

URBEMIS2007 Summertime Emissions

Urbemis 2007 Version 9.2.0

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\glu\My Documents\Dawn's Projects\CCII\The Revision (August 2007)\City Center II Operational and Construction.urb9

Project Name: City Center II Operational and Construction

Project Location: Los Angeles County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>
2008 TOTALS (lbs/day unmitigated)	6.52	68.23	42.88	0.04	24.55	3.23	27.78	5.15	2.97	8.12
2008 TOTALS (lbs/day mitigated)	6.52	68.23	42.88	0.04	12.80	3.23	16.03	2.69	2.97	5.66
2009 TOTALS (lbs/day unmitigated)	22.89	40.41	49.60	0.04	0.17	2.83	3.00	0.06	2.60	2.66
2009 TOTALS (lbs/day mitigated)	22.89	40.41	49.60	0.04	0.17	2.83	3.00	0.06	2.60	2.66
2010 TOTALS (lbs/day unmitigated)	22.56	26.01	38.75	0.04	0.17	1.61	1.78	0.06	1.48	1.54
2010 TOTALS (lbs/day mitigated)	22.56	26.01	38.75	0.04	0.17	1.61	1.78	0.06	1.48	1.54

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	10.89	3.28	6.60	0.00	0.03	0.03

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	17.61	19.84	176.90	0.17	28.56	5.57
TOTALS (lbs/day, mitigated)	17.61	19.84	176.90	0.17	28.56	5.57
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	28.50	23.12	183.50	0.17	28.59	5.60

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

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Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>
Time Slice 3/3/2008-3/7/2008 Number Active Days: 5	2.23		10.73		9.14	1.18		1.91		3.00
		19.88		0.01			10.32		1.09	
Demolition 03/03/2008-03/07/2008	2.23		10.73		9.14	1.18		1.91	1.09	
		19.88		0.01			10.32			3.00
Fugitive Dust	0.00	0.00	0.00	0.00	9.09	0.00	9.09	1.89	0.00	1.89
Demo Off Road Diesel	1.31	8.68	4.91	0.00	0.00	0.68	0.68	0.00	0.62	0.62
Demo On Road Diesel	0.88	11.12	4.57	0.01	0.04	0.50	0.54	0.01	0.46	0.48
Demo Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 3/10/2008-6/27/2008 Number Active Days: 80	<u>6.52</u>		31.32		<u>24.55</u>	<u>3.23</u>		<u>5.15</u>		<u>8.12</u>
		<u>68.23</u>		<u>0.04</u>			<u>27.78</u>		<u>2.97</u>	
Mass Grading 03/10/2008-06/27/2008	6.52		31.32		24.55	3.23		5.15	2.97	
		68.23		0.04			27.78			8.12
Mass Grading Dust	0.00	0.00	0.00	0.00	24.39	0.00	24.39	5.09	0.00	5.09
Mass Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30
Mass Grading On Road Diesel	3.17	40.15	16.51	0.04	0.15	1.81	1.97	0.05	1.67	1.72
Mass Grading Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 6/30/2008-12/31/2008 Number Active Days: 133	5.71		<u>42.88</u>		0.16	1.83		0.06		1.73
		29.24		0.04			1.99		1.67	
Building 06/30/2008-02/27/2009	5.71		42.88		0.16	1.83		0.06	1.67	
		29.24		0.04			1.99			1.73
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22
Building Vendor Trips	0.84	9.56	7.42	0.01	0.05	0.43	0.49	0.02	0.40	0.42
Building Worker Trips	0.79	1.46	23.66	0.02	0.11	0.06	0.17	0.04	0.05	0.09

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Time Slice 1/1/2009-2/27/2009 Number Active Days: 42	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 06/30/2008-02/27/2009	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/2/2009-3/16/2009 Number Active Days: 11	7.54		49.60		0.17	2.83		0.06		2.66
		<u>40.41</u>		<u>0.04</u>			<u>3.00</u>		<u>2.60</u>	
Asphalt 03/02/2009-03/16/2009	2.16		9.11		0.01	1.10		0.00	1.01	
		12.74		0.00			1.11			1.01
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.08	12.55	7.05	0.00	0.00	1.09	1.09	0.00	1.00	1.00
Paving On Road Diesel	0.01	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.07	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.00	0.01
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/17/2009-6/29/2009 Number Active Days: 75	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09

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Time Slice 6/30/2009-12/31/2009 Number Active Days: 133	<u>22.89</u>		40.98		0.17	1.73		0.06		1.65
		27.70		0.04			1.90		1.59	
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51		0.50		0.00	0.00		0.00	0.00	
		0.03		0.00			0.00			0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2010-3/2/2010 Number Active Days: 43	<u>22.56</u>		<u>38.75</u>		<u>0.17</u>	<u>1.61</u>		<u>0.06</u>		<u>1.54</u>
		<u>26.01</u>		<u>0.04</u>			<u>1.78</u>		<u>1.48</u>	
Building 03/02/2009-10/29/2010	5.05		38.28		0.16	1.61		0.06	1.48	
		25.98		0.04			1.77			1.53
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51		0.47		0.00	0.00		0.00	0.00	
		0.03		0.00			0.00			0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 3/3/2010-10/29/2010 Number Active Days: 173	5.05		38.28		0.16	1.61		0.06		1.53
		25.98		0.04			1.77		1.48	
Building 03/02/2009-10/29/2010	5.05		38.28		0.16	1.61		0.06	1.48	
		25.98		0.04			1.77			1.53
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09

Phase Assumptions

Phase: Demolition 3/3/2008 - 3/7/2008 - Remove debris on site

Building Volume Total (cubic feet): 118853.4

Building Volume Daily (cubic feet): 21639.8

On Road Truck Travel (VMT): 300.55

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: Mass Grading 3/10/2008 - 6/27/2008 - Excavation

Total Acres Disturbed: 7.02

Maximum Daily Acreage Disturbed: 1.76

Fugitive Dust Level of Detail: High

Onsite Haulage: 0 ton-miles/day; Offsite haulage: 36.4 ton-mils/day

On Road Truck Travel (VMT): 1085.38

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: Paving 3/2/2009 - 3/16/2009 - Asphalt Paving

Acres to be Paved: 0.04

Off-Road Equipment:

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

Phase: Building Construction 6/30/2008 - 2/27/2009 - Subgrade construction

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: Building Construction 3/2/2009 - 10/29/2010 - Above grade construction

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 6/30/2009 - 3/2/2010 - Architectural Coating

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

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

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

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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>
Time Slice 3/3/2008-3/7/2008 Number Active Days: 5	2.23		10.73		9.14	1.18		1.91		3.00
		19.88		0.01			10.32		1.09	
Demolition 03/03/2008-03/07/2008	2.23		10.73		9.14	1.18		1.91	1.09	
		19.88		0.01			10.32			3.00
Fugitive Dust	0.00	0.00	0.00	0.00	9.09	0.00	9.09	1.89	0.00	1.89
Demo Off Road Diesel	1.31	8.68	4.91	0.00	0.00	0.68	0.68	0.00	0.62	0.62
Demo On Road Diesel	0.88	11.12	4.57	0.01	0.04	0.50	0.54	0.01	0.46	0.48
Demo Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 3/10/2008-6/27/2008 Number Active Days: 80	<u>6.52</u>		31.32		<u>12.80</u>	<u>3.23</u>		<u>2.69</u>		<u>5.66</u>
		<u>68.23</u>		<u>0.04</u>			<u>16.03</u>		<u>2.97</u>	
Mass Grading 03/10/2008-06/27/2008	6.52		31.32		12.80	3.23		2.69	2.97	
		68.23		0.04			16.03			5.66
Mass Grading Dust	0.00	0.00	0.00	0.00	12.64	0.00	12.64	2.64	0.00	2.64
Mass Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30
Mass Grading On Road Diesel	3.17	40.15	16.51	0.04	0.15	1.81	1.97	0.05	1.67	1.72
Mass Grading Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 6/30/2008-12/31/2008 Number Active Days: 133	5.71		<u>42.88</u>		0.16	1.83		0.06		1.73
		29.24		0.04			1.99		1.67	
Building 06/30/2008-02/27/2009	5.71		42.88		0.16	1.83		0.06	1.67	
		29.24		0.04			1.99			1.73
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22
Building Vendor Trips	0.84	9.56	7.42	0.01	0.05	0.43	0.49	0.02	0.40	0.42
Building Worker Trips	0.79	1.46	23.66	0.02	0.11	0.06	0.17	0.04	0.05	0.09

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Time Slice 1/1/2009-2/27/2009 Number Active Days: 42	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 06/30/2008-02/27/2009	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/2/2009-3/16/2009 Number Active Days: 11	7.54		49.60		0.17	2.83		0.06		2.66
		<u>40.41</u>		<u>0.04</u>			<u>3.00</u>		<u>2.60</u>	
Asphalt 03/02/2009-03/16/2009	2.16		9.11		0.01	1.10		0.00	1.01	
		12.74		0.00			1.11			1.01
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.08	12.55	7.05	0.00	0.00	1.09	1.09	0.00	1.00	1.00
Paving On Road Diesel	0.01	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.07	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.00	0.01
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/17/2009-6/29/2009 Number Active Days: 75	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09

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Time Slice 6/30/2009-12/31/2009 Number Active Days: 133	<u>22.89</u>		40.98		0.17	1.73		0.06		1.65
		27.70		0.04			1.90		1.59	
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51		0.50		0.00	0.00		0.00	0.00	
		0.03		0.00			0.00			0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2010-3/2/2010 Number Active Days: 43	<u>22.56</u>		<u>38.75</u>		<u>0.17</u>	<u>1.61</u>		<u>0.06</u>		<u>1.54</u>
		<u>26.01</u>		<u>0.04</u>			<u>1.78</u>		<u>1.48</u>	
Building 03/02/2009-10/29/2010	5.05		38.28		0.16	1.61		0.06	1.48	
		25.98		0.04			1.77			1.53
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51		0.47		0.00	0.00		0.00	0.00	
		0.03		0.00			0.00			0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 3/3/2010-10/29/2010 Number Active Days: 173	5.05		38.28		0.16	1.61		0.06		1.53
		25.98		0.04			1.77		1.48	
Building 03/02/2009-10/29/2010	5.05		38.28		0.16	1.61		0.06	1.48	
		25.98		0.04			1.77			1.53
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 3/10/2008 - 6/27/2008 - Excavation
 For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:
 PM10: 61% PM25: 61%

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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>
Natural Gas	0.24	3.22	1.96	0.00	0.01	0.01
Hearth - No Summer Emissions						
Landscape	0.37	0.06	4.64	0.00	0.02	0.02
Consumer Products	9.44					
Architectural Coatings	0.84					
TOTALS (lbs/day, unmitigated)	10.89	3.28	6.60	0.00	0.03	0.03

Area Source Changes to Defaults

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

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

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>
Condo/townhouse high rise	7.02	7.95	72.70	0.07	11.73	2.29
High turnover (sit-down) rest.	1.25	1.27	11.18	0.01	1.65	0.32
Hotel	9.34	10.62	93.02	0.09	15.18	2.96
TOTALS (lbs/day, unmitigated)	17.61	19.84	176.90	0.17	28.56	5.57

Operational Mitigated Detail Report:

OPERATIONAL 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>PM25</u>
Condo/townhouse high rise	7.02	7.95	72.70	0.07	11.73	2.29
High turnover (sit-down) rest.	1.25	1.27	11.18	0.01	1.65	0.32
Hotel	9.34	10.62	93.02	0.09	15.18	2.96
TOTALS (lbs/day, mitigated)	17.61	19.84	176.90	0.17	28.56	5.57

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Local-Serving Retail Mitigation

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

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

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse high rise	2.88	4.17	dwelling units	184.00	767.28	6,786.59
High turnover (sit-down) rest.		63.59	1000 sq ft	4.09	260.08	951.97
Hotel		8.17	rooms	172.00	1,405.24	8,781.01
					2,432.60	16,519.57

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.6	1.1	98.7	0.2
Light Truck < 3750 lbs	6.8	2.9	94.2	2.9
Light Truck 3751-5750 lbs	22.8	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.0	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
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	0.1	0.0	0.0	100.0
Motorcycle	2.3	69.6	30.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Operational Changes to Defaults

**URBEMIS2007 Mitigated Summertime
Operational Emissions**

Detail Report for Summer Operational Mitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\glu\My Documents\Dawn's Projects\CCII\The Revision (August 2007)\City Center II Operational and Construction.urb9

Project Name: City Center II Operational and Construction

Project Location: Los Angeles County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25
Condo/townhouse high rise	6.76	7.58	69.36	0.07	11.19	2.18
High turnover (sit-down) rest.	1.23	1.24	10.96	0.01	1.61	0.32
Hotel	9.18	10.41	91.16	0.09	14.88	2.90
TOTALS (lbs/day, mitigated)	17.17	19.23	171.48	0.17	27.68	5.40

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Local-Serving Retail Mitigation

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

Note that the above percent is applied to a baseline of 9.57 and that product is

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subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse high rise	2.88	3.98	dwelling units	184.00	732.06	6,475.09
High turnover (sit-down) rest.		62.32	1000 sq ft	4.09	254.88	932.93
Hotel		8.01	rooms	172.00	1,377.14	8,605.39
					2,364.08	16,013.41

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.6	1.1	98.7	0.2
Light Truck < 3750 lbs	6.8	2.9	94.2	2.9
Light Truck 3751-5750 lbs	22.8	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.0	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
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	0.1	0.0	0.0	100.0
Motorcycle	2.3	69.6	30.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Operational Changes to Defaults

URBEMIS2007 Wintertime Emissions

Urbemis 2007 Version 9.2.0

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\glu\My Documents\Dawn's Projects\CCII\The Revision (August 2007)\City Center II Operational and Construction.urb9

Project Name: City Center II Operational and Construction

Project Location: Los Angeles County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>
2008 TOTALS (lbs/day unmitigated)	6.52	68.23	42.88	0.04	24.55	3.23	27.78	5.15	2.97	8.12
2008 TOTALS (lbs/day mitigated)	6.52	68.23	42.88	0.04	12.80	3.23	16.03	2.69	2.97	5.66
2009 TOTALS (lbs/day unmitigated)	22.89	40.41	49.60	0.04	0.17	2.83	3.00	0.06	2.60	2.66
2009 TOTALS (lbs/day mitigated)	22.89	40.41	49.60	0.04	0.17	2.83	3.00	0.06	2.60	2.66
2010 TOTALS (lbs/day unmitigated)	22.56	26.01	38.75	0.04	0.17	1.61	1.78	0.06	1.48	1.54
2010 TOTALS (lbs/day mitigated)	22.56	26.01	38.75	0.04	0.17	1.61	1.78	0.06	1.48	1.54

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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>
TOTALS (lbs/day, unmitigated)	10.58	4.24	2.39	0.01	0.09	0.09

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	18.63	23.88	172.37	0.15	28.56	5.57
TOTALS (lbs/day, mitigated)	18.63	23.88	172.37	0.15	28.56	5.57
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	29.21	28.12	174.76	0.16	28.65	5.66

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

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Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter 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>
Time Slice 3/3/2008-3/7/2008 Number Active Days: 5	2.23		10.73		9.14	1.18		1.91		3.00
		19.88		0.01			10.32		1.09	
Demolition 03/03/2008-03/07/2008	2.23		10.73		9.14	1.18		1.91	1.09	
		19.88		0.01			10.32			3.00
Fugitive Dust	0.00	0.00	0.00	0.00	9.09	0.00	9.09	1.89	0.00	1.89
Demo Off Road Diesel	1.31	8.68	4.91	0.00	0.00	0.68	0.68	0.00	0.62	0.62
Demo On Road Diesel	0.88	11.12	4.57	0.01	0.04	0.50	0.54	0.01	0.46	0.48
Demo Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 3/10/2008-6/27/2008 Number Active Days: 80	<u>6.52</u>		31.32		<u>24.55</u>	<u>3.23</u>		<u>5.15</u>		<u>8.12</u>
		<u>68.23</u>		<u>0.04</u>			<u>27.78</u>		<u>2.97</u>	
Mass Grading 03/10/2008-06/27/2008	6.52		31.32		24.55	3.23		5.15	2.97	
		68.23		0.04			27.78			8.12
Mass Grading Dust	0.00	0.00	0.00	0.00	24.39	0.00	24.39	5.09	0.00	5.09
Mass Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30
Mass Grading On Road Diesel	3.17	40.15	16.51	0.04	0.15	1.81	1.97	0.05	1.67	1.72
Mass Grading Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00

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Time Slice 6/30/2008-12/31/2008 Number Active Days: 133	5.71		<u>42.88</u>		0.16	1.83		0.06		1.73
		29.24		0.04			1.99		1.67	
Building 06/30/2008-02/27/2009	5.71		42.88		0.16	1.83		0.06	1.67	
		29.24		0.04			1.99			1.73
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22
Building Vendor Trips	0.84	9.56	7.42	0.01	0.05	0.43	0.49	0.02	0.40	0.42
Building Worker Trips	0.79	1.46	23.66	0.02	0.11	0.06	0.17	0.04	0.05	0.09
Time Slice 1/1/2009-2/27/2009 Number Active Days: 42	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 06/30/2008-02/27/2009	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/2/2009-3/16/2009 Number Active Days: 11	7.54		<u>49.60</u>		<u>0.17</u>	<u>2.83</u>		<u>0.06</u>		<u>2.66</u>
		<u>40.41</u>		<u>0.04</u>			<u>3.00</u>		<u>2.60</u>	
Asphalt 03/02/2009-03/16/2009	2.16		9.11		0.01	1.10		0.00	1.01	
		12.74		0.00			1.11			1.01
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.08	12.55	7.05	0.00	0.00	1.09	1.09	0.00	1.00	1.00
Paving On Road Diesel	0.01	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.07	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.00	0.01
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09

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Time Slice 1/1/2010-3/2/2010 Number Active Days: 43	<u>22.56</u>		<u>38.75</u>		<u>0.17</u>	<u>1.61</u>		<u>0.06</u>		<u>1.54</u>
		<u>26.01</u>		<u>0.04</u>			<u>1.78</u>		<u>1.48</u>	
Building 03/02/2009-10/29/2010	5.05		38.28		0.16	1.61		0.06	1.48	
		25.98		0.04			1.77			1.53
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51		0.47		0.00	0.00		0.00	0.00	
		0.03		0.00			0.00			0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 3/3/2010-10/29/2010 Number Active Days: 173	5.05		38.28		0.16	1.61		0.06		1.53
		25.98		0.04			1.77		1.48	
Building 03/02/2009-10/29/2010	5.05		38.28		0.16	1.61		0.06	1.48	
		25.98		0.04			1.77			1.53
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09

Phase Assumptions

Phase: Demolition 3/3/2008 - 3/7/2008 - Remove debris on site

Building Volume Total (cubic feet): 118853.4

Building Volume Daily (cubic feet): 21639.8

On Road Truck Travel (VMT): 300.55

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: Mass Grading 3/10/2008 - 6/27/2008 - Excavation

Total Acres Disturbed: 7.02

Maximum Daily Acreage Disturbed: 1.76

Fugitive Dust Level of Detail: High

Onsite Haulage: 0 ton-miles/day; Offsite haulage: 36.4 ton-mils/day

On Road Truck Travel (VMT): 1085.38

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 3/2/2009 - 3/16/2009 - Asphalt Paving

Acres to be Paved: 0.04

Off-Road Equipment:

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

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

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

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

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Phase: Building Construction 6/30/2008 - 2/27/2009 - Subgrade construction

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: Building Construction 3/2/2009 - 10/29/2010 - Above grade construction

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 6/30/2009 - 3/2/2010 - Architectural Coating

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

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

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

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Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter 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>
Time Slice 3/3/2008-3/7/2008 Number Active Days: 5	2.23		10.73		9.14	1.18		1.91		3.00
		19.88		0.01			10.32		1.09	
Demolition 03/03/2008-03/07/2008	2.23		10.73		9.14	1.18		1.91	1.09	
		19.88		0.01			10.32			3.00
Fugitive Dust	0.00	0.00	0.00	0.00	9.09	0.00	9.09	1.89	0.00	1.89
Demo Off Road Diesel	1.31	8.68	4.91	0.00	0.00	0.68	0.68	0.00	0.62	0.62
Demo On Road Diesel	0.88	11.12	4.57	0.01	0.04	0.50	0.54	0.01	0.46	0.48
Demo Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 3/10/2008-6/27/2008 Number Active Days: 80	<u>6.52</u>		31.32		<u>12.80</u>	<u>3.23</u>		<u>2.69</u>		<u>5.66</u>
		<u>68.23</u>		<u>0.04</u>			<u>16.03</u>		<u>2.97</u>	
Mass Grading 03/10/2008-06/27/2008	6.52		31.32		12.80	3.23		2.69	2.97	
		68.23		0.04			16.03			5.66
Mass Grading Dust	0.00	0.00	0.00	0.00	12.64	0.00	12.64	2.64	0.00	2.64
Mass Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30
Mass Grading On Road Diesel	3.17	40.15	16.51	0.04	0.15	1.81	1.97	0.05	1.67	1.72
Mass Grading Worker Trips	0.04	0.08	1.24	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Time Slice 6/30/2008-12/31/2008 Number Active Days: 133	5.71		<u>42.88</u>		0.16	1.83		0.06		1.73
		29.24		0.04			1.99		1.67	
Building 06/30/2008-02/27/2009	5.71		42.88		0.16	1.83		0.06	1.67	
		29.24		0.04			1.99			1.73
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22
Building Vendor Trips	0.84	9.56	7.42	0.01	0.05	0.43	0.49	0.02	0.40	0.42
Building Worker Trips	0.79	1.46	23.66	0.02	0.11	0.06	0.17	0.04	0.05	0.09

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Time Slice 1/1/2009-2/27/2009 Number Active Days: 42	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 06/30/2008-02/27/2009	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/2/2009-3/16/2009 Number Active Days: 11	7.54		49.60		<u>0.17</u>	<u>2.83</u>		<u>0.06</u>		<u>2.66</u>
		<u>40.41</u>		<u>0.04</u>			<u>3.00</u>		<u>2.60</u>	
Asphalt 03/02/2009-03/16/2009	2.16		9.11		0.01	1.10		0.00	1.01	
		12.74		0.00			1.11			1.01
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.08	12.55	7.05	0.00	0.00	1.09	1.09	0.00	1.00	1.00
Paving On Road Diesel	0.01	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Worker Trips	0.07	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.00	0.01
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Time Slice 3/17/2009-6/29/2009 Number Active Days: 75	5.38		40.49		0.16	1.73		0.06		1.65
		27.67		0.04			1.90		1.59	
Building 03/02/2009-10/29/2010	5.38		40.49		0.16	1.73		0.06	1.59	
		27.67		0.04			1.90			1.65
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09

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Time Slice 6/30/2009-12/31/2009 Number Active Days: 133	<u>22.89</u>	40.98	0.17	1.73	0.06	1.65				
		27.70	0.04		1.90	1.59				
Building 03/02/2009-10/29/2010	5.38	40.49	0.16	1.73	0.06	1.59				
		27.67	0.04		1.90	1.65				
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17
Building Vendor Trips	0.79	8.98	6.90	0.01	0.05	0.39	0.45	0.02	0.36	0.38
Building Worker Trips	0.72	1.34	22.08	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.03	0.00		0.00	0.00			0.00	0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 1/1/2010-3/2/2010 Number Active Days: 43	<u>22.56</u>	<u>38.75</u>	<u>0.17</u>	<u>1.61</u>	<u>0.06</u>	<u>1.54</u>				
		<u>26.01</u>	<u>0.04</u>		<u>1.78</u>	<u>1.48</u>				
Building 03/02/2009-10/29/2010	5.05	38.28	0.16	1.61	0.06	1.48				
		25.98	0.04		1.77	1.53				
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09
Coating 06/30/2009-03/02/2010	17.51	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.03	0.00		0.00	0.00			0.00	0.00
Architectural Coating	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time Slice 3/3/2010-10/29/2010 Number Active Days: 173	5.05	38.28	0.16	1.61	0.06	1.53				
		25.98	0.04		1.77	1.48				
Building 03/02/2009-10/29/2010	5.05	38.28	0.16	1.61	0.06	1.48				
		25.98	0.04		1.77	1.53				
Building Off Road Diesel	3.65	16.55	11.20	0.00	0.00	1.19	1.19	0.00	1.10	1.10
Building Vendor Trips	0.73	8.21	6.41	0.01	0.05	0.35	0.41	0.02	0.32	0.34
Building Worker Trips	0.66	1.23	20.68	0.02	0.11	0.06	0.18	0.04	0.05	0.09

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 3/10/2008 - 6/27/2008 - Excavation
 For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:
 PM10: 61% PM25: 61%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter 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>
Natural Gas	0.24	3.22	1.96	0.00	0.01	0.01
Hearth	0.06	1.02	0.43	0.01	0.08	0.08
Landscaping - No Winter Emissions						
Consumer Products	9.44					
Architectural Coatings	0.84					
TOTALS (lbs/day, unmitigated)	10.58	4.24	2.39	0.01	0.09	0.09

Area Source Changes to Defaults

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

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter 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>
Condo/townhouse high rise	7.11	9.58	69.75	0.06	11.73	2.29
High turnover (sit-down) rest.	1.49	1.52	11.39	0.01	1.65	0.32
Hotel	10.03	12.78	91.23	0.08	15.18	2.96
TOTALS (lbs/day, unmitigated)	18.63	23.88	172.37	0.15	28.56	5.57

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Condo/townhouse high rise	7.11	9.58	69.75	0.06	11.73	2.29
High turnover (sit-down) rest.	1.49	1.52	11.39	0.01	1.65	0.32
Hotel	10.03	12.78	91.23	0.08	15.18	2.96
TOTALS (lbs/day, mitigated)	18.63	23.88	172.37	0.15	28.56	5.57

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Local-Serving Retail Mitigation

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

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

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse high rise	2.88	4.17	dwelling units	184.00	767.28	6,786.59
High turnover (sit-down) rest.		63.59	1000 sq ft	4.09	260.08	951.97
Hotel		8.17	rooms	172.00	1,405.24	8,781.01
					2,432.60	16,519.57

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.6	1.1	98.7	0.2
Light Truck < 3750 lbs	6.8	2.9	94.2	2.9
Light Truck 3751-5750 lbs	22.8	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.0	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
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	0.1	0.0	0.0	100.0
Motorcycle	2.3	69.6	30.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Operational Changes to Defaults

**URBEMIS2007 Mitigated Wintertime
Operational Emissions**

Detail Report for Winter Operational Mitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\glu\My Documents\Dawn's Projects\CCII\The Revision (August 2007)\City Center II Operational and Construction.urb9

Project Name: City Center II Operational and Construction

Project Location: Los Angeles County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Mitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25
Condo/townhouse high rise	6.81	9.14	66.55	0.06	11.19	2.18
High turnover (sit-down) rest.	1.46	1.49	11.16	0.01	1.61	0.32
Hotel	9.85	12.52	89.40	0.08	14.88	2.90
TOTALS (lbs/day, mitigated)	18.12	23.15	167.11	0.15	27.68	5.40

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Local-Serving Retail Mitigation

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

Note that the above percent is applied to a baseline of 9.57 and that product is

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subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse high rise	2.88	3.98	dwelling	184.00	732.06	6,475.09
High turnover (sit-down) rest.		62.32	1000 ^{unit} sq ft	4.09	254.88	932.93
Hotel		8.01	rooms	172.00	1,377.14	8,605.39
					2,364.08	16,013.41

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.6	1.1	98.7	0.2
Light Truck < 3750 lbs	6.8	2.9	94.2	2.9
Light Truck 3751-5750 lbs	22.8	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.0	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
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	0.1	0.0	0.0	100.0
Motorcycle	2.3	69.6	30.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land

High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5

Operational Changes to Defaults