

ORANGE COUNTY SANITATION DISTRICT

Appendix B

URBEMIS AIR QUALITY MODEL

URBEMIS 2002 For Windows 7.5.0

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\OCSD.urb
Project Name: Carbon Canyon Dam Sewer
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006 ***							
TOTALS (lbs/day, unmitigated)	14.26	92.44	116.23	0.10	8.66	3.65	5.01
TOTALS (lbs/day, mitigated)	14.26	92.44	116.23	0.10	5.57	3.65	1.92

URBEMIS 2002 For Windows 7.5.0

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\OCSD.urb
Project Name: Carbon Canyon Dam Sewer
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006 ***							
TOTALS (lbs/day, unmitigated)	14.26	92.44	116.23	0.10	8.66	3.65	5.01
TOTALS (lbs/day, mitigated)	14.26	92.44	116.23	0.10	5.57	3.65	1.92

URBEMIS 2002 For Windows 7.5.0

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\OCSD.urb
Project Name: Carbon Canyon Dam Sewer
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006 ***							
TOTALS (tpy, unmitigated)	0.67	4.36	5.75	0.00	0.33	0.17	0.16
TOTALS (tpy, mitigated)	0.67	4.36	5.75	0.00	0.21	0.17	0.04

URBEMIS 2002 For Windows 7.5.0

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\OCSD.urb
 Project Name: Carbon Canyon Dam Sewer
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

Construction Start Month and Year: March, 2006
 Construction Duration: 6
 Total Land Use Area to be Developed: 4.8 acres
 Maximum Acreage Disturbed Per Day: 0.5 acres
 Single Family Units: 55.5 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	1.89	-	1.89
Off-Road Diesel	6.67	44.44	54.34	-	1.87	1.87	0.00
On-Road Diesel	0.32	7.16	1.19	0.10	0.17	0.14	0.03
Worker Trips	0.05	0.12	1.18	0.00	0.00	0.00	0.00
Maximum lbs/day	7.04	51.72	56.71	0.10	3.93	2.01	1.92
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	5.00	-	5.00
Off-Road Diesel	11.70	74.59	97.10	-	2.87	2.87	0.00
On-Road Diesel	0.02	0.42	0.07	0.01	0.01	0.01	0.00
Worker Trips	0.14	0.27	2.94	0.00	0.01	0.00	0.01
Maximum lbs/day	11.86	75.28	100.11	0.01	7.89	2.88	5.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.14	64.81	83.84	-	2.47	2.47	0.00
Bldg Const Worker Trips	0.23	0.11	2.88	0.00	0.04	0.00	0.04
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.05	-	-	-	-	-	-
Asphalt Off-Road Diesel	3.79	27.33	29.11	-	1.17	1.17	0.00
Asphalt On-Road Diesel	0.01	0.18	0.04	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.03	0.01	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	14.26	92.44	116.23	0.00	3.70	3.65	0.05
Max lbs/day all phases	14.26	92.44	116.23	0.10	8.66	3.65	5.01

Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Mar '06
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 4500
 Building Volume Daily (cubic feet): 4500
 On-Road Truck Travel (VMT): 249
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Mar '06
 Phase 2 Duration: 2.5 months
 On-Road Truck Travel (VMT): 14
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 3 - Building Construction Assumptions
 Start Month/Year for Phase 3: Jun '06
 Phase 3 Duration: 3.0 months
 Start Month/Year for SubPhase Building: Jun '06
 SubPhase Building Duration: 2.75 months
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Bore/Drill Rigs	218	0.750	8.0
1	Cranes	190	0.430	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Signal Boards	119	0.820	8.0
1	Trenchers	82	0.695	4.0

SubPhase Architectural Coatings Turned OFF
 Start Month/Year for SubPhase Asphalt: Aug '06
 SubPhase Asphalt Duration: 0.25 months
 Acres to be Paved: 0.103

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	4.0
1	Paving Equipment	111	0.530	4.0
1	Rollers	114	0.430	8.0
1	Signal Boards	119	0.820	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	1.89	-	1.89
Off-Road Diesel	6.67	44.44	54.34	-	1.87	1.87	0.00
On-Road Diesel	0.32	7.16	1.19	0.10	0.17	0.14	0.03
Worker Trips	0.05	0.12	1.18	0.00	0.00	0.00	0.00
Maximum lbs/day	7.04	51.72	56.71	0.10	3.93	2.01	1.92
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	1.03	-	1.03
Off-Road Diesel	11.70	74.59	97.10	-	2.87	2.87	0.00
On-Road Diesel	0.02	0.42	0.07	0.01	0.01	0.01	0.00
Worker Trips	0.14	0.27	2.94	0.00	0.01	0.00	0.01
Maximum lbs/day	11.86	75.28	100.11	0.01	3.92	2.88	1.04
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.14	64.81	83.84	-	2.47	2.47	0.00
Bldg Const Worker Trips	0.23	0.11	2.88	0.00	0.04	0.00	0.04
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.05	-	-	-	-	-	-
Asphalt Off-Road Diesel	3.79	27.33	29.11	-	1.17	1.17	0.00
Asphalt On-Road Diesel	0.01	0.18	0.04	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.03	0.01	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	14.26	92.44	116.23	0.00	3.70	3.65	0.05
Max lbs/day all phases	14.26	92.44	116.23	0.10	5.57	3.65	1.92

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 2x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)

Phase 1 - Demolition Assumptions

Start Month/Year for Phase 1: Mar '06
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 4500
 Building Volume Daily (cubic feet): 4500
 On-Road Truck Travel (VMT): 249

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Mar '06
 Phase 2 Duration: 2.5 months
 On-Road Truck Travel (VMT): 14
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 3 - Building Construction Assumptions
 Start Month/Year for Phase 3: Jun '06
 Phase 3 Duration: 3.0 months
 Start Month/Year for SubPhase Building: Jun '06
 SubPhase Building Duration: 2.75 months
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Bore/Drill Rigs	218	0.750	8.0
1	Cranes	190	0.430	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Signal Boards	119	0.820	8.0
1	Trenchers	82	0.695	4.0

SubPhase Architectural Coatings Turned OFF
 Start Month/Year for SubPhase Asphalt: Aug '06
 SubPhase Asphalt Duration: 0.25 months
 Acres to be Paved: 0.103
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	4.0
1	Paving Equipment	111	0.530	4.0
1	Rollers	114	0.430	8.0
1	Signal Boards	119	0.820	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

URBEMIS 2002 For Windows 7.5.0

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DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: March, 2006
 Construction Duration: 6
 Total Land Use Area to be Developed: 4.8 acres
 Maximum Acreage Disturbed Per Day: 0.5 acres
 Single Family Units: 55.5 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	1.89	-	1.89
Off-Road Diesel	6.67	44.44	54.34	-	1.87	1.87	0.00
On-Road Diesel	0.32	7.16	1.19	0.10	0.17	0.14	0.03
Worker Trips	0.05	0.12	1.18	0.00	0.00	0.00	0.00
Maximum lbs/day	7.04	51.72	56.71	0.10	3.93	2.01	1.92
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	5.00	-	5.00
Off-Road Diesel	11.70	74.59	97.10	-	2.87	2.87	0.00
On-Road Diesel	0.02	0.42	0.07	0.01	0.01	0.01	0.00
Worker Trips	0.14	0.27	2.94	0.00	0.01	0.00	0.01
Maximum lbs/day	11.86	75.28	100.11	0.01	7.89	2.88	5.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.14	64.81	83.84	-	2.47	2.47	0.00
Bldg Const Worker Trips	0.23	0.11	2.88	0.00	0.04	0.00	0.04
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.05	-	-	-	-	-	-
Asphalt Off-Road Diesel	3.79	27.33	29.11	-	1.17	1.17	0.00
Asphalt On-Road Diesel	0.01	0.18	0.04	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.03	0.01	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	14.26	92.44	116.23	0.00	3.70	3.65	0.05
Max lbs/day all phases	14.26	92.44	116.23	0.10	8.66	3.65	5.01

Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Mar '06
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 4500
 Building Volume Daily (cubic feet): 4500
 On-Road Truck Travel (VMT): 249
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Mar '06
 Phase 2 Duration: 2.5 months
 On-Road Truck Travel (VMT): 14
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 3 - Building Construction Assumptions
 Start Month/Year for Phase 3: Jun '06
 Phase 3 Duration: 3.0 months
 Start Month/Year for SubPhase Building: Jun '06
 SubPhase Building Duration: 2.75 months
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Bore/Drill Rigs	218	0.750	8.0
1	Cranes	190	0.430	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Signal Boards	119	0.820	8.0
1	Trenchers	82	0.695	4.0

SubPhase Architectural Coatings Turned OFF
 Start Month/Year for SubPhase Asphalt: Aug '06
 SubPhase Asphalt Duration: 0.25 months
 Acres to be Paved: 0.103

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	4.0
1	Paving Equipment	111	0.530	4.0
1	Rollers	114	0.430	8.0
1	Signal Boards	119	0.820	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	1.89	-	1.89
Off-Road Diesel	6.67	44.44	54.34	-	1.87	1.87	0.00
On-Road Diesel	0.32	7.16	1.19	0.10	0.17	0.14	0.03
Worker Trips	0.05	0.12	1.18	0.00	0.00	0.00	0.00
Maximum lbs/day	7.04	51.72	56.71	0.10	3.93	2.01	1.92
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	1.03	-	1.03
Off-Road Diesel	11.70	74.59	97.10	-	2.87	2.87	0.00
On-Road Diesel	0.02	0.42	0.07	0.01	0.01	0.01	0.00
Worker Trips	0.14	0.27	2.94	0.00	0.01	0.00	0.01
Maximum lbs/day	11.86	75.28	100.11	0.01	3.92	2.88	1.04
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	10.14	64.81	83.84	-	2.47	2.47	0.00
Bldg Const Worker Trips	0.23	0.11	2.88	0.00	0.04	0.00	0.04
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.05	-	-	-	-	-	-
Asphalt Off-Road Diesel	3.79	27.33	29.11	-	1.17	1.17	0.00
Asphalt On-Road Diesel	0.01	0.18	0.04	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.03	0.01	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	14.26	92.44	116.23	0.00	3.70	3.65	0.05
Max lbs/day all phases	14.26	92.44	116.23	0.10	5.57	3.65	1.92

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 2x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)

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Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Mar '06

Phase 2 Duration: 2.5 months

On-Road Truck Travel (VMT): 14

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '06

Phase 3 Duration: 3.0 months

Start Month/Year for SubPhase Building: Jun '06

SubPhase Building Duration: 2.75 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Bore/Drill Rigs	218	0.750	8.0
1	Cranes	190	0.430	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Signal Boards	119	0.820	8.0
1	Trenchers	82	0.695	4.0

SubPhase Architectural Coatings Turned OFF

Start Month/Year for SubPhase Asphalt: Aug '06

SubPhase Asphalt Duration: 0.25 months

Acres to be Paved: 0.103

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	4.0
1	Paving Equipment	111	0.530	4.0
1	Rollers	114	0.430	8.0
1	Signal Boards	119	0.820	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
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Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
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Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
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Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
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URBEMIS 2002 For Windows 7.5.0

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2002\OCSD.urb
 Project Name: Carbon Canyon Dam Sewer
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Tons/Year)

Construction Start Month and Year: March, 2006
 Construction Duration: 6
 Total Land Use Area to be Developed: 4.8 acres
 Maximum Acreage Disturbed Per Day: 0.5 acres
 Single Family Units: 55.5 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.04	0.24	0.30	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.04	0.28	0.32	0.00	0.02	0.01	0.01
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.15	-	0.15
Off-Road Diesel	0.32	2.05	2.67	-	0.08	0.08	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Total tons/year	0.32	2.05	2.74	0.00	0.23	0.08	0.15
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.30	1.95	2.53	-	0.08	0.08	0.00
Bldg Const Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.01	0.08	0.08	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.31	2.03	2.69	0.00	0.08	0.08	0.00
Total all phases tons/yr	0.67	4.36	5.75	0.00	0.33	0.17	0.16

Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Mar '06
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 4500
 Building Volume Daily (cubic feet): 4500
 On-Road Truck Travel (VMT): 249
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Mar '06
 Phase 2 Duration: 2.5 months
 On-Road Truck Travel (VMT): 14
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 3 - Building Construction Assumptions
 Start Month/Year for Phase 3: Jun '06
 Phase 3 Duration: 3.0 months
 Start Month/Year for SubPhase Building: Jun '06
 SubPhase Building Duration: 2.75 months
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Bore/Drill Rigs	218	0.750	8.0
1	Cranes	190	0.430	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Signal Boards	119	0.820	8.0
1	Trenchers	82	0.695	4.0

SubPhase Architectural Coatings Turned OFF
 Start Month/Year for SubPhase Asphalt: Aug '06
 SubPhase Asphalt Duration: 0.25 months
 Acres to be Paved: 0.103

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	4.0
1	Paving Equipment	111	0.530	4.0
1	Rollers	114	0.430	8.0
1	Signal Boards	119	0.820	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.04	0.24	0.30	-	0.01	0.01	0.00
On-Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	0.04	0.28	0.32	0.00	0.02	0.01	0.01
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.03	-	0.03
Off-Road Diesel	0.32	2.05	2.67	-	0.08	0.08	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Total tons/year	0.32	2.05	2.74	0.00	0.11	0.08	0.03
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.30	1.95	2.53	-	0.08	0.08	0.00
Bldg Const Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.01	0.08	0.08	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.31	2.03	2.69	0.00	0.08	0.08	0.00
Total all phases tons/yr	0.67	4.36	5.75	0.00	0.21	0.17	0.04

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 2x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 3.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)

Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Mar '06
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 4500
 Building Volume Daily (cubic feet): 4500
 On-Road Truck Travel (VMT): 249

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Mar '06

Phase 2 Duration: 2.5 months

On-Road Truck Travel (VMT): 14

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	8.0
1	Off Highway Trucks	417	0.490	8.0
2	Rubber Tired Loaders	165	0.465	8.0
1	Signal Boards	119	0.820	8.0

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '06

Phase 3 Duration: 3.0 months

Start Month/Year for SubPhase Building: Jun '06

SubPhase Building Duration: 2.75 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Bore/Drill Rigs	218	0.750	8.0
1	Cranes	190	0.430	8.0
1	Off Highway Trucks	417	0.490	8.0
1	Signal Boards	119	0.820	8.0
1	Trenchers	82	0.695	4.0

SubPhase Architectural Coatings Turned OFF

Start Month/Year for SubPhase Asphalt: Aug '06

SubPhase Asphalt Duration: 0.25 months

Acres to be Paved: 0.103

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	4.0
1	Paving Equipment	111	0.530	4.0
1	Rollers	114	0.430	8.0
1	Signal Boards	119	0.820	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.