

APPENDIX B
AIR QUALITY TECHNICAL DATA

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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>
2010 TOTALS (lbs/day unmitigated)	234.36	146.54	330.85	0.43	1,285.02	8.11	1,290.67	268.37	7.39	273.56	48,815.63
2010 TOTALS (lbs/day mitigated)	234.36	146.54	330.85	0.43	665.78	8.11	671.43	139.04	7.39	144.24	48,815.63

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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>
2010 TOTALS (lbs/day unmitigated)	234.36	146.54	330.85	0.43	1,285.02	8.11	1,290.67	268.37	7.39	273.56	48,815.63
2010 TOTALS (lbs/day mitigated)	234.36	146.54	330.85	0.43	665.78	8.11	671.43	139.04	7.39	144.24	48,815.63

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5 Total</u>	<u>CO2</u>
Time Slice 1/1/2010-1/29/2010 Active Days: 21	14.46	127.90	62.94	0.00	<u>1,285.02</u>	5.65	<u>1,290.67</u>	<u>268.37</u>	5.20	<u>273.56</u>	12,089.77
Mass Grading 01/01/2010-01/31/2010	14.46	127.90	62.94	0.00	1,285.02	5.65	1,290.67	268.37	5.20	273.56	12,089.77
Mass Grading Dust	0.00	0.00	0.00	0.00	1,285.00	0.00	1,285.00	268.36	0.00	268.36	0.00
Mass Grading Off Road Diesel	14.37	127.73	59.99	0.00	0.00	5.64	5.64	0.00	5.19	5.19	11,716.43
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	0.09	0.17	2.95	0.00	0.02	0.01	0.03	0.01	0.01	0.01	373.33
Time Slice 2/1/2010-12/31/2010 Active Days: 240	<u>234.36</u>	<u>146.54</u>	<u>330.85</u>	<u>0.43</u>	1.85	<u>8.11</u>	9.96	0.66	<u>7.39</u>	8.05	<u>48,815.63</u>
Asphalt 02/01/2010-12/31/2010	5.07	25.09	13.85	0.01	0.03	1.92	1.95	0.01	1.76	1.77	2,388.98
Paving Off-Gas	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	10.47	0.00	0.00	1.68	1.68	0.00	1.55	1.55	1,418.81
Paving On Road Diesel	0.43	5.85	2.14	0.01	0.03	0.23	0.26	0.01	0.21	0.22	814.61
Paving Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Building 02/01/2010-12/31/2010	15.59	85.72	294.51	0.41	1.78	4.42	6.20	0.63	4.00	4.63	42,231.15
Building Off Road Diesel	4.08	23.31	14.31	0.00	0.00	1.67	1.67	0.00	1.54	1.54	2,259.28
Building Vendor Trips	4.01	48.22	36.97	0.09	0.32	1.95	2.28	0.11	1.79	1.90	9,226.74
Building Worker Trips	7.50	14.19	243.23	0.32	1.45	0.80	2.25	0.52	0.67	1.20	30,745.13
Coating 02/01/2010-12/31/2010	209.52	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Architectural Coating	209.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.13	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Trenching 02/01/2010-12/31/2010	4.18	35.49	18.40	0.00	0.01	1.76	1.77	0.00	1.62	1.62	3,678.17
Trenching Off Road Diesel	4.12	35.38	16.43	0.00	0.00	1.75	1.75	0.00	1.61	1.61	3,429.28
Trenching Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.89

Phase Assumptions

Phase: Mass Grading 1/1/2010 - 1/31/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 513.99

Maximum Daily Acreage Disturbed: 128.5

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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- 2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Plate Compactors (8 hp) operating at a 0.43 load factor for 8 hours per day
- 2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 4 Scrapers (313 hp) operating at a 0.72 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
- 2 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 2/1/2010 - 12/31/2010 - Default Trenching Description

Off-Road Equipment:

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

Phase: Paving 2/1/2010 - 12/31/2010 - Default Paving Description

Acres to be Paved: 128.5

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 2/1/2010 - 12/31/2010 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 2/1/2010 - 12/31/2010 - 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

Urbemis 2007 Version 9.2.4

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

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 1/1/2010-1/29/2010 Active Days: 21	14.46	127.90	62.94	0.00	<u>665.78</u>	5.65	<u>671.43</u>	<u>139.04</u>	5.20	<u>144.24</u>	12,089.77
Mass Grading 01/01/2010-01/31/2010	14.46	127.90	62.94	0.00	665.78	5.65	671.43	139.04	5.20	144.24	12,089.77
Mass Grading Dust	0.00	0.00	0.00	0.00	665.76	0.00	665.76	139.04	0.00	139.04	0.00
Mass Grading Off Road Diesel	14.37	127.73	59.99	0.00	0.00	5.64	5.64	0.00	5.19	5.19	11,716.43
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	0.09	0.17	2.95	0.00	0.02	0.01	0.03	0.01	0.01	0.01	373.33
Time Slice 2/1/2010-12/31/2010 Active Days: 240	<u>234.36</u>	<u>146.54</u>	<u>330.85</u>	<u>0.43</u>	1.85	<u>8.11</u>	9.96	0.66	<u>7.39</u>	8.05	<u>48,815.63</u>
Asphalt 02/01/2010-12/31/2010	5.07	25.09	13.85	0.01	0.03	1.92	1.95	0.01	1.76	1.77	2,388.98
Paving Off-Gas	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	10.47	0.00	0.00	1.68	1.68	0.00	1.55	1.55	1,418.81
Paving On Road Diesel	0.43	5.85	2.14	0.01	0.03	0.23	0.26	0.01	0.21	0.22	814.61
Paving Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Building 02/01/2010-12/31/2010	15.59	85.72	294.51	0.41	1.78	4.42	6.20	0.63	4.00	4.63	42,231.15
Building Off Road Diesel	4.08	23.31	14.31	0.00	0.00	1.67	1.67	0.00	1.54	1.54	2,259.28
Building Vendor Trips	4.01	48.22	36.97	0.09	0.32	1.95	2.28	0.11	1.79	1.90	9,226.74
Building Worker Trips	7.50	14.19	243.23	0.32	1.45	0.80	2.25	0.52	0.67	1.20	30,745.13
Coating 02/01/2010-12/31/2010	209.52	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Architectural Coating	209.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.13	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Trenching 02/01/2010-12/31/2010	4.18	35.49	18.40	0.00	0.01	1.76	1.77	0.00	1.62	1.62	3,678.17
Trenching Off Road Diesel	4.12	35.38	16.43	0.00	0.00	1.75	1.75	0.00	1.61	1.61	3,429.28
Trenching Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.89

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/1/2010 - 1/31/2010 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

Phase Assumptions

Phase: Mass Grading 1/1/2010 - 1/31/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 513.99

Maximum Daily Acreage Disturbed: 128.5

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Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Plate Compactors (8 hp) operating at a 0.43 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

4 Scrapers (313 hp) operating at a 0.72 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

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

Phase: Trenching 2/1/2010 - 12/31/2010 - Default Trenching Description

Off-Road Equipment:

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

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

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

Phase: Paving 2/1/2010 - 12/31/2010 - Default Paving Description

Acres to be Paved: 128.5

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

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

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 2/1/2010 - 12/31/2010 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

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

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 2/1/2010 - 12/31/2010 - 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

Urbemis 2007 Version 9.2.4

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5 Total</u>	<u>CO2</u>
Time Slice 1/1/2010-1/29/2010 Active Days: 21	14.46	127.90	62.94	0.00	<u>1,285.02</u>	5.65	<u>1,290.67</u>	<u>268.37</u>	5.20	<u>273.56</u>	12,089.77
Mass Grading 01/01/2010-01/31/2010	14.46	127.90	62.94	0.00	1,285.02	5.65	1,290.67	268.37	5.20	273.56	12,089.77
Mass Grading Dust	0.00	0.00	0.00	0.00	1,285.00	0.00	1,285.00	268.36	0.00	268.36	0.00
Mass Grading Off Road Diesel	14.37	127.73	59.99	0.00	0.00	5.64	5.64	0.00	5.19	5.19	11,716.43
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	0.09	0.17	2.95	0.00	0.02	0.01	0.03	0.01	0.01	0.01	373.33
Time Slice 2/1/2010-12/31/2010 Active Days: 240	<u>234.36</u>	<u>146.54</u>	<u>330.85</u>	<u>0.43</u>	1.85	<u>8.11</u>	9.96	0.66	<u>7.39</u>	8.05	<u>48,815.63</u>
Asphalt 02/01/2010-12/31/2010	5.07	25.09	13.85	0.01	0.03	1.92	1.95	0.01	1.76	1.77	2,388.98
Paving Off-Gas	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	10.47	0.00	0.00	1.68	1.68	0.00	1.55	1.55	1,418.81
Paving On Road Diesel	0.43	5.85	2.14	0.01	0.03	0.23	0.26	0.01	0.21	0.22	814.61
Paving Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Building 02/01/2010-12/31/2010	15.59	85.72	294.51	0.41	1.78	4.42	6.20	0.63	4.00	4.63	42,231.15
Building Off Road Diesel	4.08	23.31	14.31	0.00	0.00	1.67	1.67	0.00	1.54	1.54	2,259.28
Building Vendor Trips	4.01	48.22	36.97	0.09	0.32	1.95	2.28	0.11	1.79	1.90	9,226.74
Building Worker Trips	7.50	14.19	243.23	0.32	1.45	0.80	2.25	0.52	0.67	1.20	30,745.13
Coating 02/01/2010-12/31/2010	209.52	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Architectural Coating	209.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.13	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Trenching 02/01/2010-12/31/2010	4.18	35.49	18.40	0.00	0.01	1.76	1.77	0.00	1.62	1.62	3,678.17
Trenching Off Road Diesel	4.12	35.38	16.43	0.00	0.00	1.75	1.75	0.00	1.61	1.61	3,429.28
Trenching Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.89

Phase Assumptions

Phase: Mass Grading 1/1/2010 - 1/31/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 513.99

Maximum Daily Acreage Disturbed: 128.5

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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- 2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Plate Compactors (8 hp) operating at a 0.43 load factor for 8 hours per day
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- 4 Scrapers (313 hp) operating at a 0.72 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
- 2 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 2/1/2010 - 12/31/2010 - Default Trenching Description

Off-Road Equipment:

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

Phase: Paving 2/1/2010 - 12/31/2010 - Default Paving Description

Acres to be Paved: 128.5

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 2/1/2010 - 12/31/2010 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 2/1/2010 - 12/31/2010 - 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

Urbemis 2007 Version 9.2.4

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

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5 Total</u>	<u>CO2</u>
Time Slice 1/1/2010-1/29/2010 Active Days: 21	14.46	127.90	62.94	0.00	<u>665.78</u>	5.65	<u>671.43</u>	<u>139.04</u>	5.20	<u>144.24</u>	12,089.77
Mass Grading 01/01/2010-01/31/2010	14.46	127.90	62.94	0.00	665.78	5.65	671.43	139.04	5.20	144.24	12,089.77
Mass Grading Dust	0.00	0.00	0.00	0.00	665.76	0.00	665.76	139.04	0.00	139.04	0.00
Mass Grading Off Road Diesel	14.37	127.73	59.99	0.00	0.00	5.64	5.64	0.00	5.19	5.19	11,716.43
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	0.09	0.17	2.95	0.00	0.02	0.01	0.03	0.01	0.01	0.01	373.33
Time Slice 2/1/2010-12/31/2010 Active Days: 240	<u>234.36</u>	<u>146.54</u>	<u>330.85</u>	<u>0.43</u>	1.85	<u>8.11</u>	9.96	0.66	<u>7.39</u>	8.05	<u>48,815.63</u>
Asphalt 02/01/2010-12/31/2010	5.07	25.09	13.85	0.01	0.03	1.92	1.95	0.01	1.76	1.77	2,388.98
Paving Off-Gas	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	10.47	0.00	0.00	1.68	1.68	0.00	1.55	1.55	1,418.81
Paving On Road Diesel	0.43	5.85	2.14	0.01	0.03	0.23	0.26	0.01	0.21	0.22	814.61
Paving Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Building 02/01/2010-12/31/2010	15.59	85.72	294.51	0.41	1.78	4.42	6.20	0.63	4.00	4.63	42,231.15
Building Off Road Diesel	4.08	23.31	14.31	0.00	0.00	1.67	1.67	0.00	1.54	1.54	2,259.28
Building Vendor Trips	4.01	48.22	36.97	0.09	0.32	1.95	2.28	0.11	1.79	1.90	9,226.74
Building Worker Trips	7.50	14.19	243.23	0.32	1.45	0.80	2.25	0.52	0.67	1.20	30,745.13
Coating 02/01/2010-12/31/2010	209.52	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Architectural Coating	209.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.13	0.24	4.09	0.01	0.02	0.01	0.04	0.01	0.01	0.02	517.34
Trenching 02/01/2010-12/31/2010	4.18	35.49	18.40	0.00	0.01	1.76	1.77	0.00	1.62	1.62	3,678.17
Trenching Off Road Diesel	4.12	35.38	16.43	0.00	0.00	1.75	1.75	0.00	1.61	1.61	3,429.28
Trenching Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.89

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/1/2010 - 1/31/2010 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

Phase Assumptions

Phase: Mass Grading 1/1/2010 - 1/31/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 513.99

Maximum Daily Acreage Disturbed: 128.5

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Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Plate Compactors (8 hp) operating at a 0.43 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

4 Scrapers (313 hp) operating at a 0.72 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

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

Phase: Trenching 2/1/2010 - 12/31/2010 - Default Trenching Description

Off-Road Equipment:

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

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

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

Phase: Paving 2/1/2010 - 12/31/2010 - Default Paving Description

Acres to be Paved: 128.5

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

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

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 2/1/2010 - 12/31/2010 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

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

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 2/1/2010 - 12/31/2010 - 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

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Construction.urb924

Project Name: Orange General Plan

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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>
2010 TOTALS (tons/year unmitigated)	28.27	18.93	40.36	0.05	13.71	1.03	14.75	2.90	0.94	3.84	5,984.82
2010 TOTALS (tons/year mitigated)	28.27	18.93	40.36	0.05	7.21	1.03	8.24	1.54	0.94	2.48	5,984.82
Percent Reduction	0.00	0.00	0.00	0.00	47.41	0.00	44.09	46.87	0.00	35.37	0.00

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Operations.urb924
Project Name: Orange General Plan Operations
Project Location: Orange County
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

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)	1,598.82	470.15	857.48	0.03	2.47	2.44	581,350.25

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)	1,274.00	1,403.28	16,028.22	49.39	8,049.43	1,562.48	4,859,076.95

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)	2,872.82	1,873.43	16,885.70	49.42	8,051.90	1,564.92	5,440,427.20

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Operations.urb924
Project Name: Orange General Plan Operations
Project Location: Orange County
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	5,201.79	775.84	10,544.67	28.84	1,596.06	1,536.51	999,485.79

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)	1,469.68	1,684.36	14,946.51	41.07	8,049.43	1,562.48	4,387,329.97

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)	6,671.47	2,460.20	25,491.18	69.91	9,645.49	3,098.99	5,386,815.76

Urbemis 2007 Version 9.2.4

Detail Report for Summer Area Source Unmitigated Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Urbemis\Orange GP Area Source.urb924

Project Name: Orange GP Area Source

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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	35.11	463.37	257.55	0.00	0.87	0.86	580,384.67
Hearth - No Summer Emissions							
Landscape	107.33	6.78	599.93	0.03	1.60	1.58	965.58
Consumer Products	1,214.63						
Architectural Coatings	241.75						
TOTALS (lbs/day, unmitigated)	1,598.82	470.15	857.48	0.03	2.47	2.44	581,350.25

Area Source Changes to Defaults

Urbemis 2007 Version 9.2.4

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

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Operations.urb924

Project Name: Orange General Plan Operations

Project Location: Orange 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, Unmitigated)

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	1,274.00	1,403.28	16,028.22	49.39	8,049.43	1,562.48	4,859,076.95
TOTALS (lbs/day, unmitigated)	1,274.00	1,403.28	16,028.22	49.39	8,049.43	1,562.48	4,859,076.95

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 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
Single family housing	33.33	4,616.29	dwelling units	100.00	461,629.00	4,663,745.49
					461,629.00	4,663,745.49

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	49.1	0.0	100.0	0.0
Light Truck < 3750 lbs	7.0	0.0	100.0	0.0
Light Truck 3751-5750 lbs	25.1	0.0	100.0	0.0

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Med Truck 5751-8500 lbs	11.4	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	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	2.4	33.3	66.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

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)

Operational Changes to Defaults

Urbemis 2007 Version 9.2.4

Detail Report for Winter Area Source Unmitigated Emissions (Pounds/Day)

File Name: C:\Work\Projects\Orange General Plan EIR\Urbemis\Orange GP Area Source.urb924

Project Name: Orange GP Area Source

Project Location: Orange County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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>	<u>CO2</u>
Natural Gas	35.11	463.37	257.55	0.00	0.87	0.86	580,384.67
Hearth	3,710.30	312.47	10,287.12	28.84	1,595.19	1,535.65	419,101.12
Landscaping - No Winter							
Consumer Products	1,214.63						
Architectural Coatings	241.75						
TOTALS (lbs/day, unmitigated)	5,201.79	775.84	10,544.67	28.84	1,596.06	1,536.51	999,485.79

Area Source Changes to Defaults

Urbemis 2007 Version 9.2.4

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

File Name: C:\Work\Projects\Orange General Plan EIR\Orange GP Operations.urb924

Project Name: Orange General Plan Operations

Project Location: Orange 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, Unmitigated)

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	1,469.68	1,684.36	14,946.51	41.07	8,049.43	1,562.48	4,387,329.97
TOTALS (lbs/day, unmitigated)	1,469.68	1,684.36	14,946.51	41.07	8,049.43	1,562.48	4,387,329.97

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 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
Single family housing	33.33	4,616.29	dwelling units	100.00	461,629.00	4,663,745.49
					461,629.00	4,663,745.49

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	49.1	0.0	100.0	0.0
Light Truck < 3750 lbs	7.0	0.0	100.0	0.0
Light Truck 3751-5750 lbs	25.1	0.0	100.0	0.0

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Med Truck 5751-8500 lbs	11.4	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	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	2.4	33.3	66.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

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)

Operational Changes to Defaults

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County Average

(grams/mile)

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.150	8	0.060	0.105	0.147	1.025	1.835	4.381	
0.138	9	0.055	0.097	0.136	0.915	1.706	4.153	
0.127	10	0.050	0.089	0.126	0.813	1.588	3.945	
0.099	13	0.040	0.071	0.101	0.562	1.295	3.424	
0.062	20	0.025	0.045	0.064	0.282	0.850	2.640	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1.528	8	0.905	1.535	1.989	3.965	14.769	21.875	
1.484	9	0.888	1.505	1.937	3.638	13.601	21.209	
1.444	10	0.872	1.477	1.888	3.340	12.555	20.594	
1.334	13	0.825	1.396	1.755	2.598	10.011	19.021	
1.141	20	0.728	1.229	1.508	1.627	6.390	16.608	

Temperature: 58F

Pollutant Name: Carbon Dioxide
Relative Humidity: 40%

Temperature: 58F

Pollutant Name: Sulfur Dioxide
Relative Humidity: 40%

Temperature: 58F

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.010	8	0.008	0.010	0.014	0.023	0.022	0.003	
0.009	9	0.007	0.009	0.013	0.022	0.021	0.003	
0.009	10	0.007	0.009	0.012	0.021	0.021	0.003	
0.008	13	0.006	0.007	0.010	0.019	0.020	0.002	

0.006	20	0.004	0.006	0.008	0.016	0.018	0.002
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Pollutant Name: PM10	Temperature: 58F
Relative Humidity: 40%	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.075	8	0.043	0.097	0.103	0.180	0.385	0.026	
0.070	9	0.039	0.089	0.095	0.172	0.361	0.025	
0.064	10	0.036	0.082	0.087	0.165	0.339	0.024	
0.051	13	0.029	0.065	0.069	0.146	0.284	0.021	
0.033	20	0.018	0.040	0.043	0.113	0.197	0.017	

Pollutant Name: PM10 - Tire Wear	Temperature: 58F
Relative Humidity: 40%	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.009	8	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	9	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	10	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	13	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	20	0.008	0.008	0.009	0.022	0.009	0.004	

Pollutant Name: PM10 - Break Wear	Temperature: 58F
Relative Humidity: 40%	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.013	8	0.013	0.013	0.013	0.019	0.013	0.006	
0.013	9	0.013	0.013	0.013	0.019	0.013	0.006	

0.013	10	0.013	0.013	0.013	0.019	0.013	0.006
0.013	13	0.013	0.013	0.013	0.019	0.013	0.006
0.013	20	0.013	0.013	0.013	0.019	0.013	0.006

Pollutant Name: Gasoline - mi/gal
Relative Humidity: 40%

Temperature: 58F

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
9.653	8	11.134	8.822	6.181	4.515	4.394	31.073	
10.194	9	11.758	9.316	6.546	4.887	4.756	32.198	
10.749	10	12.398	9.823	6.921	5.279	5.138	33.321	
12.491	13	14.405	11.413	8.108	6.566	6.390	36.646	
16.837	20	19.409	15.375	11.119	10.113	9.844	43.765	

Pollutant Name: Diesel - mi/gal
Relative Humidity: 40%

Temperature: 58F

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
7.572	8	29.156	29.156	19.477	4.746	4.166	0.000	
7.620	9	29.156	29.156	19.477	4.808	4.166	0.000	
7.669	10	29.156	29.156	19.477	4.872	4.166	0.000	
7.833	13	29.156	29.156	19.477	5.081	4.166	0.000	
8.251	20	29.156	29.156	19.477	5.616	4.166	0.000	

Title : Orange GP AM 2030 Jamboree Rd and Chapman Rd
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/11/17 16:39:23

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Annual

Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual

Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Total Organic Gases
Relative Humidity: ALL

Temperature: 58F

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.009	0.015	0.048	0.074	0.224	0.988	
0.029							
10	0.017	0.029	0.094	0.143	0.437	1.199	
0.052							
20	0.034	0.057	0.183	0.272	0.829	1.605	
0.095							
30	0.049	0.083	0.268	0.385	1.175	1.992	
0.135							
40	0.063	0.107	0.347	0.484	1.476	2.359	
0.173							
50	0.076	0.130	0.420	0.567	1.731	2.707	
0.207							
60	0.088	0.151	0.489	0.636	1.940	2.958	
0.238							
120	0.135	0.240	0.750	0.587	1.790	2.978	
0.335							
180	0.098	0.176	0.624	0.623	1.899	2.641	
0.274							
240	0.104	0.187	0.663	0.657	2.005	2.809	
0.291							
300	0.110	0.198	0.701	0.691	2.107	2.974	
0.308							
360	0.116	0.209	0.740	0.723	2.206	3.136	
0.324							
420	0.122	0.220	0.778	0.755	2.302	3.294	
0.340							
480	0.128	0.231	0.816	0.785	2.394	3.449	
0.357							
540	0.134	0.242	0.854	0.814	2.482	3.601	
0.373							
600	0.139	0.252	0.891	0.842	2.567	3.749	
0.388							
660	0.145	0.263	0.928	0.868	2.649	3.894	
0.404							

720	0.151	0.273	0.965	0.894	2.727	4.036
0.419						

Pollutant Name: Carbon Monoxide Temperature: 58F
Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.139	0.239	0.664	1.210	3.360	3.457	
0.356							
10	0.275	0.473	1.312	2.370	6.584	4.511	
0.686							
20	0.536	0.923	2.557	4.544	12.622	6.510	
1.318							
30	0.782	1.350	3.737	6.521	18.114	8.366	
1.911							
40	1.015	1.753	4.851	8.301	23.060	10.078	
2.466							
50	1.234	2.133	5.900	9.885	27.459	11.647	
2.983							
60	1.439	2.491	6.883	11.272	31.313	13.072	
3.463							
120	2.240	3.884	10.173	8.958	24.884	17.273	
4.794							
180	1.506	2.632	7.057	9.220	25.612	12.312	
3.452							
240	1.630	2.855	7.645	9.490	26.363	13.441	
3.713							
300	1.740	3.051	8.165	9.770	27.138	14.479	
3.947							
360	1.836	3.222	8.616	10.057	27.938	15.426	
4.153							
420	1.917	3.366	9.000	10.354	28.761	16.282	
4.331							
480	1.984	3.485	9.316	10.659	29.608	17.048	
4.481							
540	2.037	3.577	9.564	10.972	30.480	17.723	
4.604							
600	2.076	3.644	9.744	11.295	31.375	18.307	
4.699							
660	2.100	3.685	9.857	11.626	32.294	18.800	
4.766							
720	2.110	3.699	9.901	11.965	33.237	19.202	
4.805							

Pollutant Name: Oxides of Nitrogen Temperature: 58F
Relative Humidity: ALL

Time

	min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.195	5	0.046	0.108	0.643	0.220	0.896	0.168	
0.213	10	0.050	0.115	0.682	0.332	1.351	0.210	
0.245	20	0.056	0.126	0.754	0.528	2.148	0.285	
0.272	30	0.061	0.136	0.815	0.688	2.798	0.346	
0.293	40	0.065	0.144	0.866	0.812	3.301	0.395	
0.310	50	0.068	0.151	0.906	0.899	3.655	0.431	
0.321	60	0.071	0.156	0.936	0.950	3.862	0.454	
0.345	120	0.076	0.170	1.018	0.965	3.926	0.459	
0.351	180	0.080	0.177	1.029	0.962	3.911	0.458	
0.348	240	0.079	0.176	1.021	0.956	3.889	0.451	
0.344	300	0.078	0.174	1.009	0.949	3.860	0.442	
0.339	360	0.077	0.171	0.991	0.940	3.823	0.431	
0.332	420	0.075	0.167	0.969	0.929	3.778	0.418	
0.323	480	0.073	0.162	0.942	0.916	3.725	0.403	
0.313	540	0.071	0.156	0.909	0.901	3.665	0.386	
0.301	600	0.068	0.150	0.873	0.885	3.597	0.368	
0.288	660	0.065	0.143	0.831	0.866	3.522	0.347	
0.274	720	0.061	0.135	0.784	0.846	3.439	0.325	

Pollutant Name: Carbon Dioxide
Relative Humidity: ALL

Temperature: 58F

	Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
14.537	5	12.210	15.367	21.663	2.852	3.038	13.326	
16.504	10	13.709	17.262	24.532	5.688	6.060	15.525	
21.019	20	17.207	21.681	31.144	11.312	12.053	19.843	

30	21.372	26.939	38.921	16.874	17.978	24.053	
26.305	40	26.203	33.035	47.862	22.372	23.836	28.156
32.363	50	31.701	39.969	57.967	27.807	29.627	32.151
39.193	60	37.866	47.742	69.237	33.179	35.351	36.039
46.796	120	88.224	111.159	159.552	56.432	60.126	53.502
107.307	180	100.144	126.187	181.329	66.670	71.034	57.729
121.972	240	112.044	141.189	203.022	76.304	81.298	61.707
136.569	300	123.925	156.164	224.629	85.333	90.919	65.437
151.098	360	135.787	171.112	246.152	93.758	99.896	68.920
165.559	420	147.629	186.034	267.590	101.579	108.228	72.154
179.952	480	159.452	200.930	288.942	108.796	115.918	75.140
194.278	540	171.256	215.799	310.210	115.409	122.963	77.878
208.535	600	183.041	230.641	331.392	121.417	129.364	80.368
222.725	660	194.806	245.457	352.490	126.821	135.122	82.611
236.847	720	206.551	260.246	373.503	131.620	140.236	84.605
250.901							

Pollutant Name: Sulfur Dioxide
Relative Humidity: ALL

Temperature: 58F

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	
0.000	10	0.000	0.000	0.000	0.000	0.000	
0.000	20	0.000	0.000	0.000	0.000	0.000	
0.000	30	0.000	0.000	0.000	0.000	0.000	
0.000	40	0.000	0.000	0.001	0.000	0.001	0.000
0.000	50	0.000	0.000	0.001	0.000	0.001	0.001
0.000	60	0.000	0.001	0.001	0.001	0.001	0.001
0.001							

0.001	120	0.001	0.001	0.002	0.001	0.001	0.001
0.001	180	0.001	0.001	0.002	0.001	0.001	0.001
0.001	240	0.001	0.001	0.002	0.001	0.001	0.001
0.001	300	0.001	0.002	0.002	0.001	0.001	0.001
0.002	360	0.001	0.002	0.003	0.001	0.001	0.001
0.002	420	0.001	0.002	0.003	0.001	0.002	0.001
0.002	480	0.002	0.002	0.003	0.001	0.002	0.001
0.002	540	0.002	0.002	0.003	0.001	0.002	0.001
0.002	600	0.002	0.002	0.003	0.001	0.002	0.001
0.002	660	0.002	0.002	0.004	0.001	0.002	0.001
0.002	720	0.002	0.003	0.004	0.001	0.002	0.001
0.002							

Pollutant Name: PM10
Relative Humidity: ALL

Temperature: 58F

	Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.001	5	0.001	0.001	0.001	0.000	0.001	0.007	
0.002	10	0.001	0.002	0.002	0.001	0.001	0.006	
0.003	20	0.002	0.005	0.004	0.001	0.002	0.005	
0.005	30	0.003	0.007	0.006	0.002	0.003	0.004	
0.006	40	0.004	0.009	0.008	0.003	0.003	0.003	
0.008	50	0.005	0.011	0.009	0.003	0.004	0.003	
0.009	60	0.006	0.013	0.011	0.004	0.005	0.003	
0.014	120	0.010	0.021	0.018	0.005	0.006	0.006	
0.016	180	0.011	0.024	0.020	0.005	0.007	0.008	
0.018	240	0.012	0.026	0.022	0.005	0.007	0.011	
0.019	300	0.013	0.028	0.024	0.005	0.007	0.013	

0.020	360	0.013	0.029	0.025	0.006	0.007	0.014
0.021	420	0.014	0.031	0.026	0.006	0.007	0.016
0.022	480	0.014	0.032	0.027	0.006	0.008	0.017
0.022	540	0.015	0.033	0.028	0.006	0.008	0.018
0.023	600	0.015	0.033	0.028	0.006	0.008	0.019
0.023	660	0.015	0.034	0.029	0.006	0.008	0.019
0.023	720	0.015	0.034	0.029	0.007	0.009	0.019

Title : Orange GP AM 2030 Jamboree Rd and Chapman Rd
 Version : Emfac2007 V2.3 Nov 1 2006
 Run Date : 2008/11/17 16:39:23
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
 Season : Annual
 Area : Orange

 Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average	Orange
County Average	

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Total Organic Gases Temperature: 58F
 Relative Humidity: ALL

	Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.027	5	0.021	0.039	0.030	0.003	0.027	0.085	
0.050	10	0.038	0.072	0.055	0.006	0.051	0.156	
0.086	20	0.065	0.122	0.094	0.010	0.086	0.268	
0.110	30	0.083	0.156	0.120	0.013	0.110	0.346	
0.119	40	0.090	0.169	0.130	0.014	0.119	0.375	

County Average

Table 5b: Multi-Day Diurnal Loss Emissions
(grams/hour)

Pollutant Name: Total Organic Gases
Relative Humidity: ALL

Temperature: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.001	0.002	0.002	0.000	0.000	0.009	
0.002							

Title : Orange GP AM 2030 Jamboree Rd and Chapman Rd
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/11/17 16:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Annual
Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 6a: Partial Day Resting Loss
Emissions (grams/hour)

Pollutant Name: Total Organic Gases
Relative Humidity: ALL

Temperature: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.010	0.023	0.023	0.001	0.001	0.041	
0.017							

Title : Orange GP AM 2030 Jamboree Rd and Chapman Rd
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/11/17 16:39:23

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Annual

Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual

Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Total Organic Gases

Temperature: ALL

Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.001	0.002	0.002	0.000	0.000	0.004	
0.001							

Title : Orange GP AM 2030 Jamboree Rd and Chapman Rd

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2008/11/17 16:39:23

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Annual

Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual

Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 7: Estimated Travel Fractions

Pollutant Name:

Temperature: ALL

Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.473	0.331	0.152	0.037	0.002	0.005	
1.000							

%TRIP	0.448	0.289	0.202	0.054	0.000	0.007
1.000						
%VEH	0.491	0.321	0.138	0.025	0.001	0.024
1.000						

Title : Orange GP AM 2030 Jamboree Rd and Chapman Rd
 Version : Emfac2007 V2.3 Nov 1 2006
 Run Date : 2008/11/17 16:39:23
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
 Season : Annual
 Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average	Orange
County Average	

Table 8: Evaporative Running Loss

Emissions (grams/minute)

Pollutant Name: Total Organic Gases Temperature: 58F
 Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.008	0.225	0.249	0.070	0.747	0.005	
0.120							
2	0.007	0.115	0.127	0.036	0.380	0.037	
0.063							
3	0.007	0.081	0.089	0.025	0.259	0.054	
0.045							
4	0.009	0.065	0.071	0.020	0.199	0.064	
0.038							
5	0.009	0.056	0.061	0.017	0.163	0.070	
0.033							
10	0.011	0.038	0.041	0.011	0.091	0.082	
0.025							
15	0.012	0.033	0.035	0.009	0.069	0.085	
0.023							
20	0.012	0.031	0.033	0.008	0.058	0.086	
0.022							
25	0.012	0.030	0.032	0.008	0.052	0.086	
0.022							
30	0.012	0.030	0.032	0.008	0.051	0.085	
0.021							

0.021	35	0.012	0.029	0.032	0.008	0.051	0.083
	40	0.012	0.029	0.031	0.008	0.051	0.082
0.021	45	0.012	0.029	0.031	0.008	0.050	0.081
0.021	50	0.012	0.029	0.031	0.008	0.050	0.080
0.021	55	0.012	0.028	0.030	0.008	0.049	0.079
0.020	60	0.012	0.028	0.030	0.008	0.049	0.078
0.020							


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County Average

(grams/mile)

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1.528	8	0.905	1.535	1.989	3.965	14.769	21.875	
1.484	9	0.888	1.505	1.937	3.638	13.601	21.209	
1.444	10	0.872	1.477	1.888	3.340	12.555	20.594	
1.334	13	0.825	1.396	1.755	2.598	10.011	19.021	
1.188	18	0.754	1.274	1.571	1.802	7.182	17.145	

Temperature: 58F

Pollutant Name: Carbon Dioxide
Relative Humidity: 40%

Temperature: 58F

Pollutant Name: Sulfur Dioxide
Relative Humidity: 40%

Temperature: 58F

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.010	8	0.008	0.010	0.014	0.023	0.022	0.003	
0.009	9	0.007	0.009	0.013	0.022	0.021	0.003	
0.009	10	0.007	0.009	0.012	0.021	0.021	0.003	
0.008	13	0.006	0.007	0.010	0.019	0.020	0.002	

0.006	18	0.005	0.006	0.008	0.017	0.019	0.002
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Pollutant Name: PM10	Temperature: 58F
Relative Humidity: 40%	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.075	8	0.043	0.097	0.103	0.180	0.385	0.026	
0.070	9	0.039	0.089	0.095	0.172	0.361	0.025	
0.064	10	0.036	0.082	0.087	0.165	0.339	0.024	
0.051	13	0.029	0.065	0.069	0.146	0.284	0.021	
0.037	18	0.020	0.046	0.049	0.121	0.217	0.018	

Pollutant Name: PM10 - Tire Wear	Temperature: 58F
Relative Humidity: 40%	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.009	8	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	9	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	10	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	13	0.008	0.008	0.009	0.022	0.009	0.004	
0.009	18	0.008	0.008	0.009	0.022	0.009	0.004	

Pollutant Name: PM10 - Break Wear	Temperature: 58F
Relative Humidity: 40%	

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.013	8	0.013	0.013	0.013	0.019	0.013	0.006	
0.013	9	0.013	0.013	0.013	0.019	0.013	0.006	

0.013	10	0.013	0.013	0.013	0.019	0.013	0.006
0.013	13	0.013	0.013	0.013	0.019	0.013	0.006
0.013	18	0.013	0.013	0.013	0.019	0.013	0.006

Pollutant Name: Gasoline - mi/gal
Relative Humidity: 40%

Temperature: 58F

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
9.653	8	11.134	8.822	6.181	4.515	4.394	31.073	
10.194	9	11.758	9.316	6.546	4.887	4.756	32.198	
10.749	10	12.398	9.823	6.921	5.279	5.138	33.321	
12.491	13	14.405	11.413	8.108	6.566	6.390	36.646	
15.575	18	17.957	14.225	10.238	9.037	8.797	41.864	

Pollutant Name: Diesel - mi/gal
Relative Humidity: 40%

Temperature: 58F

	Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
7.572	8	29.156	29.156	19.477	4.746	4.166	0.000	
7.620	9	29.156	29.156	19.477	4.808	4.166	0.000	
7.669	10	29.156	29.156	19.477	4.872	4.166	0.000	
7.833	13	29.156	29.156	19.477	5.081	4.166	0.000	
8.150	18	29.156	29.156	19.477	5.487	4.166	0.000	

Title : Orange GP AM 2030 Main Street and La Veta Avenue
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/11/17 17:38:21

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Annual

Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual

Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average

Orange

County Average

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Total Organic Gases

Temperature: 58F

Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.009	0.015	0.048	0.074	0.224	0.988	
0.029							
10	0.017	0.029	0.094	0.143	0.437	1.199	
0.052							
20	0.034	0.057	0.183	0.272	0.829	1.605	
0.095							
30	0.049	0.083	0.268	0.385	1.175	1.992	
0.135							
40	0.063	0.107	0.347	0.484	1.476	2.359	
0.173							
50	0.076	0.130	0.420	0.567	1.731	2.707	
0.207							
60	0.088	0.151	0.489	0.636	1.940	2.958	
0.238							
120	0.135	0.240	0.750	0.587	1.790	2.978	
0.335							
180	0.098	0.176	0.624	0.623	1.899	2.641	
0.274							
240	0.104	0.187	0.663	0.657	2.005	2.809	
0.291							
300	0.110	0.198	0.701	0.691	2.107	2.974	
0.308							
360	0.116	0.209	0.740	0.723	2.206	3.136	
0.324							
420	0.122	0.220	0.778	0.755	2.302	3.294	
0.340							
480	0.128	0.231	0.816	0.785	2.394	3.449	
0.357							
540	0.134	0.242	0.854	0.814	2.482	3.601	
0.373							
600	0.139	0.252	0.891	0.842	2.567	3.749	
0.388							
660	0.145	0.263	0.928	0.868	2.649	3.894	
0.404							

720	0.151	0.273	0.965	0.894	2.727	4.036
0.419						

Pollutant Name: Carbon Monoxide Temperature: 58F
Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.139	0.239	0.664	1.210	3.360	3.457	
0.356							
10	0.275	0.473	1.312	2.370	6.584	4.511	
0.686							
20	0.536	0.923	2.557	4.544	12.622	6.510	
1.318							
30	0.782	1.350	3.737	6.521	18.114	8.366	
1.911							
40	1.015	1.753	4.851	8.301	23.060	10.078	
2.466							
50	1.234	2.133	5.900	9.885	27.459	11.647	
2.983							
60	1.439	2.491	6.883	11.272	31.313	13.072	
3.463							
120	2.240	3.884	10.173	8.958	24.884	17.273	
4.794							
180	1.506	2.632	7.057	9.220	25.612	12.312	
3.452							
240	1.630	2.855	7.645	9.490	26.363	13.441	
3.713							
300	1.740	3.051	8.165	9.770	27.138	14.479	
3.947							
360	1.836	3.222	8.616	10.057	27.938	15.426	
4.153							
420	1.917	3.366	9.000	10.354	28.761	16.282	
4.331							
480	1.984	3.485	9.316	10.659	29.608	17.048	
4.481							
540	2.037	3.577	9.564	10.972	30.480	17.723	
4.604							
600	2.076	3.644	9.744	11.295	31.375	18.307	
4.699							
660	2.100	3.685	9.857	11.626	32.294	18.800	
4.766							
720	2.110	3.699	9.901	11.965	33.237	19.202	
4.805							

Pollutant Name: Oxides of Nitrogen Temperature: 58F
Relative Humidity: ALL

Time

	min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.195	5	0.046	0.108	0.643	0.220	0.896	0.168	
0.213	10	0.050	0.115	0.682	0.332	1.351	0.210	
0.245	20	0.056	0.126	0.754	0.528	2.148	0.285	
0.272	30	0.061	0.136	0.815	0.688	2.798	0.346	
0.293	40	0.065	0.144	0.866	0.812	3.301	0.395	
0.310	50	0.068	0.151	0.906	0.899	3.655	0.431	
0.321	60	0.071	0.156	0.936	0.950	3.862	0.454	
0.345	120	0.076	0.170	1.018	0.965	3.926	0.459	
0.351	180	0.080	0.177	1.029	0.962	3.911	0.458	
0.348	240	0.079	0.176	1.021	0.956	3.889	0.451	
0.344	300	0.078	0.174	1.009	0.949	3.860	0.442	
0.339	360	0.077	0.171	0.991	0.940	3.823	0.431	
0.332	420	0.075	0.167	0.969	0.929	3.778	0.418	
0.323	480	0.073	0.162	0.942	0.916	3.725	0.403	
0.313	540	0.071	0.156	0.909	0.901	3.665	0.386	
0.301	600	0.068	0.150	0.873	0.885	3.597	0.368	
0.288	660	0.065	0.143	0.831	0.866	3.522	0.347	
0.274	720	0.061	0.135	0.784	0.846	3.439	0.325	

Pollutant Name: Carbon Dioxide
Relative Humidity: ALL

Temperature: 58F

	Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
14.537	5	12.210	15.367	21.663	2.852	3.038	13.326	
16.504	10	13.709	17.262	24.532	5.688	6.060	15.525	
21.019	20	17.207	21.681	31.144	11.312	12.053	19.843	

30	21.372	26.939	38.921	16.874	17.978	24.053	
26.305	40	26.203	33.035	47.862	22.372	23.836	28.156
32.363	50	31.701	39.969	57.967	27.807	29.627	32.151
39.193	60	37.866	47.742	69.237	33.179	35.351	36.039
46.796	120	88.224	111.159	159.552	56.432	60.126	53.502
107.307	180	100.144	126.187	181.329	66.670	71.034	57.729
121.972	240	112.044	141.189	203.022	76.304	81.298	61.707
136.569	300	123.925	156.164	224.629	85.333	90.919	65.437
151.098	360	135.787	171.112	246.152	93.758	99.896	68.920
165.559	420	147.629	186.034	267.590	101.579	108.228	72.154
179.952	480	159.452	200.930	288.942	108.796	115.918	75.140
194.278	540	171.256	215.799	310.210	115.409	122.963	77.878
208.535	600	183.041	230.641	331.392	121.417	129.364	80.368
222.725	660	194.806	245.457	352.490	126.821	135.122	82.611
236.847	720	206.551	260.246	373.503	131.620	140.236	84.605
250.901							

Pollutant Name: Sulfur Dioxide
Relative Humidity: ALL

Temperature: 58F

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	
0.000	10	0.000	0.000	0.000	0.000	0.000	
0.000	20	0.000	0.000	0.000	0.000	0.000	
0.000	30	0.000	0.000	0.000	0.000	0.000	
0.000	40	0.000	0.000	0.001	0.000	0.001	0.000
0.000	50	0.000	0.000	0.001	0.000	0.001	0.001
0.000	60	0.000	0.001	0.001	0.001	0.001	0.001
0.001							

0.001	120	0.001	0.001	0.002	0.001	0.001	0.001
0.001	180	0.001	0.001	0.002	0.001	0.001	0.001
0.001	240	0.001	0.001	0.002	0.001	0.001	0.001
0.001	300	0.001	0.002	0.002	0.001	0.001	0.001
0.002	360	0.001	0.002	0.003	0.001	0.001	0.001
0.002	420	0.001	0.002	0.003	0.001	0.002	0.001
0.002	480	0.002	0.002	0.003	0.001	0.002	0.001
0.002	540	0.002	0.002	0.003	0.001	0.002	0.001
0.002	600	0.002	0.002	0.003	0.001	0.002	0.001
0.002	660	0.002	0.002	0.004	0.001	0.002	0.001
0.002	720	0.002	0.003	0.004	0.001	0.002	0.001
0.002							

Pollutant Name: PM10
Relative Humidity: ALL

Temperature: 58F

	Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.001	5	0.001	0.001	0.001	0.000	0.001	0.007	
0.002	10	0.001	0.002	0.002	0.001	0.001	0.006	
0.003	20	0.002	0.005	0.004	0.001	0.002	0.005	
0.005	30	0.003	0.007	0.006	0.002	0.003	0.004	
0.006	40	0.004	0.009	0.008	0.003	0.003	0.003	
0.008	50	0.005	0.011	0.009	0.003	0.004	0.003	
0.009	60	0.006	0.013	0.011	0.004	0.005	0.003	
0.014	120	0.010	0.021	0.018	0.005	0.006	0.006	
0.016	180	0.011	0.024	0.020	0.005	0.007	0.008	
0.018	240	0.012	0.026	0.022	0.005	0.007	0.011	
0.019	300	0.013	0.028	0.024	0.005	0.007	0.013	

```
Title       : Orange GP AM 2030 Main Street and La Veta Avenue
Version     : Emfac2007 V2.3 Nov 1 2006
Run Date    : 2008/11/17 17:38:21
Scen Year   : 2030 -- All model years in the range 1986 to 2030 selected
Season      : Annual
Area        : Orange
*****
*****
      Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
      Emfac2007 Emission Factors: V2.3 Nov 1 2006
```

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Total Organic Gases Temperature: 58F
Relative Humidity: ALL

	Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0.027	5	0.021	0.039	0.030	0.003	0.027	0.085	
0.050	10	0.038	0.072	0.055	0.006	0.051	0.156	
0.086	20	0.065	0.122	0.094	0.010	0.086	0.268	
0.110	30	0.083	0.156	0.120	0.013	0.110	0.346	
0.119	40	0.090	0.169	0.130	0.014	0.119	0.375	

```

Title       : Orange GP AM 2030 Main Street and La Veta Avenue
Version     : Emfac2007 V2.3 Nov 1 2006
Run Date    : 2008/11/17 17:38:21
Scen Year   : 2030 -- All model years in the range 1986 to 2030 selected
Season      : Annual
Area        : Orange
*****
*****
Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

```

Pollutant Name: Total Organic Gases					Temperature: ALL		
Relative Humidity: ALL							
Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.016	0.033	0.032	0.001	0.001	0.097	
0.025							

```
Title       : Orange GP AM 2030 Main Street and La Veta Avenue
Version    : Emfac2007 V2.3 Nov 1 2006
Run Date   : 2008/11/17 17:38:21
Scen Year  : 2030 -- All model years in the range 1986 to 2030 selected
Season     : Annual
Area       : Orange
*****
*****
Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006
```

County Average

Table 5b: Multi-Day Diurnal Loss Emissions
(grams/hour)

Pollutant Name: Total Organic Gases
Relative Humidity: ALL

Temperature: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.001	0.002	0.002	0.000	0.000	0.009	
0.002							

Title : Orange GP AM 2030 Main Street and La Veta Avenue
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/11/17 17:38:21
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Annual
Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 6a: Partial Day Resting Loss
Emissions (grams/hour)

Pollutant Name: Total Organic Gases
Relative Humidity: ALL

Temperature: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.010	0.023	0.023	0.001	0.001	0.041	
0.017							

Title : Orange GP AM 2030 Main Street and La Veta Avenue
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/11/17 17:38:21

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Annual

Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual

Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Total Organic Gases

Temperature: ALL

Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
58	0.001	0.002	0.002	0.000	0.000	0.004	
0.001							

Title : Orange GP AM 2030 Main Street and La Veta Avenue

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2008/11/17 17:38:21

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Annual

Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual

Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average
County Average

Orange

Table 7: Estimated Travel Fractions

Pollutant Name:

Temperature: ALL

Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.473	0.331	0.152	0.037	0.002	0.005	
1.000							

%TRIP	0.448	0.289	0.202	0.054	0.000	0.007
1.000						
%VEH	0.491	0.321	0.138	0.025	0.001	0.024
1.000						

Title : Orange GP AM 2030 Main Street and La Veta Avenue
 Version : Emfac2007 V2.3 Nov 1 2006
 Run Date : 2008/11/17 17:38:21
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
 Season : Annual
 Area : Orange

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Annual
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average	Orange
County Average	

Table 8: Evaporative Running Loss

Emissions (grams/minute)

Pollutant Name: Total Organic Gases Temperature: 58F
 Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.008	0.225	0.249	0.070	0.747	0.005	
0.120							
2	0.007	0.115	0.127	0.036	0.380	0.037	
0.063							
3	0.007	0.081	0.089	0.025	0.259	0.054	
0.045							
4	0.009	0.065	0.071	0.020	0.199	0.064	
0.038							
5	0.009	0.056	0.061	0.017	0.163	0.070	
0.033							
10	0.011	0.038	0.041	0.011	0.091	0.082	
0.025							
15	0.012	0.033	0.035	0.009	0.069	0.085	
0.023							
20	0.012	0.031	0.033	0.008	0.058	0.086	
0.022							
25	0.012	0.030	0.032	0.008	0.052	0.086	
0.022							
30	0.012	0.030	0.032	0.008	0.051	0.085	
0.021							

0.021	35	0.012	0.029	0.032	0.008	0.051	0.083
	40	0.012	0.029	0.031	0.008	0.051	0.082
0.021	45	0.012	0.029	0.031	0.008	0.050	0.081
0.021	50	0.012	0.029	0.031	0.008	0.050	0.080
0.021	55	0.012	0.028	0.030	0.008	0.049	0.079
0.020	60	0.012	0.028	0.030	0.008	0.049	0.078
0.020							

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: C:\Work\Projects\Orange General Plan EIR
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 400. CM ALT= 187. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= 5.0 PPM
SIGTH= 5. DEGREES TEMP= 14.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M)	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
	*	X1 Y1 X2 Y2	*					
A. JambNBDep	*	0 0 0 500	*	AG	2147	1.3	.0	18.0
B. JamSBApp	*	-5 500 -5 0	*	AG	2274	1.5	.0	30.0
C. ChapWBApp	*	500 3 0 3	*	AG	2550	1.5	.0	18.0
D. ChapEBDep	*	0 -3 500 -3	*	AG	2462	1.5	.0	18.0
E. JambNBApp	*	0 -500 0 0	*	AG	1384	1.4	.0	30.0
F. JamSBDep	*	-5 0 -5 -500	*	AG	1020	1.1	.0	18.0
G. ChapWBDep	*	-5 3 -505 3	*	AG	2590	1.5	.0	18.0
H. ChapEBApp	*	-505 -3 -5 -3	*	AG	2510	1.5	.0	30.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)
	*	X Y Z
1. RECPT	1 *	-20 12 1.8
2. RECPT	2 *	-15 -17 1.8
3. RECPT	3 *	15 -10 1.8
4. RECPT	4 *	10 10 1.8

16 Orange GP 2030 AM
 RUN: CALINE4 RUN (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR		* * * *	BRG (DEG)	* * * *	PRED CONC (PPM)	* * * *	A	B	C	CONC/LINK (PPM)				F	G	H
										D	E					
1. RECPT	1	*	95.	*	6.3	*	.1	.2	.5	.4	.0	.0	.1	.0		
2. RECPT	2	*	4.	*	6.1	*	.3	.4	.0	.0	.0	.0	.2	.2		
3. RECPT	3	*	274.	*	6.2	*	.0	.0	.0	.2	.0	.0	.4	.4		
4. RECPT	4	*	267.	*	6.6	*	.2	.2	.1	.0	.0	.0	.6	.5		

17 Orange GP 2030 PM

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: C:\Work\Projects\Orange General Plan EIR
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 400. CM ALT= 47. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= 5.0 PPM
SIGTH= 5. DEGREES TEMP= 14.0 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*					EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH	(G/MI)	(M)	(M)
A. MainNBDep	*	0	0	0	500	* AG	2701	1.5	.0	18.0
B. MainSBApp	*	-5	500	-5	0	* AG	2765	1.5	.0	30.0
C. LaVetaWBApp	*	500	3	0	3	* AG	2077	1.5	.0	18.0
D. LaVetaEBDep	*	0	-3	500	-3	* AG	2174	1.3	.0	18.0
E. MainNBApp	*	0	-500	0	0	* AG	2916	1.5	.0	30.0
F. MainSBDep	*	-5	0	-5	-500	* AG	2630	1.5	.0	18.0
G. LaVetaWBDep	*	-5	3	-505	3	* AG	1705	1.2	.0	18.0
H. LaVetaEBApp	*	-505	-3	-5	-3	* AG	1452	1.4	.0	30.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)			
	*	X	Y	Z	
1. RECPT	1 *	-20	12	1.8	
2. RECPT	2 *	-15	-17	1.8	
3. RECPT	3 *	15	-10	1.8	
4. RECPT	4 *	10	10	1.8	

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: C:\Work\Projects\Orange General Plan EIR
Page 1

17 Orange GP 2030 PM
 RUN: CALINE4 RUN (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR		* * * *	BRG (DEG)	* * * *	PRED CONC (PPM)	* * * *	A	B	C	CONC/LINK (PPM)				F	G	H
										D	E					
1. RECPT	1	*	94.	*	6.1	*	.2	.2	.4	.3	.0	.0	.0	.0	.0	.0
2. RECPT	2	*	5.	*	6.2	*	.4	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. RECPT	3	*	354.	*	6.1	*	.4	.4	.2	.2	.0	.0	.0	.0	.0	.0
4. RECPT	4	*	184.	*	6.3	*	.0	.0	.2	.1	.6	.3	.0	.0	.0	.0