

**Appendix F. URBEMIS 2007 Model Estimates
Construction Emissions**

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\gp\Desktop\Greenway.urb924

Project Name: Greenway Shared Use Trail

Project Location: Mountain Counties Air Basin

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|---|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| Time Slice 5/1/2012-5/1/2012 Active Days: 1 | 4.63 | 36.01 | 22.79 | 0.00 | 0.62 | 1.95 | 2.57 | 0.13 | 1.79 | 1.92 | 3,972.11 |
| Fine Grading 05/01/2012-05/01/2012 | 4.63 | 36.01 | 22.79 | 0.00 | 0.62 | 1.95 | 2.57 | 0.13 | 1.79 | 1.92 | 3,972.11 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.60 | 0.00 | 0.60 | 0.13 | 0.00 | 0.13 | 0.00 |
| Fine Grading Off Road Diesel | 4.44 | 34.56 | 19.68 | 0.00 | 0.00 | 1.90 | 1.90 | 0.00 | 1.75 | 1.75 | 3,572.34 |
| Fine Grading On Road Diesel | 0.09 | 1.29 | 0.43 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 221.43 |
| Fine Grading Worker Trips | 0.10 | 0.16 | 2.67 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 178.34 |

Phase Assumptions

Phase: Fine Grading 5/1/2012 - 5/1/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 7

Maximum Daily Acreage Disturbed: 0.03

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

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On Road Truck Travel (VMT): 55

Off-Road Equipment:

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 5/1/2012 - 2/1/2012 - Default Paving Description

Acres to be Paved: 3.32

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

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Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|---|-------------|--------------|--------------|-------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|-----------------|
| Time Slice 5/1/2012-5/1/2012 Active Days: 1 | <u>4.63</u> | <u>36.01</u> | <u>22.79</u> | <u>0.00</u> | <u>0.62</u> | <u>1.95</u> | <u>2.57</u> | <u>0.13</u> | <u>1.79</u> | <u>1.92</u> | <u>3,972.11</u> |
| Fine Grading 05/01/2012-05/01/2012 | 4.63 | 36.01 | 22.79 | 0.00 | 0.62 | 1.95 | 2.57 | 0.13 | 1.79 | 1.92 | 3,972.11 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.60 | 0.00 | 0.60 | 0.13 | 0.00 | 0.13 | 0.00 |
| Fine Grading Off Road Diesel | 4.44 | 34.56 | 19.68 | 0.00 | 0.00 | 1.90 | 1.90 | 0.00 | 1.75 | 1.75 | 3,572.34 |
| Fine Grading On Road Diesel | 0.09 | 1.29 | 0.43 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 221.43 |
| Fine Grading Worker Trips | 0.10 | 0.16 | 2.67 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 178.34 |

Construction Related Mitigation Measures