

Appendix J

AIR EMISSIONS INVENTORY REPORT

As discussed in Chapter Four, an air emissions inventory summary was conducted to determine the level of emissions resulting from implementation of alternatives analyzed within this Environmental Assessment. This appendix includes assumptions used in calculating construction emissions for the emissions inventory.

Additionally, this appendix includes the summary tables from the Emission Dispersion Modeling System (EDMS) Version 5.0.1, NONROAD, and MOBILE6.2 emissions models.

Construction

A construction emissions inventory was prepared using the Environmental Protection Agency's (EPA) NONROAD and MOBILE6.2 emissions models. The NONROAD model estimates emissions related to non-highway approved vehicles such as heavy construction equipment. The MOBILE6 model evaluates highway vehicle emissions such as those from dump trucks or light-duty work trucks.

The NONROAD and MOBILE6.2 models do not calculate lead emissions; therefore, an assessment of these impacts cannot be made. Additionally, ozone emissions are not calculated by the emissions models; however, volatile organic compounds (VOC) are a precursor to ozone. VOCs combine with sunlight and oxides of nitrogen (NOx) to form ozone. Therefore, VOC emissions are used to estimate ozone emissions.

Table J1 summarizes the assumptions for construction equipment use. Construction emissions for the Proposed Action Alternative are included in **Table J2**. Output data from the NONROAD and MOBILE6.2 emissions models are expressed in tons per year.

Table J1
Construction Equipment Use Estimates

Equipment Type	Total Hours									
	Terminal Improvements	Taxiway C Extension	Terminal Apron Phase I	Terminal Apron Phase II	Terminal Apron Phase III	Runway 18-36 Snow Shoulders	WHMP, Runway 11-29 Improvements	Access Taxiway	Runway 18-36 Extension	Water Quality Pond
Pick ups and Misc. Vehicles	416	120	800	600	80	200	300	500	1500	200
Crawler Loader	500	0	0	0	0	0	0	0	1200	0
Highway Trucks	800	200	1200	900	130	600	600	600	2500	200
Other Construction Equipment	112	120	400	300	80	250	200	250	1000	160
Rubber Tired Loader	40	200	500	700	130	120	200	700	1500	100
Compactor Roller	16	200	640	400	60	250	200	300	1000	80
Pulvimixer	20	0	0	0	0	0	0	0	0	0
Pier Drilling Rig	40	0	0	0	0	0	0	0	0	0
Skid Steer Loader	160	0	0	0	0	0	0	0	0	0
Back Hoe	0	0	250	100	40	40	0	100	500	0
Plate Compactor	128	100	500	400	20	120	300	300	500	80
Rough Terrain Lift	240	0	0	0	0	0	0	0	0	0
Crane	560	0	50	0	0	0	0	0	0	20
Concrete Pump	160	0	600	600	48	0	0	0	0	0
Asphalt Pavers	240	40	60	30	10	100	40	60	120	0
Concrete Pavers	60	0	0	0	0	0	0	0	0	0
Rollers	240	120	180	90	20	300	120	180	300	0
Scrapers	0	0	0	0	0	0	0	0	0	0
Paving Equipment	240	40	60	30	10	100	40	60	120	0
Signal Boards	2190	0	40	40	0	80	0	120	0	0
Trenchers	80	0	40	0	0	60	0	0	40	0
Bore Drill Rigs	0	0	0	0	0	0	0	0	200	0
Excavators	1360	200	600	800	130	560	700	600	2400	200
Concrete Industrial Saw	12	10	40	40	30	30	20	40	40	20
Cement Mixers	120	8	500	400	300	0	20	40	120	10
Graders	40	40	140	200	32	60	200	200	500	0
Off Highway Trucks	240	0	0	0	0	0	250	0	320	40
Crushing/Proc Equipment	80	0	0	0	0	0	0	0	100	0
Rubber Tired Dozer	220	200	320	300	60	120	600	500	0	150
Off Highway Tractor	0	40	60	60	0	0	120	40	0	40
Dumpers/Tenders	0	0	0	0	0	0	0	0	0	0

Source: Coffman Associates analysis, OEST, Deluca-Hoffman

**Table J2
Construction Emissions Summary**

Project	VOC	PM10	PM25	CO	Nox	SO2
Water Quality Pond	0.545	0.599	0.581	3.161	7.588	1.315
Runway 18-36	6.269	6.471	6.277	34.025	74.172	12.786
Cargo Taxiway	2.402	2.554	2.477	13.582	30.688	5.222
Runway 11-29 Safety Area	1.874	2.069	2.007	10.843	26.398	4.637
Terminal	3.877	3.671	3.560	19.549	37.744	6.513
18-36 Snow Shoulder	1.144	1.236	1.199	6.388	14.178	2.527
Apron Phase 1	2.488	2.521	2.445	13.592	28.078	4.750
Apron Phase 2	2.414	2.566	2.489	13.513	30.537	5.244
Apron Phase 3	0.484	0.498	0.483	2.661	5.723	0.969
Taxiway C Snow Shoulders	0.763	0.842	0.816	4.454	10.365	1.779
Grand Total (Tons)	22.259	23.026	22.334	121.768	265.472	45.742

Source: Coffman Associates analysis

Output Reports

The following pages include the output reports from the EDMS, NONROAD, and MOBILE6.2 emissions models for the air emissions inventory.

Emissions Inventory Summary

(Short Tons per Year)
Baseline - Portland Intl Jetport 2008

Category	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Aircraft	34,651.434	473.599	52.034	58.706	58.230	59.257	91.654	14.190	2.337	2.337
GSE	N/A	177.062	N/A	5.791	6.024	6.666	18.256	0.497	0.470	0.450
APUs	N/A	8.501	0.522	0.603	0.600	0.603	4.058	0.739	0.790	0.790
Parking Facilities	N/A	6.327	N/A	0.674	0.683	0.723	0.613	0.003	0.013	0.009
Roadways	N/A	44.867	0.000	2.348	2.387	2.530	5.524	0.038	0.163	0.108
Stationary Sources	N/A	N/A	N/A	0.019	0.018	0.021	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	34,651.434	710.355	52.555	68.141	67.942	69.800	120.106	15.467	3.773	3.693

Emissions Inventory Summary

(Short Tons per Year)
Baseline - Portland Intl Jetport 2017

Category	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Aircraft	38,588.221	396.857	69.724	79.783	79.269	80.098	99.421	15.802	2.835	2.835
GSE	N/A	59.039	N/A	1.977	2.064	2.259	6.443	0.315	0.294	0.278
APUs	N/A	8.941	0.529	0.612	0.609	0.612	5.036	0.886	0.826	0.826
Parking Facilities	N/A	5.278	N/A	0.420	0.425	0.454	0.299	0.003	0.010	0.005
Roadways	N/A	38.781	0.000	1.603	1.631	1.728	2.979	0.035	0.130	0.070
Stationary Sources	N/A	N/A	N/A	0.021	0.021	0.023	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	38,588.221	508.896	70.253	84.415	84.019	85.175	114.178	17.042	4.096	4.015

Emissions Inventory Summary

(Short Tons per Year)
Baseline - Portland Intl Jetport 2012

Category	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Aircraft	33,624.107	379.448	65.821	75.244	74.751	75.569	83.188	13.769	2.526	2.526
GSE	N/A	119.394	N/A	3.883	4.044	4.460	12.706	0.311	0.404	0.385
APUs	N/A	7.036	0.432	0.500	0.497	0.500	4.351	0.767	0.678	0.678
Parking Facilities	N/A	5.650	N/A	0.513	0.519	0.553	0.450	0.003	0.011	0.007
Roadways	N/A	41.172	0.000	1.925	1.954	2.072	4.207	0.032	0.142	0.085
Stationary Sources	N/A	N/A	N/A	0.020	0.020	0.022	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	33,624.107	552.699	66.254	82.085	81.785	83.176	104.901	14.881	3.761	3.681

Emission Totals by Equipment Type and Pollutant

Diesel Tons/Day Cumberland County

Portland

2010 (Portland)

Typical weekday for July, 2009

Date of Model Run: Jan 21 14:29:43: 2009

Today's Date: 1/21/2009

Source Classification	Equipment Description	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
CONSTRUCTION AND MINING EQUIPMENT									
	Bore/Drill Rigs	0.00	0.05	0.02	0.00	0.01	4.22	0.00	0.00
	Cement & Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00
	Cranes	0.01	0.09	0.02	0.01	0.01	9.57	0.00	0.00
	Crawler Tractor/Dozers	0.02	0.34	0.14	0.03	0.06	41.76	0.00	0.00
	Crushing/Proc. Equipment	0.00	0.02	0.01	0.00	0.00	1.68	0.00	0.00
	Dumpers/Tenders	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
	Excavators	0.02	0.30	0.12	0.03	0.06	41.89	0.00	0.00
	Graders	0.01	0.08	0.03	0.01	0.01	10.43	0.00	0.00
	Off-Highway Tractors	0.00	0.04	0.02	0.00	0.01	4.41	0.00	0.00
	Off-highway Trucks	0.02	0.30	0.10	0.02	0.05	35.90	0.00	0.00
	Other Construction Equipment	0.00	0.04	0.02	0.00	0.01	4.29	0.00	0.00
	Pavers	0.00	0.03	0.01	0.00	0.01	4.13	0.00	0.00
	Paving Equipment	0.00	0.01	0.00	0.00	0.00	0.62	0.00	0.00
	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
	Rollers	0.01	0.08	0.04	0.01	0.01	10.35	0.00	0.00
	Rough Terrain Forklifts	0.01	0.11	0.07	0.01	0.02	13.42	0.00	0.00
	Rubber Tire Loaders	0.03	0.40	0.17	0.03	0.06	45.69	0.00	0.00

Emission Totals by Equipment Type and Pollutant

Diesel **Cumberland County**

Portland

2010 (Portland)

Typical weekday for July, 2009

Date of Model Run: Jan 21 14:29:43: 2009

Today's Date: 1/21/2009

Tons/Day

Source Classification	Equipment Description	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
CONSTRUCTION AND MINING EQUIPMENT								
	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cement & Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Crawler Tractor/Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dumpers/Tenders	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Off-highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Rubber Tire Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Source Classification	Equipment Description	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
	Scrapers	0.01	0.09	0.04	0.01	0.02	11.27	0.00	0.00
	Signal Boards/Light Plants	0.00	0.01	0.01	0.00	0.00	1.14	0.00	0.00
	Skid Steer Loaders	0.05	0.19	0.22	0.04	0.03	18.94	0.00	0.00
	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00
	Tampers/Rammers	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
	Tractors/Loaders/Backhoes	0.06	0.27	0.26	0.04	0.04	27.65	0.00	0.00
	Trenchers	0.00	0.04	0.03	0.00	0.01	4.89	0.00	0.00
	Construction and Mining Equipment Totals:	0.25	2.52	1.35	0.24	0.41	293.36	0.01	0.00
	Grand Totals:	0.25	2.52	1.35	0.24	0.41	293.36	0.01	0.00

Source Classification	Equipment Description	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Signal Boards/Light Plants	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tampers/Rammers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.06
	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Construction and Mining Equipment Totals:	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	Grand Totals:	0.00	0.00	0.00	0.00	0.00	0.00	0.26

Emission Totals by Equipment Type and Pollutant

Diesel Tons/Day Cumberland County

Portland

2010 (Portland)

Typical weekday for July, 2009

Date of Model Run: Jan 21 14:29:43: 2009

Today's Date: 1/21/2009

Source Classification	Equipment Description	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
CONSTRUCTION AND MINING EQUIPMENT									
	Bore/Drill Rigs	0.00	0.05	0.02	0.00	0.01	4.22	0.00	0.00
	Cement & Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00
	Cranes	0.01	0.09	0.02	0.00	0.01	9.57	0.00	0.00
	Crawler Tractor/Dozers	0.02	0.34	0.14	0.03	0.06	41.76	0.00	0.00
	Crushing/Proc. Equipment	0.00	0.02	0.01	0.00	0.00	1.68	0.00	0.00
	Dumpers/Tenders	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
	Excavators	0.02	0.30	0.12	0.03	0.06	41.89	0.00	0.00
	Graders	0.01	0.08	0.03	0.01	0.01	10.43	0.00	0.00
	Off-Highway Tractors	0.00	0.04	0.02	0.00	0.01	4.41	0.00	0.00
	Off-highway Trucks	0.02	0.30	0.10	0.02	0.05	35.90	0.00	0.00
	Other Construction Equipment	0.00	0.04	0.02	0.00	0.01	4.29	0.00	0.00
	Pavers	0.00	0.03	0.01	0.00	0.01	4.13	0.00	0.00
	Paving Equipment	0.00	0.01	0.00	0.00	0.00	0.62	0.00	0.00
	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
	Rollers	0.01	0.08	0.04	0.01	0.01	10.35	0.00	0.00
	Rough Terrain Forklifts	0.01	0.11	0.07	0.01	0.02	13.42	0.00	0.00
	Rubber Tire Loaders	0.03	0.40	0.17	0.03	0.06	45.69	0.00	0.00

Emission Totals by Equipment Type and Pollutant

Diesel **Cumberland County**

Portland

2010 (Portland)

Typical weekday for July, 2009

Date of Model Run: Jan 21 14:29:43: 2009

Today's Date: 1/21/2009

Tons/Day

Source Classification	Equipment Description	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
CONSTRUCTION AND MINING EQUIPMENT								
	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cement & Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Crawler Tractor/Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dumpers/Tenders	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Off-highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Rubber Tire Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Source Classification	Equipment Description	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
	Scrapers	0.01	0.09	0.04	0.01	0.02	11.27	0.00	0.00
	Signal Boards/Light Plants	0.00	0.01	0.01	0.00	0.00	1.14	0.00	0.00
	Skid Steer Loaders	0.05	0.19	0.22	0.04	0.03	18.94	0.00	0.00
	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00
	Tampers/Rammers	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
	Tractors/Loaders/Backhoes	0.06	0.27	0.26	0.04	0.04	27.65	0.00	0.00
	Trenchers	0.00	0.04	0.03	0.00	0.01	4.89	0.00	0.00
	Construction and Mining Equipment Totals:	0.25	2.52	1.35	0.23	0.41	293.36	0.01	0.00
	Grand Totals:	0.25	2.52	1.35	0.23	0.41	293.36	0.01	0.00

Source Classification	Equipment Description	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Signal Boards/Light Plants	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tampers/Rammers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.06
	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Construction and Mining Equipment Totals:	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	Grand Totals:	0.00	0.00	0.00	0.00	0.00	0.00	0.26

PWM25

 * MOBILE6. 2. 03 (24-Sep-2003) *
 * Input file: PWM.IN (file 1, run 1). *

* #####
 * Scenario Title : Master Example Input Demonstration

* File 1, Run 1, Scenario 1.
 * #####

Calendar Year: 2009
 Month: July
 Gasoline Fuel Sulfur Content: 30. ppm
 Diesel Fuel Sulfur Content: 15. ppm
 Particle Size Cutoff: 2.50 Microns
 Reformulated Gas: Yes

LDDT	Vehi cl e Type: HDDV	LDGV MC	LDGT12 All Veh <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV
0.0019	0.0859	0.0050	1.0000	0.1311		0.0361	0.0003

Composi te Emi ssi on Factors (g/mi):

	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	GASPM:	0.0038	0.0038	0.0042	0.0039	0.0374	
	ECARBON:						0.0462
0.0257	0.1144		0.0099				
	OCARBON:						0.0130
0.0370	0.0579		0.0050				
0.0003	0.0009	0.0001	0.0004	0.0005	0.0004	0.0015	0.0002
Total Exhaust PM:	0.0039	0.0042	0.0047	0.0043	0.0388	0.0594	
0.0630	0.1732	0.0143	0.0201				
	Brake:	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
0.0053	0.0053	0.0053	0.0053				
	Ti re:	0.0020	0.0020	0.0020	0.0020	0.0022	0.0020
0.0020	0.0065	0.0010	0.0024				
Total PM:	0.0112	0.0115	0.0120	0.0117	0.0463	0.0668	
0.0703	0.1851	0.0206	0.0278				
	S02:	0.0019	0.0072	0.0112	0.0082	0.0163	0.0029
0.0055	0.0131	0.0032	0.0067				
	NH3:	0.1017	0.1012	0.1001	0.1010	0.0451	0.0068
0.0068	0.0270	0.0113	0.0922				

Veh. Type:	LDGT1	LDGT2	LDGT3	LDGT4	LDDT12	LDDT34
VMT Mi x:	0.0890	0.2970	0.0907	0.0404	0.0000	0.0019

Composi te Emi ssi on Factors (g/mi):

Lead:	0.0000	0.0000	0.0000	0.0000	-----	-----
GASPM:	0.0039	0.0038	0.0042	0.0042	-----	-----

PWM25

ECARBON:	-----	-----	-----	-----	0.1322	0.0249
OCARBON:	-----	-----	-----	-----	0.1902	0.0358
S04:	0.0001	0.0005	0.0005	0.0005	0.0002	0.0003
Total Exhaust PM:	0.0040	0.0043	0.0047	0.0047	0.3225	0.0610
Brake:	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
Ti re:	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Total PM:	0.0114	0.0116	0.0120	0.0120	0.3299	0.0684
S02:	0.0024	0.0086	0.0112	0.0112	0.0040	0.0055
NH3:	0.1012	0.1012	0.1001	0.1001	0.0068	0.0068

HDGV8A	Veh. Type: HDGV8B	HDGV2B	HDGV3	HDGV4	HDGV5	HDGV6	HDGV7
-----	-----	-----	-----	-----	-----	-----	-----
0.0000	VMT Mi x: 0.0000	0.0307	0.0011	0.0003	0.0009	0.0021	0.0009

Composi te Emi ssi on Factors (g/mi):

0.0000	0.0000	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0430	0.0000	GASPM:	0.0366	0.0369	0.0503	0.0397	0.0386	0.0400
-----	-----	ECARBON:	-----	-----	-----	-----	-----	-----
-----	-----	OCARBON:	-----	-----	-----	-----	-----	-----
0.0011	0.0000	S04:	0.0015	0.0015	0.0011	0.0012	0.0013	0.0012
0.0442	Total Exhaust PM: 0.0000		0.0382	0.0384	0.0514	0.0409	0.0399	0.0412
0.0053	0.0000	Brake:	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
0.0090	0.0000	Ti re:	0.0020	0.0030	0.0030	0.0030	0.0030	0.0030
0.0585	Total PM: 0.0000		0.0455	0.0468	0.0598	0.0493	0.0482	0.0496
0.0231	0.0000	S02:	0.0157	0.0169	0.0176	0.0201	0.0198	0.0217
0.0451	0.0000	NH3:	0.0451	0.0451	0.0451	0.0451	0.0451	0.0451

HDDV8A	Veh. Type: HDDV8B	HDDV2B	HDDV3	HDDV4	HDDV5	HDDV6	HDDV7
-----	-----	-----	-----	-----	-----	-----	-----
0.0120	VMT Mi x: 0.0400	0.0093	0.0029	0.0027	0.0011	0.0059	0.0091

Composi te Emi ssi on Factors (g/mi):

0.1006	0.1535	ECARBON:	0.0372	0.0294	0.0380	0.0335	0.0817	0.0843
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		PMM25					
0.0791	OCARBON: 0.0485	0.0387	0.0306	0.0396	0.0349	0.0642	0.0662
0.0010	S04: 0.0011	0.0005	0.0006	0.0006	0.0007	0.0008	0.0009
0.1807	Total Exhaust PM: 0.2031	0.0765	0.0605	0.0783	0.0691	0.1467	0.1514
0.0053	Brake: 0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053
0.0090	Ti re: 0.0090	0.0020	0.0030	0.0030	0.0030	0.0030	0.0030
0.1950	Total PM: 0.2174	0.0838	0.0688	0.0866	0.0774	0.1550	0.1597
0.0143	S02: 0.0150	0.0073	0.0081	0.0092	0.0095	0.0108	0.0125
0.0270	NH3: 0.0270	0.0270	0.0270	0.0270	0.0270	0.0270	0.0270

Veh. Type:	GasBUS	URBAN	SCHOOL
VMT Mi x:	0.0002	0.0010	0.0018

Composi te Emi ssi on Factors (g/mi):

Lead:	0.0000	-----	-----
GASPM:	0.0928	-----	-----
ECARBON:	-----	0.1201	0.2930
OCARBON:	-----	0.0943	0.2302
S04:	0.0005	0.0015	0.0011
Total Exhaust PM:	0.0933	0.2159	0.5243
Brake:	0.0053	0.0053	0.0053
Ti re:	0.0030	0.0030	0.0030
Total PM:	0.1017	0.2242	0.5327
S02:	0.0260	0.0216	0.0151
NH3:	0.0451	0.0270	0.0270

PWM10

 * MOBILE6.2.03 (24-Sep-2003) *
 * Input file: PWM10.IN (file 1, run 1). *

* #####
 * Scenario Title : Master Example Input Demonstration

* File 1, Run 1, Scenario 1.
 * #####

Calendar Year: 2009
 Month: July
 Gasoline Fuel Sulfur Content: 30. ppm
 Diesel Fuel Sulfur Content: 15. ppm
 Particle Size Cutoff: 10.00 Microns
 Reformulated Gas: Yes

LDVT	Vehi cl e Type: HDDV	LDGV MC	LDGT12 All Veh	LDGT34 >6000	LDGT (All)	HDGV	LDDV
0.0019	0.0859	0.0050	1.0000	0.1311		0.0361	0.0003

Composi te Emi ssi on Factors (g/mi):

	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-----
		0.0000	0.0000					
	GASPM:	0.0041	0.0041	0.0046	0.0043	0.0430	-----	
		0.0205	0.0053					
0.0279	ECARBON:						0.0503	
		0.1243	0.0107					
0.0402	OCARBON:						0.0142	
		0.0630	0.0055					
0.0003	S04:	0.0001	0.0004	0.0005	0.0004	0.0015	0.0002	
		0.0009	0.0004					
Total Exhaust PM:		0.0042	0.0045	0.0051	0.0047	0.0445	0.0646	
0.0684		0.1882	0.0219					
	Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	
0.0125		0.0125	0.0125					
0.0080	Ti re:	0.0080	0.0080	0.0080	0.0080	0.0086	0.0080	
		0.0261	0.0096					
Total PM:		0.0248	0.0251	0.0257	0.0252	0.0657	0.0851	
0.0890		0.2268	0.0440					
	S02:	0.0019	0.0072	0.0112	0.0082	0.0163	0.0029	
0.0055		0.0131	0.0067					
	NH3:	0.1017	0.1012	0.1001	0.1010	0.0451	0.0068	
0.0068		0.0270	0.0922					

Veh. Type:	LDGT1	LDGT2	LDGT3	LDGT4	LDDT12	LDDT34
VMT Mi x:	0.0890	0.2970	0.0907	0.0404	0.0000	0.0019

Composi te Emi ssi on Factors (g/mi):

	Lead:	0.0000	0.0000	0.0000	0.0000	-----	-----
	GASPM:	0.0042	0.0041	0.0046	0.0046	-----	-----

PWM10

ECARBON:	-----	-----	-----	-----	0.1436	0.0271
OCARBON:	-----	-----	-----	-----	0.2067	0.0390
S04:	0.0001	0.0005	0.0005	0.0005	0.0002	0.0003
Total Exhaust PM:	0.0044	0.0046	0.0051	0.0051	0.3506	0.0663
Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
Ti re:	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080
Total PM:	0.0249	0.0251	0.0257	0.0257	0.3711	0.0869
S02:	0.0024	0.0086	0.0112	0.0112	0.0040	0.0055
NH3:	0.1012	0.1012	0.1001	0.1001	0.0068	0.0068

HDGV8A	Veh. Type: HDGV8B	HDGV2B	HDGV3	HDGV4	HDGV5	HDGV6	HDGV7
-----	-----	-----	-----	-----	-----	-----	-----
0.0000	VMT Mi x: 0.0000	0.0307	0.0011	0.0003	0.0009	0.0021	0.0009

Composi te Emi ssi on Factors (g/mi):

0.0000	0.0000	Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0531	0.0000	GASPM:	0.0417	0.0422	0.0645	0.0481	0.0465	0.0485
-----	-----	ECARBON:	-----	-----	-----	-----	-----	-----
-----	-----	OCARBON:	-----	-----	-----	-----	-----	-----
0.0011	0.0000	S04:	0.0015	0.0015	0.0011	0.0012	0.0013	0.0012
0.0543	Total Exhaust PM: 0.0000		0.0432	0.0437	0.0656	0.0494	0.0477	0.0497
0.0125	0.0000	Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
0.0360	0.0000	Ti re:	0.0080	0.0120	0.0120	0.0120	0.0120	0.0120
0.1028	Total PM: 0.0000		0.0638	0.0682	0.0902	0.0739	0.0723	0.0743
0.0231	0.0000	S02:	0.0157	0.0169	0.0176	0.0201	0.0198	0.0217
0.0451	0.0000	NH3:	0.0451	0.0451	0.0451	0.0451	0.0451	0.0451

HDDV8A	Veh. Type: HDDV8B	HDDV2B	HDDV3	HDDV4	HDDV5	HDDV6	HDDV7
-----	-----	-----	-----	-----	-----	-----	-----
0.0120	VMT Mi x: 0.0400	0.0093	0.0029	0.0027	0.0011	0.0059	0.0091

Composi te Emi ssi on Factors (g/mi):

0.1094	0.1669	ECARBON:	0.0404	0.0319	0.0413	0.0364	0.0888	0.0916
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		PMM10					
0.0859	OCARBON: 0.0527	0.0421	0.0332	0.0430	0.0379	0.0698	0.0720
0.0010	S04: 0.0011	0.0005	0.0006	0.0006	0.0007	0.0008	0.0009
0.1963	Total Exhaust PM: 0.2206	0.0831	0.0657	0.0850	0.0750	0.1594	0.1645
0.0125	Brake: 0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
0.0360	Ti re: 0.0360	0.0080	0.0120	0.0120	0.0120	0.0120	0.0120
0.2449	Total PM: 0.2692	0.1036	0.0902	0.1095	0.0996	0.1839	0.1890
0.0143	S02: 0.0150	0.0073	0.0081	0.0092	0.0095	0.0108	0.0125
0.0270	NH3: 0.0270	0.0270	0.0270	0.0270	0.0270	0.0270	0.0270

Veh. Type:	GasBUS	URBAN	SCHOOL
VMT Mi x:	0.0002	0.0010	0.0018

Composi te Emi ssi on Factors (g/mi):

Lead:	0.0000	-----	-----
GASPM:	0.1286	-----	-----
ECARBON:	-----	0.1305	0.3185
OCARBON:	-----	0.1025	0.2503
S04:	0.0005	0.0015	0.0011
Total Exhaust PM:	0.1292	0.2345	0.5698
Brake:	0.0125	0.0125	0.0125
Ti re:	0.0120	0.0120	0.0120
Total PM:	0.1537	0.2591	0.5944
S02:	0.0260	0.0216	0.0151
NH3:	0.0451	0.0270	0.0270
