

APPENDIX C

Air Quality Data

Appendix Elk Grove Transfer Station GHG Emissions Calculations

Air Quality Modeling Output	CO2 Estimates	Conversion Factors	Total CO2 Emissions
Site 4 Construction Emissions (Source: URBEMIS)			
Season			
2009	33 ton/yr	0.907 MT/ton	30 MT/yr
2010	811 ton/yr	0.907 MT/ton	735 MT/yr
2011	516 ton/yr	0.907 MT/ton	468 MT/yr
Total Construction-Generated Emissions (Site 4)			1,233 MT
Site 2 Construction Emissions (Source: URBEMIS)			
Season			
2009	56 ton/yr	0.907 MT/ton	51 MT/yr
2010	814 ton/yr	0.907 MT/ton	739 MT/yr
2011	516 ton/yr	0.907 MT/ton	468 MT/yr
Total Construction-Generated Emissions (Site 2)			1,257 MT
Area-Source Emissions (Source: URBEMIS)			
Operational Year 2011	175 ton/yr	0.907 MT/ton	159 MT/yr
Mobile-Source Emissions (Source: URBEMIS)*			
Operational Year 2011	(838) ton/yr	0.907 MT/ton	(760) MT/yr
*Project would result in a regional net VMT reduction.			
Total Direct Operational Emissions			(601) MT/yr

Indirect Emissions from Energy Consumption^{1,2}

KWh/du/year	# du	KWh/ksf/ear	# ksf	Commercial	Total KWh	MWh	Region	Emission Factor (lb CO2/MWh)	GWP	Emission Factor (lb CH4/MWh)	GWP	Emission Factor (lb N2O/MWh)	GWP	Total CO2e (Metric Tons/year)
7000	0	5,713	165.5	945,502	946	CALI	804.54	1	0.0067	21	0.0037	310	346	

Total Indirect Emissions (MT CO2e/yr) 346

Total Direct & Indirect Emissions (MT CO2e/yr) (256)

Sources:

1 California Energy Commission [CEC] 2009. California Commercial End Use Survey. Available: <http://capabilities.itron.com/CeusWeb/Chart.aspx>; California Energy Commission [CEC] 2000. California Energy Demand Staff Report P200-00-002

2 California Climate Action Registry [CCAR] General Reporting Protocol v 3.1 January 2009

SMAQMD Local CO Screening-Level Analysis

Background Concentrations (ppm)

*Assumes "urban" project in Elk Grove, CA

1-Hr	6
8-Hr	3

Analysis Year 2010 Rollback Factors (ppm)

*Year 2010 was the latest year of rollback available. Project operation would be expected later than 2010, and associated CO background levels would be lower. This is a conservative assumption.

1-Hr	2.64
8-Hr	1.32

Total Project-Related Daily Trips

*note that project would result in net regional VMT reduction. In reality, these trips are relocated from elsewhere in the region, but must analyze localized effects, such as CO, by treating these vehicle trips as "additional".

Vehicles/day	801
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Total Project-Related Peak Hour Trips

*Assumes 10% of daily trips

Vehicles/day	80
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Project-Related CO Concentration

contribution	0.4	0.28
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CO Concentration + Project (ppm)

1-Hr	3.04
8-Hr	1.60

Sources:

SMAQMD 2004

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\phillipsh\Application Data\Urbemis\Version9a\Projects\Elk Grove Transfer Station.urb924

Project Name: Elk Grove Transfer Station

Project Location: Sacramento County AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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Summary Report:

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>
2009 TOTALS (lbs/day unmitigated)	7.99	50.80	28.75	0.01	100.04	3.19	103.23	20.90	2.94	23.84	4,740.62
2010 TOTALS (lbs/day unmitigated)	174.14	80.21	65.43	0.05	100.22	4.85	105.07	20.96	4.46	25.41	10,952.46
2011 TOTALS (lbs/day unmitigated)	4.86	29.82	35.41	0.04	0.18	1.72	1.89	0.06	1.57	1.63	6,212.74

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1.15	0.82	2.22	0.00	0.01	0.01	959.59

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)	6.55	4.75	56.30	0.05	7.81	1.51	4,907.63

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	7.70	5.57	58.52	0.05	7.82	1.52	5,867.22

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 11/30/2009-12/25/2009	3.21	26.51	14.08	0.00	100.00	1.34	101.34	20.89	1.23	22.12	2,350.94
Active Days: 20											
Fine Grading 11/30/2009-01/11/2010	3.21	26.51	14.08	0.00	100.00	1.34	101.34	20.89	1.23	22.12	2,350.94
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	3.18	26.46	12.98	0.00	0.00	1.33	1.33	0.00	1.23	1.23	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	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62
Time Slice 12/28/2009-12/31/2009	<u>7.99</u>	<u>50.80</u>	<u>28.75</u>	<u>0.01</u>	<u>100.04</u>	<u>3.19</u>	<u>103.23</u>	<u>20.90</u>	<u>2.94</u>	<u>23.84</u>	<u>4,740.62</u>
Active Days: 4											
Asphalt 12/28/2009-01/11/2010	4.78	24.29	14.67	0.01	0.04	1.86	1.89	0.01	1.71	1.72	2,389.68
Paving Off-Gas	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.17	18.98	10.39	0.00	0.00	1.64	1.64	0.00	1.51	1.51	1,418.44
Paving On Road Diesel	0.34	5.21	1.79	0.01	0.03	0.21	0.24	0.01	0.19	0.20	738.10
Paving Worker Trips	0.07	0.11	2.49	0.00	0.01	0.01	0.02	0.00	0.00	0.01	233.14
Fine Grading 11/30/2009-01/11/2010	3.21	26.51	14.08	0.00	100.00	1.34	101.34	20.89	1.23	22.12	2,350.94
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	3.18	26.46	12.98	0.00	0.00	1.33	1.33	0.00	1.23	1.23	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	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62

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Time Slice 1/1/2010-1/8/2010 Active Days: 6	7.59	47.87	27.68	0.01	100.04	3.01	103.05	20.90	2.77	23.67	4,740.90
Asphalt 12/28/2009-01/11/2010	4.56	22.84	14.20	0.01	0.04	1.76	1.80	0.01	1.62	1.63	2,389.88
Paving Off-Gas	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.32	4.73	1.64	0.01	0.03	0.19	0.21	0.01	0.17	0.18	738.10
Paving Worker Trips	0.07	0.10	2.28	0.00	0.01	0.01	0.02	0.00	0.00	0.01	233.33
Fine Grading 11/30/2009-01/11/2010	3.03	25.03	13.47	0.00	100.00	1.25	101.26	20.89	1.15	22.04	2,351.02
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	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	1.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.70

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Time Slice 1/11/2010-1/11/2010	12.85	<u>80.21</u>	<u>65.43</u>	<u>0.05</u>	<u>100.22</u>	<u>4.85</u>	<u>105.07</u>	<u>20.96</u>	<u>4.46</u>	<u>25.41</u>	<u>10,952.46</u>
Active Days: 1											
Asphalt 12/28/2009-01/11/2010	4.56	22.84	14.20	0.01	0.04	1.76	1.80	0.01	1.62	1.63	2,389.88
Paving Off-Gas	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.32	4.73	1.64	0.01	0.03	0.19	0.21	0.01	0.17	0.18	738.10
Paving Worker Trips	0.07	0.10	2.28	0.00	0.01	0.01	0.02	0.00	0.00	0.01	233.33
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Fine Grading 11/30/2009-01/11/2010	3.03	25.03	13.47	0.00	100.00	1.25	101.26	20.89	1.15	22.04	2,351.02
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	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	1.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.70
Time Slice 1/12/2010-8/6/2010	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Active Days: 149											
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69

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Time Slice 8/9/2010-9/3/2010 Active Days: 20	<u>174.14</u>	32.43	39.76	0.05	0.19	1.84	2.03	0.06	1.69	1.75	6,415.88
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Coating 08/08/2010-09/05/2010	168.88	0.09	2.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.32
Architectural Coating	168.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.09	2.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.32
Time Slice 9/6/2010-12/31/2010 Active Days: 85	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Time Slice 1/3/2011-8/22/2011 Active Days: 166	<u>4.86</u>	<u>29.82</u>	<u>35.41</u>	<u>0.04</u>	<u>0.18</u>	<u>1.72</u>	<u>1.89</u>	<u>0.06</u>	<u>1.57</u>	<u>1.63</u>	<u>6,212.74</u>
Building 01/11/2010-08/22/2011	4.86	29.82	35.41	0.04	0.18	1.72	1.89	0.06	1.57	1.63	6,212.74
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	1.10	13.60	11.62	0.03	0.11	0.55	0.66	0.04	0.50	0.54	3,148.92
Building Worker Trips	0.37	0.56	12.95	0.01	0.06	0.03	0.09	0.02	0.02	0.05	1,442.62

Phase Assumptions

Phase: Fine Grading 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 20

Maximum Daily Acreage Disturbed: 5

Fugitive Dust Level of Detail: Default

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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 12/28/2009 - 1/11/2010 - Default Paving Description

Acres to be Paved: 5

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 1/11/2010 - 8/22/2011 - 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 8/8/2010 - 9/5/2010 - 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

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	0.06	0.80	0.67	0.00	0.00	0.00	956.78
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.97						
TOTALS (lbs/day, unmitigated)	1.15	0.82	2.22	0.00	0.01	0.01	959.59

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
General light industry	6.55	4.75	56.30	0.05	7.81	1.51	4,907.63
TOTALS (lbs/day, unmitigated)	6.55	4.75	56.30	0.05	7.81	1.51	4,907.63

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General light industry		2.74	1000 sq ft	165.50	453.47	4,534.70
					453.47	4,534.70

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.6	1.1	98.7	0.2
Light Truck < 3750 lbs	10.0	2.0	92.0	6.0
Light Truck 3751-5750 lbs	22.5	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.2	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	76.2	23.8
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	1.6	0.0	18.8	81.2
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.5	62.9	37.1	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	10.0	10.0	10.0	10.0	10.0
Rural Trip Length (miles)	10.0	10.0	10.0	10.0	10.0	10.0
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 light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\phillipsh\Application Data\Urbemis\Version9a\Projects\Elk Grove Transfer Station.urb924

Project Name: Elk Grove Transfer Station

Project Location: Sacramento County AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<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>
2009 TOTALS (tons/year unmitigated)	0.05	0.37	0.20	0.00	1.20	0.02	1.22	0.25	0.02	0.27	32.99
2010 TOTALS (tons/year unmitigated)	2.39	4.29	4.93	0.01	0.37	0.24	0.62	0.08	0.22	0.31	810.61
2011 TOTALS (tons/year unmitigated)	0.40	2.48	2.94	0.00	0.01	0.14	0.16	0.01	0.13	0.14	515.66

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.20	0.15	0.26	0.00	0.00	0.00	174.86

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 (tons/year, unmitigated)	1.06	1.01	9.71	0.01	1.43	0.27	837.87

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	1.26	1.16	9.97	0.01	1.43	0.27	1,012.73

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, 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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6/11/2009 12:52:19 PM

2010	2.39	4.29	4.93	0.01	0.37	0.24	0.62	0.08	0.22	0.31	810.61
Asphalt 12/28/2009-01/11/2010	0.02	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.36
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.01	0.01	0.00	0.01	0.01	4.96
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.58
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Fine Grading 11/30/2009-01/11/2010	0.01	0.09	0.05	0.00	0.35	0.00	0.35	0.07	0.00	0.08	8.23
Fine Grading Dust	0.00	0.00	0.00	0.00	0.35	0.00	0.35	0.07	0.00	0.07	0.00
Fine Grading Off Road Diesel	0.01	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.87
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Building 01/11/2010-08/22/2011	0.67	4.12	4.81	0.01	0.02	0.23	0.26	0.01	0.22	0.22	791.97
Building Off Road Diesel	0.47	2.11	1.43	0.00	0.00	0.15	0.15	0.00	0.14	0.14	206.70
Building Vendor Trips	0.15	1.94	1.59	0.00	0.01	0.08	0.09	0.00	0.07	0.08	401.46
Building Worker Trips	0.05	0.08	1.80	0.00	0.01	0.00	0.01	0.00	0.00	0.01	183.81
Coating 08/08/2010-09/05/2010	1.69	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04
Architectural Coating	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04
2011	0.40	2.48	2.94	0.00	0.01	0.14	0.16	0.01	0.13	0.14	515.66
Building 01/11/2010-08/22/2011	0.40	2.48	2.94	0.00	0.01	0.14	0.16	0.01	0.13	0.14	515.66
Building Off Road Diesel	0.28	1.30	0.90	0.00	0.00	0.09	0.09	0.00	0.09	0.09	134.56
Building Vendor Trips	0.09	1.13	0.96	0.00	0.01	0.05	0.05	0.00	0.04	0.04	261.36
Building Worker Trips	0.03	0.05	1.08	0.00	0.01	0.00	0.01	0.00	0.00	0.00	119.74

Phase Assumptions

Phase: Fine Grading 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 20

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 12/28/2009 - 1/11/2010 - Default Paving Description

Acres to be Paved: 5

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 1/11/2010 - 8/22/2011 - 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 8/8/2010 - 9/5/2010 - 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

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.15	0.12	0.00	0.00	0.00	174.61
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.18						
TOTALS (tons/year, unmitigated)	0.20	0.15	0.26	0.00	0.00	0.00	174.86

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
General light industry	1.06	1.01	9.71	0.01	1.43	0.27	837.87
TOTALS (tons/year, unmitigated)	1.06	1.01	9.71	0.01	1.43	0.27	837.87

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Season: Annual

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 light industry		2.74	1000 sq ft	165.50	453.47	4,534.70
					453.47	4,534.70

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.6	1.1	98.7	0.2
Light Truck < 3750 lbs	10.0	2.0	92.0	6.0
Light Truck 3751-5750 lbs	22.5	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.2	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	76.2	23.8
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	1.6	0.0	18.8	81.2
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.5	62.9	37.1	0.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	10.0	10.0	10.0	10.0	10.0	10.0
Rural Trip Length (miles)	10.0	10.0	10.0	10.0	10.0	10.0
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 light industry				50.0	25.0	25.0

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\phillipsh\Application Data\Urbemis\Version9a\Projects\Elk Grove Transfer Station site 2.urb924

Project Name: Elk Grove Transfer Station Site 2

Project Location: Sacramento County AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<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>
2009 TOTALS (tons/year unmitigated)	0.08	0.58	0.34	0.00	1.24	0.04	1.27	0.26	0.03	0.29	55.72
2010 TOTALS (tons/year unmitigated)	2.39	4.32	4.95	0.01	0.38	0.25	0.63	0.08	0.23	0.31	814.23
2011 TOTALS (tons/year unmitigated)	0.40	2.48	2.94	0.00	0.01	0.14	0.16	0.01	0.13	0.14	515.66

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, 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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Demolition 11/01/2009-01/11/2010	0.00	0.03	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	3.62
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45
Demo On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Fine Grading 11/30/2009-01/11/2010	0.01	0.09	0.05	0.00	0.35	0.00	0.35	0.07	0.00	0.08	8.23
Fine Grading Dust	0.00	0.00	0.00	0.00	0.35	0.00	0.35	0.07	0.00	0.07	0.00
Fine Grading Off Road Diesel	0.01	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.87
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Building 01/11/2010-08/22/2011	0.67	4.12	4.81	0.01	0.02	0.23	0.26	0.01	0.22	0.22	791.97
Building Off Road Diesel	0.47	2.11	1.43	0.00	0.00	0.15	0.15	0.00	0.14	0.14	206.70
Building Vendor Trips	0.15	1.94	1.59	0.00	0.01	0.08	0.09	0.00	0.07	0.08	401.46
Building Worker Trips	0.05	0.08	1.80	0.00	0.01	0.00	0.01	0.00	0.00	0.01	183.81
Coating 08/08/2010-09/05/2010	1.69	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04
Architectural Coating	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04
2011	0.40	2.48	2.94	0.00	0.01	0.14	0.16	0.01	0.13	0.14	515.66
Building 01/11/2010-08/22/2011	0.40	2.48	2.94	0.00	0.01	0.14	0.16	0.01	0.13	0.14	515.66
Building Off Road Diesel	0.28	1.30	0.90	0.00	0.00	0.09	0.09	0.00	0.09	0.09	134.56
Building Vendor Trips	0.09	1.13	0.96	0.00	0.01	0.05	0.05	0.00	0.04	0.04	261.36
Building Worker Trips	0.03	0.05	1.08	0.00	0.01	0.00	0.01	0.00	0.00	0.00	119.74

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Phase Assumptions

Phase: Demolition 11/1/2009 - 1/11/2010 - Type Your Description Here

Building Volume Total (cubic feet): 175616

Building Volume Daily (cubic feet): 4096

On Road Truck Travel (VMT): 56.89

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

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

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 20

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 12/28/2009 - 1/11/2010 - Default Paving Description

Acres to be Paved: 5

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

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

Phase: Building Construction 1/11/2010 - 8/22/2011 - 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 8/8/2010 - 9/5/2010 - 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

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\phillipsh\Application Data\Urbemis\Version9a\Projects\Elk Grove Transfer Station site 2.urb924

Project Name: Elk Grove Transfer Station Site 2

Project Location: Sacramento County AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<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>
2009 TOTALS (lbs/day unmitigated)	9.36	60.62	35.20	0.01	101.77	3.90	105.68	21.26	3.59	24.85	5,773.57
2010 TOTALS (lbs/day unmitigated)	174.14	89.40	71.64	0.06	101.95	5.50	107.45	21.32	5.05	26.37	11,985.50
2011 TOTALS (lbs/day unmitigated)	4.86	29.82	35.41	0.04	0.18	1.72	1.89	0.06	1.57	1.63	6,212.74

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 11/2/2009-11/27/2009	1.37	9.82	6.45	0.00	1.73	0.71	2.44	0.36	0.65	1.01	1,032.95
Active Days: 20											
Demolition 11/01/2009-01/11/2010	1.37	9.82	6.45	0.00	1.73	0.71	2.44	0.36	0.65	1.01	1,032.95
Fugitive Dust	0.00	0.00	0.00	0.00	1.72	0.00	1.72	0.36	0.00	0.36	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.11	1.62	0.56	0.00	0.01	0.07	0.07	0.00	0.06	0.06	229.04
Demo Worker Trips	0.03	0.05	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62
Time Slice 11/30/2009-12/25/2009	4.58	36.32	20.53	0.00	101.74	2.05	103.78	21.25	1.88	23.13	3,383.89
Active Days: 20											
Demolition 11/01/2009-01/11/2010	1.37	9.82	6.45	0.00	1.73	0.71	2.44	0.36	0.65	1.01	1,032.95
Fugitive Dust	0.00	0.00	0.00	0.00	1.72	0.00	1.72	0.36	0.00	0.36	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.11	1.62	0.56	0.00	0.01	0.07	0.07	0.00	0.06	0.06	229.04
Demo Worker Trips	0.03	0.05	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62
Fine Grading 11/30/2009-01/11/2010	3.21	26.51	14.08	0.00	100.00	1.34	101.34	20.89	1.23	22.12	2,350.94
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	3.18	26.46	12.98	0.00	0.00	1.33	1.33	0.00	1.23	1.23	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	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62

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Time Slice 12/28/2009-12/31/2009	<u>9.36</u>	<u>60.62</u>	<u>35.20</u>	<u>0.01</u>	<u>101.77</u>	<u>3.90</u>	<u>105.68</u>	<u>21.26</u>	<u>3.59</u>	<u>24.85</u>	<u>5,773.57</u>
Active Days: 4											
Asphalt 12/28/2009-01/11/2010	4.78	24.29	14.67	0.01	0.04	1.86	1.89	0.01	1.71	1.72	2,389.68
Paving Off-Gas	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.17	18.98	10.39	0.00	0.00	1.64	1.64	0.00	1.51	1.51	1,418.44
Paving On Road Diesel	0.34	5.21	1.79	0.01	0.03	0.21	0.24	0.01	0.19	0.20	738.10
Paving Worker Trips	0.07	0.11	2.49	0.00	0.01	0.01	0.02	0.00	0.00	0.01	233.14
Demolition 11/01/2009-01/11/2010	1.37	9.82	6.45	0.00	1.73	0.71	2.44	0.36	0.65	1.01	1,032.95
Fugitive Dust	0.00	0.00	0.00	0.00	1.72	0.00	1.72	0.36	0.00	0.36	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.11	1.62	0.56	0.00	0.01	0.07	0.07	0.00	0.06	0.06	229.04
Demo Worker Trips	0.03	0.05	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62
Fine Grading 11/30/2009-01/11/2010	3.21	26.51	14.08	0.00	100.00	1.34	101.34	20.89	1.23	22.12	2,350.94
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	3.18	26.46	12.98	0.00	0.00	1.33	1.33	0.00	1.23	1.23	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	1.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.62

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Time Slice 1/1/2010-1/8/2010 Active Days: 6	8.86	57.06	33.89	0.01	101.77	3.66	105.43	21.26	3.36	24.62	5,773.94
Asphalt 12/28/2009-01/11/2010	4.56	22.84	14.20	0.01	0.04	1.76	1.80	0.01	1.62	1.63	2,389.88
Paving Off-Gas	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.32	4.73	1.64	0.01	0.03	0.19	0.21	0.01	0.17	0.18	738.10
Paving Worker Trips	0.07	0.10	2.28	0.00	0.01	0.01	0.02	0.00	0.00	0.01	233.33
Demolition 11/01/2009-01/11/2010	1.27	9.19	6.21	0.00	1.73	0.65	2.38	0.36	0.60	0.96	1,033.04
Fugitive Dust	0.00	0.00	0.00	0.00	1.72	0.00	1.72	0.36	0.00	0.36	0.00
Demo Off Road Diesel	1.14	7.68	4.68	0.00	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	0.10	1.47	0.51	0.00	0.01	0.06	0.07	0.00	0.05	0.06	229.04
Demo Worker Trips	0.03	0.04	1.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.70
Fine Grading 11/30/2009-01/11/2010	3.03	25.03	13.47	0.00	100.00	1.25	101.26	20.89	1.15	22.04	2,351.02
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	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	1.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.70

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Time Slice 1/11/2010-1/11/2010	14.12	<u>89.40</u>	<u>71.64</u>	<u>0.06</u>	<u>101.95</u>	<u>5.50</u>	<u>107.45</u>	<u>21.32</u>	<u>5.05</u>	<u>26.37</u>	<u>11,985.50</u>
Active Days: 1											
Asphalt 12/28/2009-01/11/2010	4.56	22.84	14.20	0.01	0.04	1.76	1.80	0.01	1.62	1.63	2,389.88
Paving Off-Gas	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.32	4.73	1.64	0.01	0.03	0.19	0.21	0.01	0.17	0.18	738.10
Paving Worker Trips	0.07	0.10	2.28	0.00	0.01	0.01	0.02	0.00	0.00	0.01	233.33
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Demolition 11/01/2009-01/11/2010	1.27	9.19	6.21	0.00	1.73	0.65	2.38	0.36	0.60	0.96	1,033.04
Fugitive Dust	0.00	0.00	0.00	0.00	1.72	0.00	1.72	0.36	0.00	0.36	0.00
Demo Off Road Diesel	1.14	7.68	4.68	0.00	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	0.10	1.47	0.51	0.00	0.01	0.06	0.07	0.00	0.05	0.06	229.04
Demo Worker Trips	0.03	0.04	1.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.70
Fine Grading 11/30/2009-01/11/2010	3.03	25.03	13.47	0.00	100.00	1.25	101.26	20.89	1.15	22.04	2,351.02
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	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.04	1.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	103.70

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Time Slice 1/12/2010-8/6/2010 Active Days: 149	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Time Slice 8/9/2010-9/3/2010 Active Days: 20	<u>174.14</u>	32.43	39.76	0.05	0.19	1.84	2.03	0.06	1.69	1.75	6,415.88
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Coating 08/08/2010-09/05/2010	168.88	0.09	2.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.32
Architectural Coating	168.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.09	2.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.32
Time Slice 9/6/2010-12/31/2010 Active Days: 85	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building 01/11/2010-08/22/2011	5.26	32.34	37.76	0.04	0.18	1.84	2.01	0.06	1.69	1.75	6,211.56
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	1.20	15.18	12.45	0.03	0.11	0.61	0.73	0.04	0.56	0.60	3,148.68
Building Worker Trips	0.41	0.62	14.10	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,441.69
Time Slice 1/3/2011-8/22/2011 Active Days: 166	<u>4.86</u>	<u>29.82</u>	<u>35.41</u>	<u>0.04</u>	<u>0.18</u>	<u>1.72</u>	<u>1.89</u>	<u>0.06</u>	<u>1.57</u>	<u>1.63</u>	<u>6,212.74</u>
Building 01/11/2010-08/22/2011	4.86	29.82	35.41	0.04	0.18	1.72	1.89	0.06	1.57	1.63	6,212.74
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	1.10	13.60	11.62	0.03	0.11	0.55	0.66	0.04	0.50	0.54	3,148.92
Building Worker Trips	0.37	0.56	12.95	0.01	0.06	0.03	0.09	0.02	0.02	0.05	1,442.62

Phase Assumptions

Phase: Demolition 11/1/2009 - 1/11/2010 - Type Your Description Here

Building Volume Total (cubic feet): 175616

Building Volume Daily (cubic feet): 4096

On Road Truck Travel (VMT): 56.89

Off-Road Equipment:

- 1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 20

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 12/28/2009 - 1/11/2010 - Default Paving Description

Acres to be Paved: 5

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

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

Phase: Building Construction 1/11/2010 - 8/22/2011 - 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 8/8/2010 - 9/5/2010 - 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

