Greenhouse Gas Emissions Worksheet

Project Parameters		
	2011	
Vehicles (trips/day)	1,388	(Assumes these occur 365 days/year)
Electricity used (MWh/year)	130	MWh = Megawatt hour
(mscf/year)	0.1	mscf = million standard cubic feet
tons/year)	20	

Emission Source	Total (metric tons/yr)				
	CO_2	CH_4	N_2O	CO_2e	Percent of Total
Construction (30-yr amort.)	3.94	0.000257	6.1E-06	4.0	0.0022%
Vehicles	1,678	0.100283	0.180834	1,734	95.5%
Electricity Production	35.96	0.000395	0.000218	36	2.0%
Natural Gas Combustion(1)	17.51	0.000104	9.98E-05	18	0.0097%
Solid Waste	23.6	--	--	23.6	1.3%
Other Area Sources(2)	0.47	--	--	0.47	0.0003%
Total Annual Emissions	1,760	0.101039	0.181158	1,816	100.0%

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

(1) CO_2 emissions for Vehicles and Natural Gas from URBEMIS 2007 outputs, if available.

(2) Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 outputs.

tons/metric ton
1.1025

U.S. or Metric?
○ Tons ◉ Metric Tons

Emission Source	Total CO2e (Tg/yr)
Vehicles	0.0017
Electricity Production	0.000036
Natural Gas Combustion	0.000018
Solid Waste	0.000024
Total (CO_2e)	0.0018
% of SCAG 2004 total	0.001
% of State 2004 total	0.00038

1,000,000 tonne/Tg

Year of data	Comparison Area GHG Usage		
2004	SCAG	176.79	(Tg/yr)
2004	State	480	(Tg/yr)

Global warming potentials (GWPs) are used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The GWP provides a construct for converting emissions of various gases into a common measure, which allows climate analysts to aggregate the radiative impacts of various GHGs into a uniform measure denominated in carbon or CO_2 equivalents. The generally accepted authority on GWPs is the Intergovernmental Panel on Climate Change (IPCC). In 2007, the IPCC updated its estimates of GWPs for key GHGs. The table below lists the GWPs to calculate carbon dioxide equivalents (CO_2e)

Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	25
Nitrous Oxide	120	298
HFC-23	264	14800
HFC-134a	14.6	1430
HFC-152a	1.5	124
PFC: Tetrafluoromethane (CF_4)	50000	7390
PFC: Hexafluoromethane (C_2F_6)	10000	12200
Sulfur Hexafluoride (SF_6)	3200	22800

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Keithl\Application Data\Urbemis\Version9a\Projects\4201 Willow.urb924

Project Name: 4201 Willow

Project Location: South Coast 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

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (tons/year unmitigated)	0.26	1.25	0.72	0.00	0.19	0.07	0.26	0.04	0.06	0.10	130.43
2011 TOTALS (tons/year mitigated)	0.26	1.25	0.72	0.00	0.11	0.07	0.18	0.02	0.06	0.09	130.43
Percent Reduction	0.00	0.00	0.00	0.00	43.35	0.00	31.74	43.27	0.00	16.59	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.03	0.02	0.29	0.00	0.00	0.00	19.82

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.52	2.36	19.34	0.02	3.93	0.76	2,259.78

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.55	2.38	19.63	0.02	3.93	0.76	2,279.60

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Keithl\Application Data\Urbemis\Version9a\Projects\4201 Willow.urb924

Project Name: 4201 Willow

Project Location: South Coast 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

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	19.54	23.49	12.93	0.00	5.01	1.18	6.18	1.05	1.08	2.13	2,371.69
2011 TOTALS (lbs/day mitigated)	19.54	23.49	12.93	0.00	2.83	1.18	4.01	0.59	1.08	1.67	2,371.69

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.18	0.11	1.62	0.00	0.01	0.01	108.60

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	7.97	12.10	107.38	0.13	21.51	4.18	12,787.94

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	8.15	12.21	109.00	0.13	21.52	4.19	12,896.54

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Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 3/1/2011-3/18/2011 Active Days: 14	1.08	7.28	5.56	0.00	0.01	0.55	0.56	0.00	0.51	0.51	824.67
Demolition 03/01/2011-03/18/2011	1.08	7.28	5.56	0.00	0.01	0.55	0.56	0.00	0.51	0.51	824.67
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	1.05	7.22	4.58	0.00	0.00	0.55	0.55	0.00	0.50	0.50	700.30
Demo 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
Demo Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37
Time Slice 3/21/2011-5/20/2011 Active Days: 45	2.86	**23.49**	**12.93**	0.00	**5.01**	**1.18**	**6.18**	**1.05**	**1.08**	**2.13**	**2,371.69**
Mass Grading 03/21/2011-05/20/2011	2.86	23.49	12.93	0.00	5.01	1.18	6.18	1.05	1.08	2.13	2,371.69
Mass Grading Dust	0.00	0.00	0.00	0.00	5.00	0.00	5.00	1.04	0.00	1.04	0.00
Mass Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Mass 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
Mass Grading Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37
Time Slice 5/23/2011-7/1/2011 Active Days: 30	2.86	**23.49**	**12.93**	0.00	**5.01**	**1.18**	**6.18**	**1.05**	**1.08**	**2.13**	**2,371.69**
Fine Grading 05/23/2011-07/01/2011	2.86	23.49	12.93	0.00	5.01	1.18	6.18	1.05	1.08	2.13	2,371.69
Fine Grading Dust	0.00	0.00	0.00	0.00	5.00	0.00	5.00	1.04	0.00	1.04	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	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	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37

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Time Slice 7/4/2011-7/8/2011 Active Days: 5	1.98	16.48	9.05	0.00	0.01	0.82	0.83	0.00	0.76	0.76	1,839.01
Trenching 07/04/2011-07/08/2011	1.98	16.48	9.05	0.00	0.01	0.82	0.83	0.00	0.76	0.76	1,839.01
Trenching Off Road Diesel	1.95	16.42	8.07	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,714.64
Trenching Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37
Time Slice 7/11/2011-7/22/2011 Active Days: 10	2.05	11.86	8.81	**0.00**	0.01	1.00	1.02	0.00	0.92	0.93	1,272.94
Asphalt 07/11/2011-07/22/2011	2.05	11.86	8.81	0.00	0.01	1.00	1.02	0.00	0.92	0.93	1,272.94
Paving Off-Gas	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.04	0.50	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	76.07
Paving Worker Trips	0.05	0.10	1.71	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.64
Time Slice 7/25/2011-9/30/2011 Active Days: 50	1.14	8.63	5.32	0.00	0.00	0.55	0.55	0.00	0.50	0.51	984.66
Building 07/25/2011-09/30/2011	1.14	8.63	5.32	0.00	0.00	0.55	0.55	0.00	0.50	0.51	984.66
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.01	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.68
Building Worker Trips	0.02	0.03	0.57	0.00	0.00	0.00	0.01	0.00	0.00	0.00	72.59
Time Slice 10/3/2011-10/14/2011 Active Days: 10	**19.54**	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.36
Coating 10/03/2011-10/14/2011	19.54	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.36
Architectural Coating	19.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.36

Phase Assumptions

Phase: Demolition 3/1/2011 - 3/18/2011 - Default Demolition Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

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On Road Truck Travel (VMT): 0

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 5/23/2011 - 7/1/2011 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 2

Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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

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

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

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 3/21/2011 - 5/20/2011 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 2

Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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

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

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

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

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Phase: Trenching 7/4/2011 - 7/8/2011 - Default Trenching Description

Off-Road Equipment:

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

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

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

Phase: Paving 7/11/2011 - 7/22/2011 - Default Paving Description

Acres to be Paved: 0.5

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

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 7/25/2011 - 9/30/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 10/3/2011 - 10/14/2011 - Default Architectural Coating Description

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

Construction Mitigated Detail Report:

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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
Time Slice 3/1/2011-3/18/2011 Active Days: 14	1.08	7.28	5.56	0.00	0.01	0.55	0.56	0.00	0.51	0.51	824.67
Demolition 03/01/2011-03/18/2011	1.08	7.28	5.56	0.00	0.01	0.55	0.56	0.00	0.51	0.51	824.67
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	1.05	7.22	4.58	0.00	0.00	0.55	0.55	0.00	0.50	0.50	700.30
Demo 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
Demo Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37
Time Slice 3/21/2011-5/20/2011 Active Days: 45	2.86	**23.49**	**12.93**	0.00	2.83	**1.18**	4.01	0.59	**1.08**	1.67	**2,371.69**
Mass Grading 03/21/2011-05/20/2011	2.86	23.49	12.93	0.00	2.83	1.18	4.01	0.59	1.08	1.67	2,371.69
Mass Grading Dust	0.00	0.00	0.00	0.00	2.83	0.00	2.83	0.59	0.00	0.59	0.00
Mass Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Mass 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
Mass Grading Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37
Time Slice 5/23/2011-7/1/2011 Active Days: 30	2.86	**23.49**	**12.93**	0.00	2.83	**1.18**	4.01	0.59	**1.08**	1.67	**2,371.69**
Fine Grading 05/23/2011-07/01/2011	2.86	23.49	12.93	0.00	2.83	1.18	4.01	0.59	1.08	1.67	2,371.69
Fine Grading Dust	0.00	0.00	0.00	0.00	2.83	0.00	2.83	0.59	0.00	0.59	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	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	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37

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Time Slice 7/4/2011-7/8/2011 Active Days: 5	1.98	16.48	9.05	0.00	0.01	0.82	0.83	0.00	0.76	0.76	1,839.01
Trenching 07/04/2011-07/08/2011	1.98	16.48	9.05	0.00	0.01	0.82	0.83	0.00	0.76	0.76	1,839.01
Trenching Off Road Diesel	1.95	16.42	8.07	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,714.64
Trenching Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.37
Time Slice 7/11/2011-7/22/2011 Active Days: 10	2.05	11.86	8.81	**0.00**	0.01	1.00	1.02	0.00	0.92	0.93	1,272.94
Asphalt 07/11/2011-07/22/2011	2.05	11.86	8.81	0.00	0.01	1.00	1.02	0.00	0.92	0.93	1,272.94
Paving Off-Gas	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.04	0.50	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	76.07
Paving Worker Trips	0.05	0.10	1.71	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.64
Time Slice 7/25/2011-9/30/2011 Active Days: 50	1.14	8.63	5.32	0.00	0.00	0.55	0.55	0.00	0.50	0.51	984.66
Building 07/25/2011-09/30/2011	1.14	8.63	5.32	0.00	0.00	0.55	0.55	0.00	0.50	0.51	984.66
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.01	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.68
Building Worker Trips	0.02	0.03	0.57	0.00	0.00	0.00	0.01	0.00	0.00	0.00	72.59
Time Slice 10/3/2011-10/14/2011 Active Days: 10	**19.54**	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.36
Coating 10/03/2011-10/14/2011	19.54	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.36
Architectural Coating	19.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.36

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 5/23/2011 - 7/1/2011 - Default Fine Site Grading/Excavation Description

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

PM10: 55% PM25: 55%

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The following mitigation measures apply to Phase: Mass Grading 3/21/2011 - 5/20/2011 - Default Mass Site Grading/Excavation Description

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

PM10: 55% PM25: 55%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.09	0.07	0.00	0.00	0.00	105.79
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.05						
TOTALS (lbs/day, unmitigated)	0.18	0.11	1.62	0.00	0.01	0.01	108.60

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Convenience market with gas pumps	7.97	12.10	107.38	0.13	21.51	4.18	12,787.94
TOTALS (lbs/day, unmitigated)	7.97	12.10	107.38	0.13	21.51	4.18	12,787.94

Operational Settings:

Does not include correction for passby trips

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Does not include double counting adjustment for internal trips

Analysis Year: 2012 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
Convenience market with gas pumps		152.18	1000 sq ft	9.12	1,387.88	12,453.46
					1,387.88	12,453.46

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
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	2.8	60.7	39.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

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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 use)						
Convenience market with gas pumps				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Keithl\Application Data\Urbemis\Version9a\Projects\4201 Willow.urb924

Project Name: 4201 Willow

Project Location: South Coast 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

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2011 TOTALS (lbs/day unmitigated)	19.54	23.49	12.93	0.00	5.01	1.18	6.18	1.05	1.08	2.13	2,371.69
2011 TOTALS (lbs/day mitigated)	19.54	23.49	12.93	0.00	2.83	1.18	4.01	0.59	1.08	1.67	2,371.69

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.06	0.09	0.07	0.00	0.00	0.00	105.79

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	9.12	14.56	103.17	0.11	21.51	4.18	11,571.25

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	9.18	14.65	103.24	0.11	21.51	4.18	11,677.04

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.09	0.07	0.00	0.00	0.00	105.79
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.05						
TOTALS (lbs/day, unmitigated)	0.06	0.09	0.07	0.00	0.00	0.00	105.79

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Convenience market with gas pumps	9.12	14.56	103.17	0.11	21.51	4.18	11,571.25
TOTALS (lbs/day, unmitigated)	9.12	14.56	103.17	0.11	21.51	4.18	11,571.25

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 60 Season: Winter

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Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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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
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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)						
Convenience market with gas pumps				2.0	1.0	97.0

Operational Changes to Defaults