APPENDIX I

Air Quality Calculations

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Urbemis 2007 Version 9.2.2

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas Construction.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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
2008 TOTALS (lbs/day unmitigated)	10.67	88.60	71.18	0.04	40.01	4.55	44.56	8.36	4.19	12.54	11,306.18
2008 TOTALS (lbs/day mitigated)	10.67	88.60	71.18	0.04	29.43	4.55	33.03	6.14	4.19	9.45	11,306.18
2009 TOTALS (lbs/day unmitigated)	8.67	68.96	66.84	0.04	0.19	2.99	3.18	0.07	2.74	2.81	11,306.68
2009 TOTALS (lbs/day mitigated)	8.67	68.96	66.84	0.04	0.19	2.99	3.18	0.07	2.74	2.81	11,306.68
2010 TOTALS (lbs/day unmitigated)	8.20	64.54	62.61	0.04	0.19	2.72	2.92	0.07	2.50	2.57	11,307.65
2010 TOTALS (lbs/day mitigated)	8.20	64.54	62.61	0.04	0.19	2.72	2.92	0.07	2.50	2.57	11,307.65
2011 TOTALS (lbs/day unmitigated)	109.80	74.89	69.65	0.04	0.20	3.65	3.85	0.07	3.34	3.42	12,858.99
2011 TOTALS (lbs/day mitigated)	55.31	74.89	69.65	0.04	0.20	3.65	3.85	0.07	3.34	3.42	12,858.99

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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 1/1/2008-3/31/2008 Active Days: 65	7.26	75.91	29.74	0.04	29.43	3.60	33.03	6.14	3.32	9.45	8,128.39
Demolition 01/01/2008-03/31/2008	7.26	75.91	29.74	0.04	29.43	3.60	33.03	6.14	3.32	9.45	8,128.39
Fugitive Dust	0.00	0.00	0.00	0.00	29.28	0.00	29.28	6.09	0.00	6.09	0.00
Demo Off Road Diesel	5.12	42.87	17.04	0.00	0.00	2.29	2.29	0.00	2.10	2.10	4,102.09
Demo On Road Diesel	2.08	32.94	11.12	0.04	0.14	1.32	1.45	0.04	1.21	1.26	3,898.66
Demo Worker Trips	0.05	0.09	1.59	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.65
Time Slice 4/1/2008-6/30/2008 Active Days: 65	10.67	**88.60**	51.19	0.00	**40.01**	**4.55**	**44.56**	**8.36**	**4.19**	**12.54**	7,061.87
Mass Grading 04/01/2008-06/30/2008	10.67	88.60	51.19	0.00	40.01	4.55	44.56	8.36	4.19	12.54	7,061.87
Mass Grading Dust	0.00	0.00	0.00	0.00	40.00	0.00	40.00	8.35	0.00	8.35	0.00
Mass Grading Off Road Diesel	10.58	88.44	48.34	0.00	0.00	4.54	4.54	0.00	4.18	4.18	6,832.10
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	0.10	0.16	2.86	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.77
Time Slice 7/1/2008-12/31/2008 Active Days: 132	9.31	73.92	**71.18**	0.04	0.19	3.24	3.43	0.07	2.97	3.04	11,306.18
Building 07/01/2008-12/31/2011	9.31	73.92	71.18	0.04	0.19	3.24	3.43	0.07	2.97	3.04	11,306.18
Building Off Road Diesel	7.53	66.57	25.49	0.00	0.00	2.95	2.95	0.00	2.71	2.71	7,129.24
Building Vendor Trips	0.38	5.00	4.06	0.01	0.03	0.20	0.23	0.01	0.18	0.19	827.27
Building Worker Trips	1.39	2.35	41.63	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,349.67

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Time Slice 1/1/2009-12/31/2009 Active Days: 261	8.67	68.96	66.84	0.04	0.19	2.99	3.18	0.07	2.74	2.81	11,306.68
Building 07/01/2008-12/31/2011	8.67	68.96	66.84	0.04	0.19	2.99	3.18	0.07	2.74	2.81	11,306.68
Building Off Road Diesel	7.03	62.12	24.25	0.00	0.00	2.71	2.71	0.00	2.50	2.50	7,129.24
Building Vendor Trips	0.36	4.68	3.82	0.01	0.03	0.18	0.21	0.01	0.17	0.18	827.33
Building Worker Trips	1.28	2.16	38.78	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,350.11
Time Slice 1/1/2010-12/31/2010 Active Days: 261	8.20	64.54	62.61	0.04	0.19	2.72	2.92	0.07	2.50	2.57	11,307.65
Building 07/01/2008-12/31/2011	8.20	64.54	62.61	0.04	0.19	2.72	2.92	0.07	2.50	2.57	11,307.65
Building Off Road Diesel	6.70	58.29	23.00	0.00	0.00	2.47	2.47	0.00	2.27	2.27	7,129.24
Building Vendor Trips	0.33	4.27	3.57	0.01	0.03	0.17	0.20	0.01	0.15	0.16	827.39
Building Worker Trips	1.17	1.97	36.04	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,351.03
Time Slice 1/3/2011-7/29/2011 Active Days: 150	7.57	59.30	58.81	0.04	0.19	2.47	2.67	0.07	2.27	2.33	11,308.78
Building 07/01/2008-12/31/2011	7.57	59.30	58.81	0.04	0.19	2.47	2.67	0.07	2.27	2.33	11,308.78
Building Off Road Diesel	6.20	53.63	22.04	0.00	0.00	2.23	2.23	0.00	2.06	2.06	7,129.24
Building Vendor Trips	0.31	3.86	3.34	0.01	0.03	0.15	0.18	0.01	0.14	0.15	827.44
Building Worker Trips	1.07	1.81	33.44	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,352.10

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Time Slice 8/1/2011-12/30/2011 Active Days: 110	**109.80**	74.89	69.65	**0.04**	0.20	3.65	3.85	0.07	3.34	3.42	**12,858.99**
Asphalt 08/01/2011-12/31/2011	2.38	15.53	9.65	0.00	0.00	1.17	1.17	0.00	1.07	1.08	1,431.17
Paving Off-Gas	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.30	15.35	8.84	0.00	0.00	1.16	1.16	0.00	1.07	1.07	1,332.83
Paving On Road Diesel	0.01	0.14	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.70
Paving Worker Trips	0.02	0.04	0.76	0.00	0.00	0.00	0.01	0.00	0.00	0.00	76.64
Building 07/01/2008-12/31/2011	7.57	59.30	58.81	0.04	0.19	2.47	2.67	0.07	2.27	2.33	11,308.78
Building Off Road Diesel	6.20	53.63	22.04	0.00	0.00	2.23	2.23	0.00	2.06	2.06	7,129.24
Building Vendor Trips	0.31	3.86	3.34	0.01	0.03	0.15	0.18	0.01	0.14	0.15	827.44
Building Worker Trips	1.07	1.81	33.44	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,352.10
Coating 08/01/2011-12/31/2011	99.85	0.06	1.19	0.00	0.01	0.00	0.01	0.00	0.00	0.00	119.04
Architectural Coating	99.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.06	1.19	0.00	0.01	0.00	0.01	0.00	0.00	0.00	119.04

Phase Assumptions

Phase: Demolition 1/1/2008 - 3/31/2008 - Demolition

Building Volume Total (cubic feet): 6972250

Building Volume Daily (cubic feet): 69722.5

On Road Truck Travel (VMT): 968.37

Off-Road Equipment:

2 Off Highway Trucks (479 hp) operating at a 0.57 load factor for 8 hours per day

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

Phase: Mass Grading 4/1/2008 - 6/30/2008 - Site Grading

Total Acres Disturbed: 8.1

Maximum Daily Acreage Disturbed: 2

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Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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

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

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

Phase: Paving 8/1/2011 - 12/31/2011 - Paving

Acres to be Paved: 2

Off-Road Equipment:

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

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

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

Phase: Building Construction 7/1/2008 - 12/31/2011 - Building Construction

Off-Road Equipment:

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

4 Forklifts (145 hp) operating at a 0.3 load factor for 7 hours per day

8 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

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

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

Phase: Architectural Coating 8/1/2011 - 12/31/2011 - Architectural Coatings

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

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

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

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

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Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/1/2008-3/31/2008 Active Days: 65	7.26	75.91	29.74	0.04	29.43	3.60	33.03	6.14	3.32	9.45	8,128.39
Demolition 01/01/2008-03/31/2008	7.26	75.91	29.74	0.04	29.43	3.60	33.03	6.14	3.32	9.45	8,128.39
Fugitive Dust	0.00	0.00	0.00	0.00	29.28	0.00	29.28	6.09	0.00	6.09	0.00
Demo Off Road Diesel	5.12	42.87	17.04	0.00	0.00	2.29	2.29	0.00	2.10	2.10	4,102.09
Demo On Road Diesel	2.08	32.94	11.12	0.04	0.14	1.32	1.45	0.04	1.21	1.26	3,898.66
Demo Worker Trips	0.05	0.09	1.59	0.00	0.01	0.00	0.01	0.00	0.00	0.01	127.65
Time Slice 4/1/2008-6/30/2008 Active Days: 65	10.67	**88.60**	51.19	0.00	2.43	**4.55**	6.98	0.51	**4.19**	4.69	7,061.87
Mass Grading 04/01/2008-06/30/2008	10.67	88.60	51.19	0.00	2.43	4.55	6.98	0.51	4.19	4.69	7,061.87
Mass Grading Dust	0.00	0.00	0.00	0.00	2.42	0.00	2.42	0.50	0.00	0.50	0.00
Mass Grading Off Road Diesel	10.58	88.44	48.34	0.00	0.00	4.54	4.54	0.00	4.18	4.18	6,832.10
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	0.10	0.16	2.86	0.00	0.01	0.01	0.02	0.00	0.00	0.01	229.77
Time Slice 7/1/2008-12/31/2008 Active Days: 132	9.31	73.92	**71.18**	0.04	0.19	3.24	3.43	0.07	2.97	3.04	11,306.18
Building 07/01/2008-12/31/2011	9.31	73.92	71.18	0.04	0.19	3.24	3.43	0.07	2.97	3.04	11,306.18
Building Off Road Diesel	7.53	66.57	25.49	0.00	0.00	2.95	2.95	0.00	2.71	2.71	7,129.24
Building Vendor Trips	0.38	5.00	4.06	0.01	0.03	0.20	0.23	0.01	0.18	0.19	827.27
Building Worker Trips	1.39	2.35	41.63	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,349.67

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Time Slice 1/1/2009-12/31/2009 Active Days: 261	8.67	68.96	66.84	0.04	0.19	2.99	3.18	0.07	2.74	2.81	11,306.68
Building 07/01/2008-12/31/2011	8.67	68.96	66.84	0.04	0.19	2.99	3.18	0.07	2.74	2.81	11,306.68
Building Off Road Diesel	7.03	62.12	24.25	0.00	0.00	2.71	2.71	0.00	2.50	2.50	7,129.24
Building Vendor Trips	0.36	4.68	3.82	0.01	0.03	0.18	0.21	0.01	0.17	0.18	827.33
Building Worker Trips	1.28	2.16	38.78	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,350.11
Time Slice 1/1/2010-12/31/2010 Active Days: 261	8.20	64.54	62.61	0.04	0.19	2.72	2.92	0.07	2.50	2.57	11,307.65
Building 07/01/2008-12/31/2011	8.20	64.54	62.61	0.04	0.19	2.72	2.92	0.07	2.50	2.57	11,307.65
Building Off Road Diesel	6.70	58.29	23.00	0.00	0.00	2.47	2.47	0.00	2.27	2.27	7,129.24
Building Vendor Trips	0.33	4.27	3.57	0.01	0.03	0.17	0.20	0.01	0.15	0.16	827.39
Building Worker Trips	1.17	1.97	36.04	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,351.03
Time Slice 1/3/2011-7/29/2011 Active Days: 150	7.57	59.30	58.81	0.04	0.19	2.47	2.67	0.07	2.27	2.33	11,308.78
Building 07/01/2008-12/31/2011	7.57	59.30	58.81	0.04	0.19	2.47	2.67	0.07	2.27	2.33	11,308.78
Building Off Road Diesel	6.20	53.63	22.04	0.00	0.00	2.23	2.23	0.00	2.06	2.06	7,129.24
Building Vendor Trips	0.31	3.86	3.34	0.01	0.03	0.15	0.18	0.01	0.14	0.15	827.44
Building Worker Trips	1.07	1.81	33.44	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,352.10

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Time Slice 8/1/2011-12/30/2011 Active Days: 110	55.31	74.89	69.65	**0.04**	0.20	3.65	3.85	0.07	3.34	3.42	**12,858.99**
Asphalt 08/01/2011-12/31/2011	2.38	15.53	9.65	0.00	0.00	1.17	1.17	0.00	1.07	1.08	1,431.17
Paving Off-Gas	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.30	15.35	8.84	0.00	0.00	1.16	1.16	0.00	1.07	1.07	1,332.83
Paving On Road Diesel	0.01	0.14	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.70
Paving Worker Trips	0.02	0.04	0.76	0.00	0.00	0.00	0.01	0.00	0.00	0.00	76.64
Building 07/01/2008-12/31/2011	7.57	59.30	58.81	0.04	0.19	2.47	2.67	0.07	2.27	2.33	11,308.78
Building Off Road Diesel	6.20	53.63	22.04	0.00	0.00	2.23	2.23	0.00	2.06	2.06	7,129.24
Building Vendor Trips	0.31	3.86	3.34	0.01	0.03	0.15	0.18	0.01	0.14	0.15	827.44
Building Worker Trips	1.07	1.81	33.44	0.03	0.16	0.09	0.25	0.06	0.07	0.13	3,352.10
Coating 08/01/2011-12/31/2011	45.36	0.06	1.19	0.00	0.01	0.00	0.01	0.00	0.00	0.00	119.04
Architectural Coating	45.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.06	1.19	0.00	0.01	0.00	0.01	0.00	0.00	0.00	119.04

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 4/1/2008 - 6/30/2008 - Site Grading

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

PM10: 84% PM25: 84%

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

PM10: 5% PM25: 5%

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

PM10: 61% PM25: 61%

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

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

The following mitigation measures apply to Phase: Architectural Coating 8/1/2011 - 12/31/2011 - Architectural Coatings

For Residential Architectural Coating Measures, the Residential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 40%

For Residential Architectural Coating Measures, the Residential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 60%

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 40%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 60%

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Urbemis 2007 Version 9.2.2

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas Construction.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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
2008 TOTALS (tons/year unmitigated)	1.20	10.23	7.33	0.00	2.27	0.48	2.75	0.48	0.44	0.92	1,239.89
2008 TOTALS (tons/year mitigated)	1.20	10.23	7.33	0.00	1.05	0.48	1.53	0.22	0.44	0.66	1,239.89
Percent Reduction	0.00	0.00	0.00	0.00	53.82	0.00	44.45	53.63	0.00	27.87	0.00
2009 TOTALS (tons/year unmitigated)	1.13	9.00	8.72	0.01	0.03	0.39	0.42	0.01	0.36	0.37	1,475.52
2009 TOTALS (tons/year mitigated)	1.13	9.00	8.72	0.01	0.03	0.39	0.42	0.01	0.36	0.37	1,475.52
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010 TOTALS (tons/year unmitigated)	1.07	8.42	8.17	0.01	0.03	0.36	0.38	0.01	0.33	0.33	1,475.65
2010 TOTALS (tons/year mitigated)	1.07	8.42	8.17	0.01	0.03	0.36	0.38	0.01	0.33	0.33	1,475.65
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011 TOTALS (tons/year unmitigated)	6.61	8.57	8.24	0.01	0.03	0.39	0.41	0.01	0.35	0.36	1,555.40
2011 TOTALS (tons/year mitigated)	3.61	8.57	8.24	0.01	0.03	0.39	0.41	0.01	0.35	0.36	1,555.40
Percent Reduction	45.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

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2008	1.20	10.23	7.33	0.00	2.27	0.48	2.75	0.48	0.44	0.92	1,239.89
Demolition 01/01/2008-03/31/2008	0.24	2.47	0.97	0.00	0.96	0.12	1.07	0.20	0.11	0.31	264.17
Fugitive Dust	0.00	0.00	0.00	0.00	1.46	0.00	1.46	0.30	0.00	0.30	0.00
Demo Off Road Diesel	0.17	1.39	0.55	0.00	0.00	0.07	0.07	0.00	0.07	0.07	133.32
Demo On Road Diesel	0.07	1.07	0.36	0.00	0.00	0.04	0.05	0.00	0.04	0.04	126.71
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15
Mass Grading 04/01/2008-06/30/2008	0.35	2.88	1.66	0.00	1.30	0.15	1.45	0.27	0.14	0.41	229.51
Mass Grading Dust	0.00	0.00	0.00	0.00	1.30	0.00	1.30	0.27	0.00	0.27	0.00
Mass Grading Off Road Diesel	0.34	2.87	1.57	0.00	0.00	0.15	0.15	0.00	0.14	0.14	222.04
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	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.47
Building 07/01/2008-12/31/2011	0.61	4.88	4.70	0.00	0.01	0.21	0.23	0.00	0.20	0.20	746.21
Building Off Road Diesel	0.50	4.39	1.68	0.00	0.00	0.19	0.19	0.00	0.18	0.18	470.53
Building Vendor Trips	0.03	0.33	0.27	0.00	0.00	0.01	0.02	0.00	0.01	0.01	54.60
Building Worker Trips	0.09	0.16	2.75	0.00	0.01	0.01	0.02	0.00	0.00	0.01	221.08
2009	1.13	9.00	8.72	0.01	0.03	0.39	0.42	0.01	0.36	0.37	1,475.52
Building 07/01/2008-12/31/2011	1.13	9.00	8.72	0.01	0.03	0.39	0.42	0.01	0.36	0.37	1,475.52
Building Off Road Diesel	0.92	8.11	3.16	0.00	0.00	0.35	0.35	0.00	0.33	0.33	930.37
Building Vendor Trips	0.05	0.61	0.50	0.00	0.00	0.02	0.03	0.00	0.02	0.02	107.97
Building Worker Trips	0.17	0.28	5.06	0.00	0.02	0.01	0.03	0.01	0.01	0.02	437.19

3/9/2008 1:05:04 PM

2010	1.07	8.42	8.17	0.01	0.03	0.36	0.38	0.01	0.33	0.33	1,475.65
Building 07/01/2008-12/31/2011	1.07	8.42	8.17	0.01	0.03	0.36	0.38	0.01	0.33	0.33	1,475.65
Building Off Road Diesel	0.87	7.61	3.00	0.00	0.00	0.32	0.32	0.00	0.30	0.30	930.37
Building Vendor Trips	0.04	0.56	0.47	0.00	0.00	0.02	0.03	0.00	0.02	0.02	107.97
Building Worker Trips	0.15	0.26	4.70	0.00	0.02	0.01	0.03	0.01	0.01	0.02	437.31
2011	6.61	8.57	8.24	0.01	0.03	0.39	0.41	0.01	0.35	0.36	1,555.40
Building 07/01/2008-12/31/2011	0.98	7.71	7.65	0.01	0.03	0.32	0.35	0.01	0.29	0.30	1,470.14
Building Off Road Diesel	0.81	6.97	2.86	0.00	0.00	0.29	0.29	0.00	0.27	0.27	926.80
Building Vendor Trips	0.04	0.50	0.43	0.00	0.00	0.02	0.02	0.00	0.02	0.02	107.57
Building Worker Trips	0.14	0.24	4.35	0.00	0.02	0.01	0.03	0.01	0.01	0.02	435.77
Asphalt 08/01/2011-12/31/2011	0.13	0.85	0.53	0.00	0.00	0.06	0.06	0.00	0.06	0.06	78.71
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.13	0.84	0.49	0.00	0.00	0.06	0.06	0.00	0.06	0.06	73.31
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
Paving Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.22
Coating 08/01/2011-12/31/2011	5.49	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55
Architectural Coating	5.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55

Phase Assumptions

Phase: Demolition 1/1/2008 - 3/31/2008 - Demolition

Building Volume Total (cubic feet): 6972250

Building Volume Daily (cubic feet): 69722.5

On Road Truck Travel (VMT): 968.37

Off-Road Equipment:

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2 Off Highway Trucks (479 hp) operating at a 0.57 load factor for 8 hours per day

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

Phase: Mass Grading 4/1/2008 - 6/30/2008 - Site Grading

Total Acres Disturbed: 8.1

Maximum Daily Acreage Disturbed: 2

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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

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

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

Phase: Paving 8/1/2011 - 12/31/2011 - Paving

Acres to be Paved: 2

Off-Road Equipment:

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

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

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

Phase: Building Construction 7/1/2008 - 12/31/2011 - Building Construction

Off-Road Equipment:

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

4 Forklifts (145 hp) operating at a 0.3 load factor for 7 hours per day

8 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

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

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

Phase: Architectural Coating 8/1/2011 - 12/31/2011 - Architectural Coatings

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

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

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

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

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2008	1.20	10.23	7.33	0.00	1.05	0.48	1.53	0.22	0.44	0.66	1,239.89
Demolition 01/01/2008-03/31/2008	0.24	2.47	0.97	0.00	0.96	0.12	1.07	0.20	0.11	0.31	264.17
Fugitive Dust	0.00	0.00	0.00	0.00	1.46	0.00	1.46	0.30	0.00	0.30	0.00
Demo Off Road Diesel	0.17	1.39	0.55	0.00	0.00	0.07	0.07	0.00	0.07	0.07	133.32
Demo On Road Diesel	0.07	1.07	0.36	0.00	0.00	0.04	0.05	0.00	0.04	0.04	126.71
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15
Mass Grading 04/01/2008-06/30/2008	0.35	2.88	1.66	0.00	0.08	0.15	0.23	0.02	0.14	0.15	229.51
Mass Grading Dust	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.02	0.00	0.02	0.00
Mass Grading Off Road Diesel	0.34	2.87	1.57	0.00	0.00	0.15	0.15	0.00	0.14	0.14	222.04
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	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.47
Building 07/01/2008-12/31/2011	0.61	4.88	4.70	0.00	0.01	0.21	0.23	0.00	0.20	0.20	746.21
Building Off Road Diesel	0.50	4.39	1.68	0.00	0.00	0.19	0.19	0.00	0.18	0.18	470.53
Building Vendor Trips	0.03	0.33	0.27	0.00	0.00	0.01	0.02	0.00	0.01	0.01	54.60
Building Worker Trips	0.09	0.16	2.75	0.00	0.01	0.01	0.02	0.00	0.00	0.01	221.08

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2009	1.13	9.00	8.72	0.01	0.03	0.39	0.42	0.01	0.36	0.37	1,475.52
Building 07/01/2008-12/31/2011	1.13	9.00	8.72	0.01	0.03	0.39	0.42	0.01	0.36	0.37	1,475.52
Building Off Road Diesel	0.92	8.11	3.16	0.00	0.00	0.35	0.35	0.00	0.33	0.33	930.37
Building Vendor Trips	0.05	0.61	0.50	0.00	0.00	0.02	0.03	0.00	0.02	0.02	107.97
Building Worker Trips	0.17	0.28	5.06	0.00	0.02	0.01	0.03	0.01	0.01	0.02	437.19
2010	1.07	8.42	8.17	0.01	0.03	0.36	0.38	0.01	0.33	0.33	1,475.65
Building 07/01/2008-12/31/2011	1.07	8.42	8.17	0.01	0.03	0.36	0.38	0.01	0.33	0.33	1,475.65
Building Off Road Diesel	0.87	7.61	3.00	0.00	0.00	0.32	0.32	0.00	0.30	0.30	930.37
Building Vendor Trips	0.04	0.56	0.47	0.00	0.00	0.02	0.03	0.00	0.02	0.02	107.97
Building Worker Trips	0.15	0.26	4.70	0.00	0.02	0.01	0.03	0.01	0.01	0.02	437.31
2011	3.61	8.57	8.24	0.01	0.03	0.39	0.41	0.01	0.35	0.36	1,555.40
Building 07/01/2008-12/31/2011	0.98	7.71	7.65	0.01	0.03	0.32	0.35	0.01	0.29	0.30	1,470.14
Building Off Road Diesel	0.81	6.97	2.86	0.00	0.00	0.29	0.29	0.00	0.27	0.27	926.80
Building Vendor Trips	0.04	0.50	0.43	0.00	0.00	0.02	0.02	0.00	0.02	0.02	107.57
Building Worker Trips	0.14	0.24	4.35	0.00	0.02	0.01	0.03	0.01	0.01	0.02	435.77
Asphalt 08/01/2011-12/31/2011	0.13	0.85	0.53	0.00	0.00	0.06	0.06	0.00	0.06	0.06	78.71
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.13	0.84	0.49	0.00	0.00	0.06	0.06	0.00	0.06	0.06	73.31
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
Paving Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.22
Coating 08/01/2011-12/31/2011	2.49	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55
Architectural Coating	2.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55

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Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 4/1/2008 - 6/30/2008 - Site Grading

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

PM10: 84% PM25: 84%

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

PM10: 5% PM25: 5%

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

PM10: 61% PM25: 61%

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

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

The following mitigation measures apply to Phase: Architectural Coating 8/1/2011 - 12/31/2011 - Architectural Coatings

For Residential Architectural Coating Measures, the Residential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 40%

For Residential Architectural Coating Measures, the Residential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 60%

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 40%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 60%

1/12/2008 2:53:56 PM

Urbemis 2007 Version 9.2.2

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas Area Sources.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.38	3.44	4.47	0.00	0.01	0.01	4,102.99
TOTALS (lbs/day, mitigated)	1.74	3.44	4.47	0.00	0.01	0.01	4,102.99
Percent Reduction	48.52	0.00	0.00	NaN	0.00	0.00	0.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.38	3.44	4.47	0.00	0.01	0.01	4,102.99

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

1/12/2008 2:53:56 PM

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	0.25	3.42	2.87	0.00	0.01	0.01	4,100.24
Hearth							
Landscape	0.13	0.02	1.60	0.00	0.00	0.00	2.75
Consumer Products							
Architectural Coatings	3.00						
TOTALS (lbs/day, unmitigated)	3.38	3.44	4.47	0.00	0.01	0.01	4,102.99

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.25	3.42	2.87	0.00	0.01	0.01	4,100.24
Hearth							
Landscape	0.13	0.02	1.60	0.00	0.00	0.00	2.75
Consumer Products							
Architectural Coatings	1.36						
TOTALS (lbs/day, mitigated)	1.74	3.44	4.47	0.00	0.01	0.01	4,102.99

Area Source Changes to Defaults

1/12/2008 2:54:21 PM

Urbemis 2007 Version 9.2.2

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas Area Sources.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.25	3.42	2.87	0.00	0.01	0.01	4,100.24
TOTALS (lbs/day, mitigated)	1.61	3.42	2.87	0.00	0.01	0.01	4,100.24
Percent Reduction	50.46	0.00	0.00	NaN	0.00	0.00	0.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.25	3.42	2.87	0.00	0.01	0.01	4,100.24

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

1/12/2008 2:54:21 PM

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	0.25	3.42	2.87	0.00	0.01	0.01	4,100.24
Hearth							
Landscaping - No Winter Emissions							
Consumer Products							
Architectural Coatings	3.00						
TOTALS (lbs/day, unmitigated)	3.25	3.42	2.87	0.00	0.01	0.01	4,100.24

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.25	3.42	2.87	0.00	0.01	0.01	4,100.24
Hearth							
Landscaping - No Winter Emissions							
Consumer Products							
Architectural Coatings	1.36						
TOTALS (lbs/day, mitigated)	1.61	3.42	2.87	0.00	0.01	0.01	4,100.24

Area Source Changes to Defaults

1/12/2008 2:54:44 PM

Urbemis 2007 Version 9.2.2

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas Area Sources.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.61	0.62	0.66	0.00	0.00	0.00	748.54
TOTALS (tons/year, mitigated)	0.31	0.62	0.66	0.00	0.00	0.00	748.54
Percent Reduction	49.18	0.00	0.00	NaN	NaN	NaN	0.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.61	0.62	0.66	0.00	0.00	0.00	748.54

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

1/12/2008 2:54:44 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.05	0.62	0.52	0.00	0.00	0.00	748.29
Hearth							
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products							
Architectural Coatings	0.55						
TOTALS (tons/year, unmitigated)	0.61	0.62	0.66	0.00	0.00	0.00	748.54

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.05	0.62	0.52	0.00	0.00	0.00	748.29
Hearth							
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products							
Architectural Coatings	0.25						
TOTALS (tons/year, mitigated)	0.31	0.62	0.66	0.00	0.00	0.00	748.54

Area Source Changes to Defaults

3/24/2008 8:08:02 AM

Urbemis 2007 Version 9.2.2

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	14.58	13.04	114.01	0.10	16.77	3.27	9,687.16

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	14.58	13.04	114.01	0.10	16.77	3.27	9,687.16

3/24/2008 8:08:02 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Inmate Housing with Food Service	14.58	13.04	114.01	0.10	16.77	3.27	9,687.16
TOTALS (lbs/day, unmitigated)	14.58	13.04	114.01	0.10	16.77	3.27	9,687.16

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 85 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
Inmate Housing with Food Service		2.13	unknown	616.00	1,312.08	9,700.21
					1,312.08	9,700.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.9	1.2	98.4	0.4
Light Truck < 3750 lbs	10.9	2.8	91.7	5.5
Light Truck 3751-5750 lbs	21.7	0.9	98.6	0.5
Med Truck 5751-8500 lbs	9.5	1.1	98.9	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0

3/24/2008 8:08:02 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	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	3.5	68.6	31.4	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)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Inmate Housing with Food Service				2.0	1.0	97.0

3/24/2008 8:09:13 AM

Urbemis 2007 Version 9.2.2

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	10.47	17.70	115.14	0.08	16.77	3.27	8,427.34

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	10.47	17.70	115.14	0.08	16.77	3.27	8,427.34

3/24/2008 8:09:13 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Inmate Housing with Food Service	10.47	17.70	115.14	0.08	16.77	3.27	8,427.34
TOTALS (lbs/day, unmitigated)	10.47	17.70	115.14	0.08	16.77	3.27	8,427.34

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 50 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
Inmate Housing with Food Service		2.13	unknown	616.00	1,312.08	9,700.21
					1,312.08	9,700.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.9	1.2	98.4	0.4
Light Truck < 3750 lbs	10.9	2.8	91.7	5.5
Light Truck 3751-5750 lbs	21.7	0.9	98.6	0.5
Med Truck 5751-8500 lbs	9.5	1.1	98.9	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	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	3.5	68.6	31.4	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)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Inmate Housing with Food Service				2.0	1.0	97.0

3/24/2008 8:09:44 AM

Urbemis 2007 Version 9.2.2

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Las Colinas.urb9

Project Name: Las Colinas Detention Facility

Project Location: California State-wide

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.41	2.66	20.87	0.02	3.06	0.60	1,691.27

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.41	2.66	20.87	0.02	3.06	0.60	1,691.27

3/24/2008 8:09:44 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Inmate Housing with Food Service	2.41	2.66	20.87	0.02	3.06	0.60	1,691.27
TOTALS (tons/year, unmitigated)	2.41	2.66	20.87	0.02	3.06	0.60	1,691.27

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Inmate Housing with Food Service		2.13	unknown	616.00	1,312.08	9,700.21
					1,312.08	9,700.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.9	1.2	98.4	0.4
Light Truck < 3750 lbs	10.9	2.8	91.7	5.5
Light Truck 3751-5750 lbs	21.7	0.9	98.6	0.5
Med Truck 5751-8500 lbs	9.5	1.1	98.9	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0

3/24/2008 8:09:44 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	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	3.5	68.6	31.4	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)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Inmate Housing with Food Service				2.0	1.0	97.0

Las Colinas Detention Facility

Air Quality Modeling Outputs

ISCST3 Model Outputs

```
NO ECHO


 BEE-Line ISCST3 "BEEST" Version 9.00


 Input File - C:\BEEST\Las Colinas_95_OTHER.DTA

Output File - C:\BEEST\Las Colinas_95_OTHER.LST

   Met File - C:\MetData\MIR95.ASC



 *** Message Summary For ISC3 Model Setup ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            1 Warning Message(s)
A Total of            0 Informational Message(s)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
RE W282   140 CHK_EL:RecElev < SrcBase; See non-DFAULT HE>ZI option in
MCB#9

***********************************
*** SETUP Finishes Successfully ***
***********************************
```

CONC RURAL ELEV DFAULT

*** MODEL SETUP OPTIONS
SUMMARY ***
- -
- -

**Intermediate Terrain Processing is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

  -- SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION. DDPLETE = F
**Model Uses NO WET DEPLETION. WDPLETE = F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

**Model Uses RURAL Dispersion.

**Model Uses Regulatory DEFAULT Options:
1. Final Plume Rise.
2. Stack-tip Downwash.
3. Buoyancy-induced Dispersion.
4. Use Calms Processing Routine.
5. Not Use Missing Data Processing Routine.
6. Default Wind Profile Exponents.
7. Default Vertical Potential Temperature Gradients.
8. "Upper Bound" Values for Supersquat Buildings.
9. No Exponential Decay for RURAL Mode

**Model Accepts Receptors on ELEV Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates ANNUAL Averages Only

**This Run Includes: 1 Source(s); 1 Source Group(s); and
288 Receptor(s)

**The Model Assumes A Pollutant Type of: OTHER

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of High Values for Plotting
(PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for
Calm Hours

```
                                                                    m for
Missing Hours
                                                                    b for
Both Calm and Missing Hours

**Misc. Inputs:  Anem. Hgt. (m) =    10.00 ;    Decay Coef. =    0.000
;    Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =     1.2 MB of RAM.

**Input Runstream File:          Las Colinas_95_OTHER.DTA
**Output Print File:             Las Colinas_95_OTHER.LST
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
POINT1	0	0.10000E+01	502400.0	3633700.0	103.9	3.00	600.00	20.00	0.50	NO	

CONC RURAL ELEV DFAULT

*** SOURCE IDs DEFINING
SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	POINT1 ,

CONC RURAL ELEV DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 502400.00 ; Y-ORIG = 3633700.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***

(METERS)

50.0, 100.0, 150.0, 200.0, 250.0, 300.0, 400.0, 500.0,

*** DIRECTION RADIALS OF NETWORK ***

(DEGREES)

360.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0,
100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0,
200.0, 210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0, 280.0, 290.0,
300.0, 310.0, 320.0, 330.0, 340.0, 350.0,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDPOLR ***

* ELEVATION HEIGHTS IN METERS *

DIRECTION (DEGREES)	DISTANCE (METERS) 50.00	100.00	150.00	200.00	250.00	300.00	400.00	500.00
360.00	103.90	103.90	103.90	103.90	103.60	103.60	103.60	103.90
10.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.90
20.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.90
30.00	103.90	104.20	103.90	103.90	103.90	103.90	103.90	103.90
40.00	103.90	104.70	103.90	103.90	103.90	104.00	104.00	104.20
50.00	103.90	104.80	104.40	104.30	104.60	104.90	104.90	104.90
60.00	104.00	104.90	104.80	104.90	104.80	104.90	104.90	104.90
70.00	104.10	104.90	104.90	104.90	104.90	104.90	106.10	106.10
80.00	104.20	104.90	104.90	104.90	104.90	104.90	106.00	106.10
90.00	104.20	104.90	104.90	104.90	104.90	104.90	105.70	106.10
100.00	104.20	104.90	104.90	104.90	104.90	104.90	105.80	106.10
110.00	104.30	104.90	104.90	104.90	104.90	105.00	106.10	106.10
120.00	104.40	104.90	105.10	105.50	105.90	106.10	106.10	106.20
130.00	104.60	104.90	105.40	106.10	106.10	106.10	106.10	107.00
140.00	104.80	104.90	104.90	106.10	106.10	106.10	106.90	107.10
150.00	104.90	104.90	104.90	106.10	106.10	106.30	107.00	107.90
160.00	104.90	104.90	105.00	106.00	106.10	106.10	107.00	107.30

170.00	104.80	104.90	104.90	105.10	106.10	106.10	107.00	106.50
180.00	104.50	104.90	104.90	105.10	106.10	106.10	106.10	106.10
190.00	104.30	104.80	104.90	104.90	105.10	105.40	106.10	104.90
200.00	104.00	104.70	104.90	104.90	104.90	104.90	104.90	104.90
210.00	103.90	104.40	104.90	104.90	104.90	104.50	104.90	103.90
220.00	103.90	104.10	104.90	104.90	104.20	103.90	103.90	103.90
230.00	103.90	103.90	104.60	104.40	103.90	103.90	103.90	103.80
240.00	103.90	103.90	104.00	103.90	103.90	103.90	103.90	103.20
250.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.60
260.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.20
270.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.30
280.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.90
290.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.90
300.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.90
310.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.90
320.00	103.90	103.90	103.90	103.90	103.90	103.90	103.90	103.00
330.00	103.90	103.90	103.90	103.90	103.90	103.90	103.00	103.00
340.00	103.90	103.90	103.90	103.90	103.80	103.20	103.00	103.00
350.00	103.90	103.90	103.90	103.90	103.40	103.00	103.00	103.70

CONC RURAL ELEV DFAULT

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1=YES; 0=NO)

```
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES *** (METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00

D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS *** (DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

CONC RURAL ELEV DFAULT

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: MIR95.ASC
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 93107 UPPER AIR STATION NO.: 3190
NAME: MIRAMAR_NAS,CA NAME: UNKNOWN
YEAR: 1995 YEAR: 1995

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	MIXING HEIGHT (M) URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
95	01	01	01	181.0	1.00	282.6	6	1255.7	240.0	0.0000	0.0	0.0000	0	0.00
95	01	01	02	268.0	1.03	282.0	6	1267.5	240.0	0.0000	0.0	0.0000	0	0.00
95	01	01	03	244.0	1.03	282.6	6	1279.3	240.0	0.0000	0.0	0.0000	0	0.00
95	01	01	04	293.0	1.54	282.6	6	1291.1	240.0	0.0000	0.0	0.0000	0	0.00
95	01	01	05	293.0	2.06	282.6	5	1302.9	240.0	0.0000	0.0	0.0000	0	0.00
95	01	01	06	292.0	0.00	282.6	6	1314.7	240.0	0.0000	0.0	0.0000	0	0.00
95	01	01	07	285.0	1.03	280.4	5	13.8	251.5	0.0000	0.0	0.0000	0	0.00
95	01	01	08	253.0	1.00	283.2	4	213.1	416.8	0.0000	0.0	0.0000	0	0.00
95	01	01	09	247.0	0.00	288.7	3	412.4	582.2	0.0000	0.0	0.0000	0	0.00
95	01	01	10	151.0	2.06	288.7	3	611.8	747.6	0.0000	0.0	0.0000	0	0.00
95	01	01	11	144.0	2.06	289.3	3	811.1	912.9	0.0000	0.0	0.0000	0	0.00
95	01	01	12	136.0	4.12	290.9	3	1010.4	1078.3	0.0000	0.0	0.0000	0	0.00
95	01	01	13	143.0	3.60	291.5	3	1209.7	1243.6	0.0000	0.0	0.0000	0	0.00
95	01	01	14	129.0	4.12	289.3	3	1409.0	1409.0	0.0000	0.0	0.0000	0	0.00
95	01	01	15	132.0	4.12	290.4	3	1409.0	1409.0	0.0000	0.0	0.0000	0	0.00

```
95 01 01 16  144.0   3.09  289.3   4    1409.0  1409.0    0.0000
0.0  0.0000   0   0.00
95 01 01 17  161.0   2.06  288.2   5    1409.5  1371.2    0.0000
0.0  0.0000   0   0.00
95 01 01 18   57.0   1.03  284.8   6    1412.2  1182.2    0.0000
0.0  0.0000   0   0.00
95 01 01 19   64.0   0.00  283.7   7    1414.9   993.1    0.0000
0.0  0.0000   0   0.00
95 01 01 20   57.0   0.00  281.5   7    1417.6   804.1    0.0000
0.0  0.0000   0   0.00
95 01 01 21  280.0   1.03  282.0   7    1420.3   615.1    0.0000
0.0  0.0000   0   0.00
95 01 01 22  272.0   1.03  280.9   7    1423.0   426.1    0.0000
0.0  0.0000   0   0.00
95 01 01 23  270.0   1.54  280.9   7    1425.7   237.0    0.0000
0.0  0.0000   0   0.00
95 01 01 24  270.0   1.54  282.0   7    1428.4    48.0    0.0000
0.0  0.0000   0   0.00


*** NOTES:  STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
            FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.
```

CONC RURAL ELEV DFAULT

*** THE ANNUAL (1 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): POINT1 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

DIRECTION (DEGREES)	DISTANCE (METERS) 50.00	100.00	150.00	200.00	250.00	300.00	400.00	500.00
360.00	0.00121	0.07380	0.25244	0.34742	0.38764	0.42241	0.44643	0.45190
10.00	0.00108	0.09382	0.32428	0.43475	0.48591	0.50829	0.49946	0.46679
20.00	0.00137	0.15351	0.47645	0.60938	0.65516	0.66050	0.61238	0.54715
30.00	0.00179	0.22165	0.61519	0.77938	0.83963	0.84932	0.79312	0.71281
40.00	0.00229	0.29597	0.70374	0.86901	0.91157	0.90413	0.80519	0.70188
50.00	0.00310	0.35767	0.87637	1.04035	1.09522	1.07923	0.93320	0.79129
60.00	0.00374	0.42755	1.11979	1.36971	1.40820	1.39413	1.25388	1.10552
70.00	0.00424	0.42637	1.07635	1.25168	1.25761	1.20242	1.10218	0.92776
80.00	0.00706	0.61935	1.46830	1.67002	1.65591	1.57117	1.40829	1.18099
90.00	0.01114	1.00816	2.36406	2.70688	2.70653	2.57887	2.30885	1.98201
100.00	0.01353	1.27260	2.91979	3.28596	3.22719	3.02026	2.62675	2.18284
110.00	0.01587	1.50462	3.48134	3.94236	3.88954	3.68044	3.25409	2.68292
120.00	0.01967	1.71483	4.10688	4.83518	4.90407	4.64799	3.89221	3.26518
130.00	0.02370	1.63887	3.97860	4.69554	4.50994	4.16684	3.41756	3.57808
140.00	0.02270	1.27350	2.82927	3.54302	3.41128	3.16559	2.72323	2.81370
150.00	0.01710	0.79103	1.76509	2.25670	2.22083	2.14602	2.36498	2.14264

160.00	0.01120	0.41774	0.94260	1.19855	1.20896	1.17635	1.48677	1.42047
170.00	0.00700	0.19468	0.44665	0.55031	0.64650	0.65799	0.89834	0.67392
180.00	0.00405	0.08041	0.18710	0.24642	0.31315	0.34156	0.38630	0.42193
190.00	0.00237	0.03486	0.07685	0.09967	0.11717	0.13663	0.17076	0.16912
200.00	0.00144	0.02270	0.04715	0.05993	0.06899	0.07898	0.09518	0.10716
210.00	0.00121	0.02120	0.04689	0.05801	0.06555	0.07004	0.08580	0.08837
220.00	0.00111	0.02309	0.06037	0.07072	0.06794	0.06736	0.06744	0.06660
230.00	0.00141	0.02369	0.05720	0.06378	0.06172	0.06126	0.05839	0.05519
240.00	0.00277	0.03206	0.05942	0.06983	0.07445	0.07724	0.08094	0.08027
250.00	0.00609	0.05497	0.07072	0.07643	0.07855	0.08209	0.09258	0.10314
260.00	0.01118	0.09797	0.12316	0.13747	0.14558	0.15534	0.17686	0.18475
270.00	0.01449	0.12688	0.17062	0.20691	0.23811	0.27260	0.34325	0.38385
280.00	0.01248	0.09531	0.12745	0.15446	0.17599	0.19819	0.23593	0.27152
290.00	0.00831	0.05989	0.10273	0.13784	0.16369	0.18517	0.21220	0.22951
300.00	0.00565	0.04158	0.07654	0.10434	0.12566	0.14581	0.17857	0.20626
310.00	0.00379	0.02828	0.06474	0.09256	0.11167	0.12571	0.14014	0.14589
320.00	0.00221	0.02018	0.06994	0.10914	0.13799	0.16039	0.18430	0.18038
330.00	0.00138	0.01788	0.08469	0.13810	0.18022	0.21623	0.23915	0.26512
340.00	0.00105	0.02018	0.09251	0.14361	0.17735	0.19162	0.22187	0.23927
350.00	0.00113	0.04649	0.16119	0.22382	0.24323	0.25624	0.27789	0.29543

CONC RURAL ELEV DFAULT

*** THE SUMMARY OF MAXIMUM
ANNUAL (1 YRS) RESULTS ***

** CONC OF OTHER IN
MICROGRAMS/M**3 **

NETWORK
GROUP ID AVERAGE CONC RECEPTOR
(XR, YR, ZELEV, ZFLAG) OF TYPE GRID-ID
- -
- -

ALL 1ST HIGHEST VALUE IS 4.90407 AT (502616.50,
3633575.00, 105.90, 0.00) GP GRID1
  2ND HIGHEST VALUE IS 4.83518 AT (502573.22,
3633600.00, 105.50, 0.00) GP GRID1
  3RD HIGHEST VALUE IS 4.69554 AT (502553.22,
3633571.50, 106.10, 0.00) GP GRID1
  4TH HIGHEST VALUE IS 4.64799 AT (502659.81,
3633550.00, 106.10, 0.00) GP GRID1
  5TH HIGHEST VALUE IS 4.50994 AT (502591.50,
3633539.25, 106.10, 0.00) GP GRID1
  6TH HIGHEST VALUE IS 4.16684 AT (502629.81,
3633507.25, 106.10, 0.00) GP GRID1
  7TH HIGHEST VALUE IS 4.10688 AT (502529.91,
3633625.00, 105.10, 0.00) GP GRID1
  8TH HIGHEST VALUE IS 3.97860 AT (502514.91,
3633603.50, 105.40, 0.00) GP GRID1
  9TH HIGHEST VALUE IS 3.94236 AT (502587.94,
3633631.50, 104.90, 0.00) GP GRID1
  10TH HIGHEST VALUE IS 3.89221 AT (502746.41,
3633500.00, 106.10, 0.00) GP GRID1

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
BD = BOUNDARY

CONC RURAL ELEV DFAULT

*** Message Summary : ISCST3 Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1526 Informational Message(s)

A Total of 1525 Calm Hours Identified

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
RE W282 140 CHK_EL:RecElev < SrcBase; See non-DFAULT HE>ZI option in MCB#9

****
*** ISCST3 Finishes Successfully ***
****

Table A-1
Excess Cancer Risk Calculations
Las Colinas Detention Facility Construction

Impact based on 1 g/s	4.9	micrograms/cubic meter		
Construction Phase	**Emissions, lbs/day**	**Duration of Phase, months**	**Impact, micrograms/ cubic meter**	**Excess Cancer Risk**
Demolition	2.29	2	0.012022235	1.2881E-08
Grading	4.54	3	0.023834475	3.83054E-08
Building Construction	2.23	30	0.011707242	1.88152E-07
Building Construction and Paving	3.39	3	0.017797108	2.86025E-08
Total Risk				**2.67941E-07**

Magnolia Segment am

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

     JOB: Magnolia Segment pm
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
   U=   1.0 M/S            Z0= 100. CM           ALT=     0. (M)
 BRG= WORST CASE           VD=   .0 CM/S
CLAS=     7 (G)            VS=   .0 CM/S
MIXH= 1000. M             AMB=   .0 PPM
SIGTH=   10. DEGREES      TEMP= 16.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Magnolia NB1	*	672	-234	500	156	* AG	1336	9.2	.0	10.0
B. Magnolia NB2	*	500	156	477	688	* AG	1336	9.2	.0	10.0
C. Magnolia SB1	*	469	688	493	156	* AG	2435	9.2	.0	10.0
D. Magnolia SB2	*	493	156	665	-234	* AG	2435	9.2	.0	10.0

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

     JOB: Magnolia Segment pm
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	456	688	1.8
2. Recpt 2	*	460	588	1.8
3. Recpt 3	*	464	488	1.8
4. Recpt 4	*	468	388	1.8
5. Recpt 5	*	472	288	1.8
6. Recpt 6	*	476	188	1.8

7.	Recpt 7	490	688	1.8
8.	Recpt 8	494	588	1.8
9.	Recpt 9	498	488	1.8
10.	Recpt 10	502	388	1.8
11.	Recpt 11	506	288	1.8
12.	Recpt 12	510	188	1.8
13.	Recpt 13	505	88	1.8
14.	Recpt 14	550	-13	1.8
15.	Recpt 15	595	-113	1.8
16.	Recpt 16	640	-213	1.8
17.	Recpt 17	538	88	1.8
18.	Recpt 18	583	-13	1.8
19.	Recpt 19	628	-113	1.8
20.	Recpt 20	673	-213	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Magnolia Segment pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D
1. Recpt 1	169.	1.6	.0	.4	.9	.1
2. Recpt 2	168.	1.6	.1	.4	.9	.1
3. Recpt 3	167.	1.6	.1	.4	.9	.2
4. Recpt 4	166.	1.6	.2	.4	.8	.2
5. Recpt 5	163.	1.7	.3	.3	.7	.3
6. Recpt 6	152.	1.9	.6	.0	.4	.9
7. Recpt 7	187.	1.3	.0	.6	.7	.0
8. Recpt 8	187.	1.3	.0	.6	.7	.0
9. Recpt 9	188.	1.3	.0	.6	.6	.0
10. Recpt 10	190.	1.3	.0	.6	.6	.0
11. Recpt 11	346.	1.3	.0	.7	.7	.0
12. Recpt 12	348.	1.4	.0	.7	.7	.0
13. Recpt 13	357.	1.8	.2	.5	.6	.6
14. Recpt 14	350.	1.6	.3	.2	.3	.7
15. Recpt 15	347.	1.6	.4	.2	.2	.8
16. Recpt 16	346.	1.6	.4	.1	.2	.9
17. Recpt 17	167.	1.8	.9	.0	.0	.8
18. Recpt 18	169.	1.6	.8	.0	.0	.8
19. Recpt 19	325.	1.5	.8	.0	.0	.8
20. Recpt 20	326.	1.5	.7	.0	.0	.7

Magnolia Segment pm

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

     JOB: Magnolia Segment
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
   U=   1.0 M/S            Z0= 100. CM           ALT=     0. (M)
 BRG= WORST CASE           VD=   .0 CM/S
CLAS=     7 (G)            VS=   .0 CM/S
MIXH= 1000. M             AMB=   .0 PPM
SIGTH=   10. DEGREES      TEMP= 16.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Magnolia NB1	*	672	-234	500	156	* AG	2041	9.2	.0	10.0
B. Magnolia NB2	*	500	156	477	688	* AG	2041	9.2	.0	10.0
C. Magnolia SB1	*	469	688	493	156	* AG	2117	9.2	.0	10.0
D. Magnolia SB2	*	493	156	665	-234	* AG	2117	9.2	.0	10.0

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

     JOB: Magnolia Segment
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	456	688	1.8
2. Recpt 2	*	460	588	1.8
3. Recpt 3	*	464	488	1.8
4. Recpt 4	*	468	388	1.8
5. Recpt 5	*	472	288	1.8
6. Recpt 6	*	476	188	1.8

Magnolia Segment pm

7.	Recpt 7	490	688	1.8
8.	Recpt 8	494	588	1.8
9.	Recpt 9	498	488	1.8
10.	Recpt 10	502	388	1.8
11.	Recpt 11	506	288	1.8
12.	Recpt 12	510	188	1.8
13.	Recpt 13	505	88	1.8
14.	Recpt 14	550	-13	1.8
15.	Recpt 15	595	-113	1.8
16.	Recpt 16	640	-213	1.8
17.	Recpt 17	538	88	1.8
18.	Recpt 18	583	-13	1.8
19.	Recpt 19	628	-113	1.8
20.	Recpt 20	673	-213	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Magnolia Segment
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D
1. Recpt 1	169.	1.6	.1	.6	.8	.1
2. Recpt 2	168.	1.6	.1	.6	.8	.1
3. Recpt 3	167.	1.6	.2	.5	.8	.2
4. Recpt 4	166.	1.7	.2	.5	.7	.2
5. Recpt 5	163.	1.7	.3	.4	.7	.3
6. Recpt 6	151.	2.0	.8	.0	.4	.8
7. Recpt 7	187.	1.4	.0	.8	.6	.0
8. Recpt 8	188.	1.4	.0	.8	.6	.0
9. Recpt 9	189.	1.4	.0	.8	.6	.0
10. Recpt 10	190.	1.4	.0	.8	.6	.0
11. Recpt 11	346.	1.5	.0	.9	.6	.0
12. Recpt 12	347.	1.6	.0	.9	.6	.0
13. Recpt 13	357.	1.9	.3	.6	.5	.5
14. Recpt 14	350.	1.7	.5	.3	.3	.7
15. Recpt 15	347.	1.7	.5	.2	.2	.7
16. Recpt 16	346.	1.7	.6	.2	.2	.8
17. Recpt 17	168.	2.1	1.3	.0	.0	.8
18. Recpt 18	170.	1.9	1.1	.0	.0	.7
19. Recpt 19	325.	1.8	1.1	.0	.0	.7
20. Recpt 20	325.	1.7	1.0	.0	.0	.7