746.15
2012 TOTALS (lbs/day mitigated)	3.69	22.03	22.36	0.01	8.89	1.07	9.97	1.86	0.99	2.85	2,746.15
2013 TOTALS (lbs/day unmitigated)	3.38	16.03	21.16	0.01	0.05	1.00	1.06	0.02	0.92	0.94	2,746.05
2013 TOTALS (lbs/day mitigated)	3.38	13.94	21.16	0.01	0.05	0.21	0.27	0.02	0.19	0.21	2,746.05
2014 TOTALS (lbs/day unmitigated)	3.09	14.87	20.00	0.01	0.05	0.89	0.95	0.02	0.82	0.84	2,745.99
2014 TOTALS (lbs/day mitigated)	3.09	12.92	20.00	0.01	0.05	0.19	0.25	0.02	0.17	0.19	2,745.99
2015 TOTALS (lbs/day unmitigated)	46.49	13.73	18.93	0.01	0.05	0.99	1.00	0.02	0.91	0.91	2,745.95
2015 TOTALS (lbs/day mitigated)	41.84	11.93	18.93	0.01	0.05	0.18	0.23	0.02	0.16	0.18	2,745.95

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AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	7.21	1.02	5.06	0.00	0.02	0.02	1,225.37
TOTALS (lbs/day, mitigated)	7.20	0.82	4.98	0.00	0.02	0.02	981.98
Percent Reduction	0.14	19.61	1.58	NaN	0.00	0.00	19.86

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)	8.41	10.54	94.52	0.06	12.14	2.34	6,420.36

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)	15.62	11.56	99.58	0.06	12.16	2.36	7,645.73

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

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 9/3/2012-11/1/2012 Active Days: 44	2.74	22.03	12.66	0.00	<u>39.20</u>	1.07	<u>40.28</u>	<u>8.19</u>	0.99	<u>9.18</u>	2,332.65
Fine Grading 09/01/2012- 11/01/2012	2.74	22.03	12.66	0.00	39.20	1.07	40.28	8.19	0.99	9.18	2,332.65
Fine Grading Dust	0.00	0.00	0.00	0.00	39.20	0.00	39.20	8.19	0.00	8.19	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	0.05	0.09	1.15	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.33

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Time Slice 11/2/2012-12/31/2012	<u>3.69</u>	17.18	<u>22.36</u>	<u>0.01</u>	0.05	<u>1.12</u>	1.17	0.02	<u>1.02</u>	1.04	<u>2,746.15</u>
Active Days: 42											
Building 11/02/2012-05/31/2015	3.69	17.18	22.36	0.01	0.05	1.12	1.17	0.02	1.02	1.04	2,746.15
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	0.13	1.59	1.38	0.00	0.01	0.06	0.07	0.00	0.05	0.05	346.05
Building Worker Trips	0.43	0.78	10.47	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.90
Time Slice 1/1/2013-12/31/2013	<u>3.38</u>	<u>16.03</u>	<u>21.16</u>	<u>0.01</u>	<u>0.05</u>	<u>1.00</u>	<u>1.06</u>	<u>0.02</u>	<u>0.92</u>	<u>0.94</u>	<u>2,746.05</u>
Active Days: 261											
Building 11/02/2012-05/31/2015	3.38	16.03	21.16	0.01	0.05	1.00	1.06	0.02	0.92	0.94	2,746.05
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	0.12	1.41	1.28	0.00	0.01	0.05	0.06	0.00	0.04	0.05	346.07
Building Worker Trips	0.39	0.72	9.68	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.79
Time Slice 1/1/2014-12/31/2014	<u>3.09</u>	<u>14.87</u>	<u>20.00</u>	<u>0.01</u>	<u>0.05</u>	<u>0.89</u>	<u>0.95</u>	<u>0.02</u>	<u>0.82</u>	<u>0.84</u>	<u>2,745.99</u>
Active Days: 261											
Building 11/02/2012-05/31/2015	3.09	14.87	20.00	0.01	0.05	0.89	0.95	0.02	0.82	0.84	2,745.99
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	0.11	1.24	1.18	0.00	0.01	0.04	0.06	0.00	0.04	0.04	346.08
Building Worker Trips	0.35	0.66	8.93	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.71
Time Slice 1/1/2015-5/29/2015	<u>2.82</u>	<u>13.73</u>	<u>18.93</u>	<u>0.01</u>	<u>0.05</u>	<u>0.83</u>	<u>0.88</u>	<u>0.02</u>	<u>0.76</u>	<u>0.78</u>	<u>2,745.95</u>
Active Days: 107											
Building 11/02/2012-05/31/2015	2.82	13.73	18.93	0.01	0.05	0.83	0.88	0.02	0.76	0.78	2,745.95
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	0.10	1.10	1.10	0.00	0.01	0.04	0.05	0.00	0.04	0.04	346.09
Building Worker Trips	0.32	0.60	8.21	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.67

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Time Slice 6/1/2015-7/15/2015	2.18	12.42	10.65	0.00	0.01	<u>0.99</u>	<u>1.00</u>	0.00	<u>0.91</u>	<u>0.91</u>	1,497.62
Active Days: 33											
Asphalt 06/01/2015-07/15/2015	2.18	12.42	10.65	0.00	0.01	0.99	1.00	0.00	0.91	0.91	1,497.62
Paving Off-Gas	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.93	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	0.02	0.22	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	54.97
Paving Worker Trips	0.07	0.13	1.80	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.61
Time Slice 7/16/2015-10/16/2015	<u>46.49</u>	0.04	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.26
Active Days: 67											
Coating 07/16/2015-10/16/2015	46.49	0.04	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.26
Architectural Coating	46.47	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	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.26

Phase Assumptions

Phase: Fine Grading 9/1/2012 - 11/1/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 7.86

Maximum Daily Acreage Disturbed: 1.96

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 6/1/2015 - 7/15/2015 - Default Paving Description

Acres to be Paved: 1.96

Off-Road Equipment:

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- 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 11/2/2012 - 5/31/2015 - 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

Phase: Architectural Coating 7/16/2015 - 10/16/2015 - 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 9/3/2012-11/1/2012 Active Days: 44	2.74	22.03	12.66	0.00	<u>8.89</u>	<u>1.07</u>	<u>9.97</u>	<u>1.86</u>	<u>0.99</u>	<u>2.85</u>	2,332.65
Fine Grading 09/01/2012- 11/01/2012	2.74	22.03	12.66	0.00	8.89	1.07	9.97	1.86	0.99	2.85	2,332.65
Fine Grading Dust	0.00	0.00	0.00	0.00	8.89	0.00	8.89	1.86	0.00	1.86	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	0.05	0.09	1.15	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.33
Time Slice 11/2/2012-12/31/2012 Active Days: 42	<u>3.69</u>	<u>14.96</u>	22.36	0.01	0.05	0.24	0.29	0.02	0.21	0.23	2,746.15
Building 11/02/2012-05/31/2015	3.69	14.96	22.36	0.01	0.05	0.24	0.29	0.02	0.21	0.23	2,746.15
Building Off Road Diesel	3.14	12.59	10.52	0.00	0.00	0.16	0.16	0.00	0.14	0.14	1,621.20
Building Vendor Trips	0.13	1.59	1.38	0.00	0.01	0.06	0.07	0.00	0.05	0.05	346.05
Building Worker Trips	0.43	0.78	10.47	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.90
Time Slice 1/1/2013-12/31/2013 Active Days: 261	<u>3.38</u>	<u>13.94</u>	<u>21.16</u>	0.01	<u>0.05</u>	<u>0.21</u>	<u>0.27</u>	<u>0.02</u>	<u>0.19</u>	<u>0.21</u>	<u>2,746.05</u>
Building 11/02/2012-05/31/2015	3.38	13.94	21.16	0.01	0.05	0.21	0.27	0.02	0.19	0.21	2,746.05
Building Off Road Diesel	2.88	11.82	10.20	0.00	0.00	0.14	0.14	0.00	0.13	0.13	1,621.20
Building Vendor Trips	0.12	1.41	1.28	0.00	0.01	0.05	0.06	0.00	0.04	0.05	346.07
Building Worker Trips	0.39	0.72	9.68	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.79
Time Slice 1/1/2014-12/31/2014 Active Days: 261	<u>3.09</u>	<u>12.92</u>	<u>20.00</u>	0.01	<u>0.05</u>	<u>0.19</u>	<u>0.25</u>	<u>0.02</u>	<u>0.17</u>	<u>0.19</u>	<u>2,745.99</u>
Building 11/02/2012-05/31/2015	3.09	12.92	20.00	0.01	0.05	0.19	0.25	0.02	0.17	0.19	2,745.99
Building Off Road Diesel	2.63	11.03	9.89	0.00	0.00	0.12	0.12	0.00	0.11	0.11	1,621.20
Building Vendor Trips	0.11	1.24	1.18	0.00	0.01	0.04	0.06	0.00	0.04	0.04	346.08
Building Worker Trips	0.35	0.66	8.93	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.71

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Time Slice 1/1/2015-5/29/2015 Active Days: 107	2.82	<u>11.93</u>	<u>18.93</u>	<u>0.01</u>	<u>0.05</u>	<u>0.18</u>	<u>0.23</u>	<u>0.02</u>	<u>0.16</u>	<u>0.18</u>	<u>2,745.95</u>
Building 11/02/2012-05/31/2015	2.82	11.93	18.93	0.01	0.05	0.18	0.23	0.02	0.16	0.18	2,745.95
Building Off Road Diesel	2.40	10.23	9.62	0.00	0.00	0.11	0.11	0.00	0.11	0.11	1,621.20
Building Vendor Trips	0.10	1.10	1.10	0.00	0.01	0.04	0.05	0.00	0.04	0.04	346.09
Building Worker Trips	0.32	0.60	8.21	0.01	0.04	0.03	0.07	0.02	0.02	0.04	778.67
Time Slice 6/1/2015-7/15/2015 Active Days: 33	2.18	10.61	10.65	0.00	0.01	0.16	0.17	0.00	0.15	0.15	1,497.62
Asphalt 06/01/2015-07/15/2015	2.18	10.61	10.65	0.00	0.01	0.16	0.17	0.00	0.15	0.15	1,497.62
Paving Off-Gas	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.93	10.26	8.78	0.00	0.00	0.15	0.15	0.00	0.13	0.13	1,272.04
Paving On Road Diesel	0.02	0.22	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	54.97
Paving Worker Trips	0.07	0.13	1.80	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.61
Time Slice 7/16/2015-10/16/2015 Active Days: 67	<u>41.84</u>	0.04	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.26
Coating 07/16/2015-10/16/2015	41.84	0.04	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.26
Architectural Coating	41.82	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	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.26

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 9/1/2012 - 11/1/2012 - Default Fine Site Grading Description

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

PM10: 84% PM25: 84%

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

PM10: 5% PM25: 5%

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

PM10: 55% PM25: 55%

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

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PM10: 69% PM25: 69%

The following mitigation measures apply to Phase: Paving 6/1/2015 - 7/15/2015 - Default Paving Description

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

PM10: 85% PM25: 85%

For Cement and Mortar Mixers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

The following mitigation measures apply to Phase: Building Construction 11/2/2012 - 5/31/2015 - Default Building Construction Description

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

PM10: 85% PM25: 85%

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

NOX: 15%

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

PM10: 85% PM25: 85%

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

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NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

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

PM10: 85% PM25: 85%

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

NOX: 15%

The following mitigation measures apply to Phase: Architectural Coating 7/16/2015 - 10/16/2015 - 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%

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.07	0.96	0.42	0.00	0.00	0.00	1,216.94
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	5.92						
Architectural Coatings	0.85						
TOTALS (lbs/day, unmitigated)	7.21	1.02	5.06	0.00	0.02	0.02	1,225.37

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	0.06	0.76	0.34	0.00	0.00	0.00	973.55
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	5.92						
Architectural Coatings	0.85						
TOTALS (lbs/day, mitigated)	7.20	0.82	4.98	0.00	0.02	0.02	981.98

Area Source Mitigation Measures Selected

<u>Mitigation Description</u>	<u>Percent Reduction</u>
Residential Increase Energy Efficiency Beyond Title 24	20.00
Commercial Increase Energy Efficiency Beyond Title 24	20.00

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
Apartments low rise	2.33	2.89	26.00	0.02	3.36	0.65	1,777.71
Condo/townhouse general	4.15	5.06	45.45	0.03	5.88	1.13	3,107.02
General office building	1.93	2.59	23.07	0.01	2.90	0.56	1,535.63
TOTALS (lbs/day, unmitigated)	8.41	10.54	94.52	0.06	12.14	2.34	6,420.36

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 75 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
Apartments low rise	2.50	6.72	dwelling units	40.00	268.80	1,951.54
Condo/townhouse general	5.06	5.80	dwelling units	81.00	469.80	3,410.84
General office building		47.70	1000 sq ft	6.50	310.05	1,680.47
					1,048.65	7,042.85