

Appendix C

Round 6.2 Cooperative Forecast Projections
Area and Nonroad Inventories and Projections

**Summary of Intermediate Employment Forecasts
Round 6.2 Cooperative Forecasts
(Thousands)**

JURISDICTION	1990	1995	2000	2005	2010	2015	2020	2025
District of Columbia	747.3	701.9	678.0	720.4	752.0	783.7	807.1	831.2
Arlington County	183.1	195.8	201.2	210.5	236.9	256.2	275.4	294.7
City of Alexandria	93.2	91.9	98.6	105.8	110.4	113.2	115.9	119.0
Central Jurisdictions	1,023.6	989.6	977.8	1,036.7	1,099.3	1,153.1	1,198.4	1,244.9
Montgomery County (1)	466.0	462.5	536.0	589.0	626.0	641.0	660.0	675.0
Rockville (2)	56.9	62.7	73.0	78.8	83.0	85.3	86.6	87.3
Prince George's County	310.4	301.3	325.3	357.3	385.2	410.2	449.1	488.3
Fairfax County	403.7	448.7	526.4	589.3	644.4	671.7	701.3	727.8
City of Fairfax (3)	26.9	29.7	30.8	31.8	32.6	32.7	32.7	32.7
City of Falls Church	9.2	9.3	9.4	9.5	9.6	9.6	9.7	9.7
Inner Suburbs	1,216.1	1,251.5	1,428.0	1,576.9	1,697.7	1,765.2	1,852.8	1,933.5
Loudoun County	39.3	53.2	85.3	117.9	145.5	173.7	202.7	232.8
Prince William County	68.8	78.0	90.6	104.9	118.5	130.0	141.2	152.7
Manassas & Manassas Park	18.7	20.1	21.6	23.2	24.7	25.3	25.4	25.4
Calvert County (4)	18.1	21.5	24.8	26.9	28.3	29.2	29.7	29.7
Charles County (4)	38.7	44.6	50.6	54.4	58.2	59.8	61.4	63.2
Frederick County	54.0	68.0	99.7	109.2	120.7	134.6	148.5	162.5
Stafford County (5)	11.0	14.6	18.2	21.8	25.4	29.0	32.5	36.1
Anne Arundel County (6)	249.4	258.3	274.3	289.8	302.8	310.6	313.5	328.1
Howard County (6)	106.3	123.6	138.8	153.1	164.4	175.7	187.0	187.0
Outer Suburbs (6)	248.6	299.9	390.8	458.4	521.3	581.6	641.5	702.3
Northern Virginia	853.8	941.3	1,082.2	1,214.8	1,348.0	1,441.4	1,536.8	1,630.8
Suburban Maryland (6)	887.1	897.9	1,036.4	1,136.8	1,218.4	1,274.8	1,348.7	1,418.6
REGIONAL TOTAL (6)	2,488.3	2,541.0	2,796.6	3,071.9	3,318.3	3,499.9	3,692.6	3,880.7

(1) Forecasts for years 2000 to 2025 include all of Takoma Park.

(2) Included in Montgomery County total.

(3) Totals for all years include Fairfax County Government employees working in the Massey Complex, located within the boundaries of the City of Fairfax.

(4) Tri-County Council for Southern Maryland develops ten-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.

(5) Source: Rappahanock Area Development Commission, November 1997.

(6) 5-a Forecasts for Anne Arundel and Howard counties are shown for reference purposes only and are not included in any other totals. Anne Arundel and Howard counties participate in the Cooperative Forecasting programs of the Baltimore Metropolitan Council and the Metropolitan Washington Council of Governments.

26-May-03

gas	Submerged	0.426	0.000	0.020	0.072	0.115	0.000	0.000	0.000	0.000	0.103	0.000	0.116	0.219	0.207
gas	Submerged/Balanced	4.054	0.334	0.000	0.000	0.000	0.629	0.691	0.264	0.267	1.479	0.000	0.389	0.000	1.320
gas	Vehicle Fueling	6.142	0.531	0.040	0.141	0.227	1.225	1.359	0.257	0.258	1.438	0.132	0.384	0.150	2.992
gas	Underground Tank Breathing	2.277	0.185	0.015	0.052	0.085	0.462	0.508	0.096	0.097	0.533	0.049	0.140	0.055	1.123
gas	Losses Fom Gasoline Tank Tru	0.093	0.007	0.000	0.001	0.002	0.013	0.014	0.006	0.006	0.030	0.002	0.008	0.003	0.030
emp	Aircraft Refueling	0.281	0.000	0.000	0.001	0.015	0.003	0.155	0.023	0.000	0.019	0.049	0.015	0.000	0.174
emp	Petroleum Vessel Loading and	0.035	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.023
pop	Dry Cleaning	7.317	0.637	0.000	0.000	0.180	1.868	0.474	0.884	0.469	1.920	0.277	0.607	0.000	2.522
emp	Surface Cleaning	4.289	0.151	0.019	0.058	0.184	0.543	0.488	0.116	0.143	1.517	0.280	0.720	0.069	1.293
	Surface Coatings														
pop	Architectural	30.283	3.540	0.491	0.850	1.331	5.774	5.276	1.263	0.834	6.773	1.362	2.250	0.539	13.020
pop	Traffic Markings	3.554	0.416	0.057	0.099	0.156	0.678	0.619	0.148	0.098	0.795	0.160	0.264	0.063	1.528
emp	Auto Refinishing	10.301	0.832	0.000	0.237	0.571	1.743	1.250	0.000	0.685	3.482	0.827	0.675	0.000	5.668
emp	Industrial Product	19.699	0.500	0.040	1.026	3.885	1.303	9.412	0.135	0.194	1.353	0.970	0.799	0.081	15.666
emp	Special Purpose	11.968	1.995	0.088	0.165	0.336	1.139	1.006	0.647	0.417	3.885	0.758	1.162	0.370	7.239
	Graphic Arts														
pop	Graphic Arts - Lithography (64%)	2.985	0.536	0.028	0.083	0.034	0.504	0.073	0.191	0.126	0.910	0.206	0.212	0.081	1.727
pop	Graphic Arts - Flexographic (16%)	0.839	0.151	0.008	0.023	0.010	0.142	0.021	0.054	0.035	0.256	0.058	0.060	0.023	0.486
pop	Graphic Arts - Rotogravure (16%)	0.963	0.151	0.012	0.038	0.016	0.228	0.033	0.054	0.035	0.256	0.058	0.060	0.023	0.486
pop	Asphalt Paving	0.024	0.003	0.000	0.001	0.001	0.005	0.004	0.001	0.001	0.006	0.000	0.001	0.000	0.010
na	Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	6.216
pop	Commercial/Consumer Solvent	35.908	4.198	0.582	1.007	1.579	6.848	6.257	1.498	0.989	8.031	1.614	2.668	0.638	15.438
emp	Synthetic Organic Chemical Str	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Barge, Tank, Tank Truck, Rail (	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Bakeries	1.964	0.230	0.032	0.055	0.087	0.374	0.342	0.082	0.054	0.439	0.089	0.145	0.035	0.844
pop	Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Wineries	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
pop	Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.024
hhs	Publicly Owned Treatment Wor	0.023	0.012	0.000	0.000	0.000	0.000	0.001	0.001	0.006	0.002	0.000	0.000	0.000	0.010
emp	Industrial Wastewater Treatmer	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Hazardous Waste Treatment, S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Municipal Landfills	1.379	0.000	0.000	0.055	0.172	0.155	0.347	0.000	0.000	0.475	0.031	0.061	0.082	0.650
pop	On-Site Incineration	0.202	0.000	0.001	0.005	0.007	0.012	0.011	0.016	0.010	0.088	0.017	0.029	0.007	0.166
na	Open Burning	0.811	0.000	0.013	0.048	0.055	0.021	0.009	0.000	0.000	0.367	0.208	0.090	0.000	0.665
pop	Fuel Oil Consumption	0.149	0.017	0.003	0.004	0.007	0.028	0.025	0.007	0.005	0.033	0.007	0.011	0.003	0.065
pop	Coal Consumption*	0.716	0.004	0.001	0.005	0.011	0.002	0.007	0.074	0.051	0.380	0.106	0.063	0.011	0.686
pop	Natural Gas and Liquified Petro	0.400	0.087	0.000	0.005	0.001	0.050	0.044	0.023	0.013	0.105	0.024	0.038	0.009	0.212
hhs	Other Fuels Consumption (Resi	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na	Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007
na	Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Structure Fires	1.554	0.332	0.000	0.000	0.000	0.001	0.000	0.118	0.078	0.635	0.128	0.211	0.051	1.221
na	Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Leaking Underground Storage	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826
emp	Commercial Airports	0.783	0.000	0.000	0.000	0.000	0.000	0.000	0.168	0.000	0.308	0.308	0.000	0.000	0.783
pop	General Aviation Airports	0.439	0.000	0.000	0.006	0.053	0.031	0.020	0.076	0.000	0.037	0.134	0.082	0.000	0.328
na	Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087
emp	Railroad Locomotives	0.499	0.109	0.000	0.027	0.062	0.018	0.081	0.015	0.017	0.058	0.000	0.052	0.060	0.202
	2002 Area Source Total	159.927	15.402	1.665	4.316	11.491	26.767	29.925	6.359	4.958	36.049	8.904	11.490	2.602	70.362
	Controlled														74.164

2002 Reduction Factors:

Stage II Vapor Recovery	0.65	Weighted average of reduction factors obtained in MOBILE6. 70% control efficiency in MD, 77% in VA													
Gasoline Volatility Controls	0.11	Weighted average of reduction factors obtained in MOBILE6.													
MD-Surface Cleaning/Degreasing Te	0.59	(67% reduction from technology rules and 0.06857 from good housekeeping practices; 0.8 remaining after reformulati													
DC & VA -Surface Cleaning/Degreas	0.32	[0.8*(Measure1: 0.1*0.8 + Measure2: 1.0*0.4*0.8)] ??													
Landfills - MD & VA	0.63	(98% reduction factor * 80% capture efficiency * 80% rule effectiveness factor)													
Seasonal Open Burning Restrictions	0.80	(100% ban * 80% rule compliance factor)													
Seasonal Open Burning Restrictions	0.97	(100% ban * 96.8% rule compliance factor based on MARAMA report)													
Stage I Vapor Recovery Expansion -	0.82	(90% reduction factor * 91% rule effectiveness, applied in Frederick, Charles, and Calvert Counties)													
Stage I Vapor Recovery Expansion -	0.72	(90% reduction factor * 80% rule effectiveness, applied in Stafford and Loudoun Counties)													
Graphic Arts Controls - VA and DC	0.38	(75% reduction factor * 80% rule effectiveness * 64% Penetration)													

Graphic Arts Controls MD-Lithograph	0.60	(75% reduction factor * 80% rule effectiveness * 64% Penetration)
Graphic Arts Controls MD-Flexograph	0.43	(60% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Graphic Arts Controls MD-Rotogravure	0.50	(70% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Autobody Refinishing - MD	0.60	
Autobody Refinishing - VA, DC	0.36	
Architectural and Industrial Coatings	0.20	(National Standards for Architectural coatings - 20% reduction)
Consumer and Commercial Products	0.10	(National Standards for Consumer/Commercial solvents - 20% reduction on 49.7449% Penetration - 3.9 lbs/person su
Locomotives	0.03	(Locomotives New standards - 3.3% reduction)

CHECK:

Category	2002 Uncontrolled	2002 Controlled	Delta	
Tank Truck Unloading (Stage I)				
gas Submerged	1.93	0.43	1.50	
gas Submerged/Balanced	4.05	4.05	0.00	
gas Vehicle Fueling	23.81	6.14	17.67	
gas Underground Tank Breathing	2.28	2.28	0.00	
gas Losses From Gasoline Tank Trucks	0.09	0.09	0.00	
emp Aircraft Refueling	0.28	0.28	0.00	
emp Petroleum Vessel Loading and Unloading	0.03	0.03	0.00	
pop Dry Cleaning	7.32	7.32	0.00	
emp Surface Cleaning	9.34	4.29	5.05	
pop Architectural Surface Coating	37.85	30.28	7.57	
pop Traffic Markings	4.44	3.55	0.89	16.38
emp Auto Refinishing	19.61	10.30	9.31	
emp Industrial Product	24.62	19.70	4.92	
emp Special Purpose	14.96	11.97	2.99	
pop Graphic Arts	8.52	4.79	3.74	
pop Asphalt Paving	0.02	0.02	0.00	
na Pesticide Application	7.31	7.31	0.00	
pop Commercial/Consumer Solvent	39.88	35.91	3.97	
emp Synthetic Organic Chemical Solvent	0.00	0.00	0.00	
emp Barge, Tank, Tank Truck, Railroad	0.00	0.00	0.00	
pop Bakeries	1.96	1.96	0.00	
pop Breweries	0.00	0.00	0.00	
pop Wineries	0.00	0.00	0.00	
pop Distilleries	0.00	0.00	0.00	
na Oil Spills	0.10	0.10	0.00	
hhs Publicly Owned Treatment Works	0.02	0.02	0.00	
emp Industrial Wastewater Treatment	0.00	0.00	0.00	
emp Hazardous Waste Treatment, Storage, and Disposal	0.00	0.00	0.00	
pop Municipal Landfills	3.70	1.38	2.32	
pop On-Site Incineration	0.20	0.20	0.00	
na Open Burning	7.91	0.81	7.10	
pop Fuel Oil Consumption	0.15	0.15	0.00	
pop Coal Consumption*	0.72	0.72	0.00	
pop Natural Gas and Liquified Petroleum Gas	0.40	0.40	0.00	
hhs Other Fuels Consumption (Residential)	0.00	0.00	0.00	
pop Small Electric Utility Boilers	0.00	0.00	0.00	
na Slash/Prescribed Burning	0.01	0.01	0.00	
na Forest Fires	0.50	0.50	0.00	
na Agricultural Burning	0.00	0.00	0.00	
pop Structure Fires	1.55	1.55	0.00	
na Orchard Heaters	0.00	0.00	0.00	
na Leaking Underground Storage Tanks	1.46	1.46	0.00	
emp Commercial Airports	0.78	0.78	0.00	
pop General Aviation Airports	0.44	0.44	0.00	
na Military Airports	0.18	0.18	0.00	
emp Railroad Locomotives	0.51	0.50	0.01	
2002 Area Source Total-VOC	226.97	159.93	67.04	
	<i>Uncontrolled</i>	<i>Controlled</i>	<i>Delta</i>	

VOC - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2

Tons per day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudou County	P. Willm County	Stafford County	VA Total	MD Total
Tank Truck Unloading (Stage I)															
gas Submerged	1.994	0.000	0.117	0.410	0.657	0.000	0.000	0.000	0.000	0.000	0.380	0.000	0.429	0.809	1.184
gas Submerged/Balanced	4.197	0.346	0.000	0.000	0.000	0.651	0.715	0.274	0.276	1.532	0.000	0.403	0.000	2.484	1.366
gas Vehicle Fueling	24.654	0.616	0.172	0.604	0.971	5.249	5.824	1.102	1.103	6.160	0.566	1.645	0.642	11.218	12.820
gas Underground Tank Breathing	2.358	0.192	0.016	0.054	0.088	0.479	0.526	0.099	0.100	0.552	0.051	0.145	0.057	1.003	1.163
gas Losses From Gasoline Tank Truc	0.096	0.007	0.000	0.001	0.002	0.013	0.014	0.006	0.006	0.031	0.002	0.008	0.004	0.058	0.031
emp Aircraft Refueling	0.297	0.000	0.000	0.001	0.016	0.003	0.160	0.024	0.000	0.021	0.057	0.016	0.000	0.117	0.180
emp Petroleum Vessel Loading and U	0.036	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.024	0.000
pop Dry Cleaning	7.590	0.618	0.000	0.000	0.192	1.933	0.485	0.909	0.484	2.003	0.318	0.649	0.000	4.363	2.610
emp Surface Cleaning	9.875	0.257	0.067	0.200	0.659	1.834	1.619	0.206	0.253	2.768	0.556	1.324	0.133	5.239	4.378
Surface Coatings															
pop Architectural	39.271	4.289	0.662	1.120	1.774	7.469	6.754	1.623	1.076	8.834	1.953	3.003	0.716	17.204	17.779
pop Traffic Markings	4.609	0.504	0.077	0.131	0.208	0.877	0.793	0.190	0.126	1.037	0.230	0.353	0.084	2.020	2.085
emp Auto Refinishing	20.694	1.285	0.000	0.628	1.588	4.554	3.209	0.000	1.091	5.735	1.484	1.121	0.000	9.430	9.979
emp Industrial Product	26.013	0.621	0.053	1.361	5.402	1.702	12.082	0.173	0.249	1.791	1.400	1.067	0.113	4.792	20.600
emp Special Purpose	15.725	2.476	0.117	0.219	0.467	1.488	1.292	0.831	0.533	5.144	1.093	1.551	0.513	9.666	3.583
pop Graphic Arts	8.841	1.309	0.116	0.342	0.143	2.039	0.293	0.495	0.328	2.393	0.595	0.571	0.218	4.600	2.933
Graphic Arts - Lithography		0.837	0.074	0.219	0.091	1.305	0.187	0.317	0.210	1.531	0.381	0.365	0.140	2.944	1.877
Graphic Arts - Flexographic		0.236	0.021	0.062	0.026	0.367	0.053	0.089	0.059	0.431	0.107	0.103	0.039	0.828	0.528
Graphic Arts - Rotogravure		0.236	0.021	0.062	0.026	0.367	0.053	0.089	0.059	0.431	0.107	0.103	0.039	0.828	0.528
pop Asphalt Paving	0.025	0.003	0.000	0.001	0.001	0.005	0.005	0.001	0.001	0.006	0.000	0.001	0.000	0.010	0.012
na Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	6.216
pop Commercial/Consumer Solvent U	41.368	4.518	0.697	1.179	1.869	7.869	7.116	1.710	1.134	9.306	2.055	3.164	0.753	18.121	18.729
emp Synthetic Organic Chemical Stor	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp Barge, Tank, Tank Truck, Rail C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Bakeries	2.037	0.223	0.035	0.058	0.092	0.387	0.350	0.085	0.056	0.458	0.102	0.155	0.037	0.893	0.922
pop Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Wineries	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000
pop Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.024
hhs Publicly Owned Treatment Work	0.023	0.012	0.000	0.000	0.000	0.000	0.001	0.001	0.007	0.002	0.000	0.000	0.000	0.010	0.002
emp Industrial Wastewater Treatment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp Waste Treatment, Storage & Dispc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Municipal Landfills	3.867	0.000	0.000	0.155	0.492	0.430	0.954	0.000	0.000	1.331	0.097	0.174	0.234	1.835	2.031
pop On-Site Incineration	0.213	0.000	0.002	0.005	0.007	0.012	0.011	0.016	0.011	0.092	0.019	0.031	0.007	0.176	0.038
na Open Burning	7.910	0.000	0.415	1.494	1.731	0.652	0.295	0.000	0.000	1.835	1.038	0.450	0.000	3.323	4.587
pop Fuel Oil Consumption	0.155	0.016	0.003	0.004	0.007	0.029	0.026	0.007	0.005	0.034	0.008	0.012	0.003	0.069	0.069
pop Coal Consumption*	0.758	0.003	0.002	0.005	0.012	0.002	0.007	0.076	0.053	0.397	0.122	0.067	0.011	0.727	0.028
pop Natural Gas and Liquefied Petrol	0.413	0.085	0.000	0.005	0.001	0.052	0.045	0.023	0.013	0.109	0.028	0.041	0.010	0.224	0.104
hhs Other Fuels Consumption (Resid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	0.497
na Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Structure Fires	1.614	0.322	0.000	0.000	0.000	0.001	0.000	0.122	0.080	0.663	0.147	0.225	0.054	1.291	0.001
na Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Leaking Underground Storage T	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	0.294
emp Commercial Airports	1.790	0.000	0.000	0.000	0.000	0.000	0.000	0.380	0.000	0.705	0.705	0.000	0.000	1.790	0.000
pop General Aviation Airports	0.474	0.000	0.000	0.006	0.057	0.032	0.021	0.078	0.000	0.039	0.154	0.087	0.000	0.357	0.116
na Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	0.097
emp Railroad Locomotives	0.540	0.110	0.000	0.030	0.071	0.019	0.086	0.016	0.018	0.063	0.000	0.057	0.069	0.224	0.206
2005 Area Source Total	237.006	18.254	2.764	8.267	18.817	40.748	44.077	8.586	7.073	53.480	14.105	16.614	4.219	#####	#####
Uncontrolled															

2005 Area Source Inventory - CONTROLLED

VOC - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2

tons per day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudou County	P. Willm County	Stafford County	VA Total	MD Total
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Tank Truck Unloading (Stage I)																
gas	Submerged	0.441	0.000	0.021	0.074	0.119	0.000	0.000	0.000	0.000	0.106	0.000	0.120	0.227	0.214	
gas	Submerged/Balanced	4.197	0.346	0.000	0.000	0.000	0.651	0.715	0.274	0.276	1.532	0.000	0.403	0.000	2.484	1.366
gas	Vehicle Fueling	7.299	0.559	0.048	0.169	0.272	1.472	1.633	0.309	0.309	1.727	0.159	0.461	0.180	3.146	3.595
gas	Underground Tank Breathing	2.358	0.192	0.016	0.054	0.088	0.479	0.526	0.099	0.100	0.552	0.051	0.145	0.057	1.003	1.163
gas	Losses Fom Gasoline Tank Truc	0.096	0.007	0.000	0.001	0.002	0.013	0.014	0.006	0.006	0.031	0.002	0.008	0.004	0.058	0.031
emp	Aircraft Refueling	0.297	0.000	0.000	0.001	0.016	0.003	0.160	0.024	0.000	0.021	0.057	0.016	0.000	0.117	0.180
emp	Petroleum Vessel Loading and U	0.036	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.024	0.000
pop	Dry Cleaning	7.590	0.618	0.000	0.000	0.192	1.933	0.485	0.909	0.484	2.003	0.318	0.649	0.000	4.363	2.610
emp	Surface Cleaning	4.547	0.149	0.021	0.062	0.204	0.568	0.501	0.119	0.147	1.607	0.323	0.769	0.077	3.041	1.356
	Surface Coatings	0.000														
pop	Architectural	31.417	3.431	0.530	0.896	1.419	5.975	5.403	1.298	0.861	7.067	1.562	2.402	0.573	13.763	14.223
pop	Traffic Markings	3.687	0.403	0.062	0.105	0.166	0.701	0.634	0.152	0.101	0.829	0.184	0.282	0.067	1.616	1.668
emp	Auto Refinishing	10.881	0.826	0.000	0.251	0.635	1.822	1.284	0.000	0.701	3.687	0.954	0.721	0.000	6.063	3.992
emp	Industrial Product	20.811	0.497	0.043	1.089	4.321	1.362	9.665	0.139	0.199	1.433	1.120	0.853	0.090	3.834	16.480
emp	Special Purpose	12.580	1.980	0.094	0.175	0.374	1.190	1.033	0.665	0.427	4.115	0.875	1.241	0.411	7.733	2.866
	Graphic Arts															
pop	Graphic Arts - Lithography (64%)	3.095	0.519	0.030	0.087	0.037	0.522	0.075	0.196	0.130	0.949	0.236	0.227	0.087	1.825	0.751
pop	Graphic Arts - Flexographic (16%)	0.959	0.146	0.012	0.035	0.015	0.208	0.030	0.055	0.037	0.267	0.066	0.064	0.024	0.513	0.300
pop	Graphic Arts - Rotogravure (16%)	0.921	0.146	0.010	0.031	0.013	0.182	0.026	0.055	0.037	0.267	0.066	0.064	0.024	0.513	0.262
pop	Asphalt Paving	0.025	0.003	0.000	0.001	0.001	0.005	0.005	0.001	0.001	0.006	0.000	0.001	0.000	0.010	0.012
na	Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	6.216
pop	Commercial/Consumer Solvent U	37.253	4.069	0.628	1.062	1.683	7.086	6.408	1.539	1.021	8.380	1.851	2.849	0.678	16.318	16.866
emp	Synthetic Organic Chemical Stor	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Barge, Tank, Tank Truck, Rail C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Bakeries	2.037	0.223	0.035	0.058	0.092	0.387	0.350	0.085	0.056	0.458	0.102	0.155	0.037	0.893	0.922
pop	Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Wineries	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000
pop	Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.024
hhs	Publicly Owned Treatment Work	0.023	0.012	0.000	0.000	0.000	0.000	0.001	0.001	0.007	0.002	0.000	0.000	0.000	0.010	0.002
emp	Industrial Wastewater Treatment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Hazardous Waste Treatment, Str	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Municipal Landfills	1.441	0.000	0.000	0.058	0.183	0.160	0.356	0.000	0.000	0.496	0.036	0.065	0.087	0.684	0.757
pop	On-Site Incineration	0.213	0.000	0.002	0.005	0.007	0.012	0.011	0.016	0.011	0.092	0.019	0.031	0.007	0.176	0.038
na	Open Burning	0.811	0.000	0.013	0.048	0.055	0.021	0.009	0.000	0.000	0.367	0.208	0.090	0.000	0.665	0.147
pop	Fuel Oil Consumption	0.155	0.016	0.003	0.004	0.007	0.029	0.026	0.007	0.005	0.034	0.008	0.012	0.003	0.069	0.069
pop	Coal Consumption*	0.758	0.003	0.002	0.005	0.012	0.002	0.007	0.076	0.053	0.397	0.122	0.067	0.011	0.727	0.028
pop	Natural Gas and Liquefied Petrole	0.413	0.085	0.000	0.005	0.001	0.052	0.045	0.023	0.013	0.109	0.028	0.041	0.010	0.224	0.104
hhs	Other Fuels Consumption (Resid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na	Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	0.497
na	Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Structure Fires	1.614	0.322	0.000	0.000	0.000	0.001	0.000	0.122	0.080	0.663	0.147	0.225	0.054	1.291	0.001
na	Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Leaking Underground Storage T	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	0.294
emp	Commercial Airports	1.790	0.000	0.000	0.000	0.000	0.000	0.000	0.380	0.000	0.705	0.705	0.000	0.000	1.790	0.000
pop	General Aviation Airports	0.474	0.000	0.000	0.006	0.057	0.032	0.021	0.078	0.000	0.039	0.154	0.087	0.000	0.357	0.116
na	Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	0.097
emp	Railroad Locomotives	0.524	0.109	0.000	0.029	0.068	0.019	0.083	0.016	0.018	0.061	0.000	0.055	0.067	0.216	0.199
	2005 Area Source Total	168.313	15.105	1.781	4.564	12.351	27.855	30.903	6.785	5.149	38.338	10.405	12.277	2.801	#####	77.454
	Controlled															

2005 Reduction Factors:

Stage II Vapor Recovery	0.63	Weighted average of reduction factors obtained in MOBILE6. 70% control efficiency in MD, 77% in VA
Gasoline Volatility Controls	0.09	
MD-Surface Cleaning/Degreasing Tec	0.59	(67% reduction from technology rules and 0.06857 from good housekeeping practices; 0.8 remaining after reformul
DC & VA -Surface Cleaning/Degreasin	0.32	[0.8*(Measure1: 0.1*0.8 + Measure2: 1.0*0.4*0.8)] ??
Landfills - MD & VA	0.63	(98% reduction factor * 80% capture efficiency * 80% rule effectiveness factor)
Seasonal Open Burning Restrictions -	0.80	(100% ban * 80% rule compliance factor)
Seasonal Open Burning Restrictions -	0.97	(100% ban * 96.8% rule compliance factor based on MARAMA report)
Stage I Vapor Recovery Expansion - IV	0.82	(90% reduction factor * 91% rule effectiveness, applied in Frederick, Charles, and Calvert Counties)
Stage I Vapor Recovery Expansion - V	0.72	(90% reduction factor * 80% rule effectiveness, applied in Stafford and Loudoun Counties)

Graphic Arts Controls - VA and DC	0.38	(75% reduction factor * 80% rule effectiveness * 64% Penetration)
Graphic Arts Controls MD-Lithography	0.60	(75% reduction factor * 80% rule effectiveness * 64% Penetration)
Graphic Arts Controls MD-Flexography	0.43	(60% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Graphic Arts Controls MD-Rotogravure	0.50	(70% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Autobody Refinishing - MD	0.60	
Autobody Refinishing - VA, DC	0.36	
Architectural and Industrial Coatings	0.20	(National Standards for Architectural coatings - 20% reduction)
Consumer and Commercial Products	0.10	(National Standards for Consumer/Commercial solvents - 20% reduction on 49.7449% Penetration - 3.9 lbs/person)
Locomotives	0.03	(Locomotives New standards - 3.3% reduction)

CHECK:

Category	2005 Uncontrolled	2005 Controlled	Delta	
Tank Truck Unloading (Stage I)				
gas Submerged	1.99	0.44	1.55	
gas Submerged/Balanced	4.20	4.20	0.00	
gas Vehicle Fueling	24.65	7.30	17.35	
gas Underground Tank Breathing	2.36	2.36	0.00	
gas Losses From Gasoline Tank Trucks	0.10	0.10	0.00	
emp Aircraft Refueling	0.30	0.30	0.00	
emp Petroleum Vessel Loading and Unloading	0.04	0.04	0.00	
pop Dry Cleaning	7.59	7.59	0.00	
emp Surface Cleaning	9.87	4.55	5.33	
Surface Coating				
pop Architectural	39.27	31.42	7.85	
pop Traffic Markings	4.61	3.69	0.92	17.12
emp Auto Refinishing	20.69	10.88	9.81	
emp Industrial Product	26.01	20.81	5.20	
emp Special Purpose	15.72	12.58	3.14	
pop Graphic Arts	8.84	4.98	3.87	
pop Asphalt Paving	0.02	0.02	0.00	
na Pesticide Application	7.31	7.31	0.00	
pop Commercial/Consumer Solvent Use	41.37	37.25	4.12	
emp Synthetic Organic Chemical Storage	0.00	0.00	0.00	
emp Barge, Tank, Tank Truck, Rail Car	0.00	0.00	0.00	
pop Bakeries	2.04	2.04	0.00	
pop Breweries	0.00	0.00	0.00	
pop Wineries	0.00	0.00	0.00	
pop Distilleries	0.00	0.00	0.00	
na Oil Spills	0.10	0.10	0.00	
hhs Publicly Owned Treatment Works	0.02	0.02	0.00	
emp Industrial Wastewater Treatment	0.00	0.00	0.00	
emp Hazardous Waste Treatment, Storage, and Disposal	0.00	0.00	0.00	
pop Municipal Landfills	3.87	1.44	2.43	
pop On-Site Incineration	0.21	0.21	0.00	
na Open Burning	7.91	0.81	7.10	
pop Fuel Oil Consumption	0.15	0.15	0.00	
pop Coal Consumption*	0.76	0.76	0.00	
pop Natural Gas and Liquefied Petroleum Gas	0.41	0.41	0.00	
hhs Other Fuels Consumption (Residual)	0.00	0.00	0.00	
pop Small Electric Utility Boilers	0.00	0.00	0.00	
na Slash/Prescribed Burning	0.01	0.01	0.00	
na Forest Fires	0.50	0.50	0.00	
na Agricultural Burning	0.00	0.00	0.00	
pop Structure Fires	1.61	1.61	0.00	
na Orchard Heaters	0.00	0.00	0.00	
na Leaking Underground Storage Tanks	1.46	1.46	0.00	
emp Commercial Airports	1.79	1.79	0.00	
pop General Aviation Airports	0.47	0.47	0.00	
na Military Airports	0.18	0.18	0.00	
emp Railroad Locomotives	0.54	0.52	0.02	
2005 Area Source Total-VOC	237.01	168.31	68.69	
	<i>Uncontrolled</i>	<i>Controlled</i>	<i>Delta</i>	

1990 Area Source Inventory - NOx
NOx - Ozone Nonattainment Area Jurisdictional Estimates
Tons per Day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	4.686	0.000	0.001	0.004	0.005	0.010	0.010	0.521	0.339	2.584	0.262	0.763	0.187	4.656	0.030
Open Burning	1.665	0.000	0.087	0.315	0.364	0.137	0.062	0.000	0.000	0.386	0.219	0.095	0.000	0.700	0.965
Fuel Oil Consumption	9.714	0.942	0.119	0.235	0.349	1.761	1.696	0.516	0.336	2.559	0.260	0.756	0.185	4.612	4.160
Coal Consumption	6.387	0.000	0.056	1.037	0.767	0.146	0.577	0.492	0.338	2.310	0.343	0.284	0.037	3.804	2.583
Natural Gas and Liquefied Petroleum Gas Consumption	11.566	1.890	0.015	0.187	0.090	2.301	1.948	0.633	0.360	2.732	0.309	0.874	0.227	5.135	4.541
Forest Fires	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	0.167	0.048	0.000	0.000	0.000	0.000	0.000	0.013	0.009	0.066	0.007	0.020	0.005	0.120	0.000
Commercial Airports	5.102	0.000	0.000	0.000	0.000	0.000	0.000	2.713	0.000	1.195	1.195	0.000	0.000	5.102	0.000
General Aviation Airports	0.045	0.000	0.000	0.001	0.006	0.004	0.003	0.009	0.000	0.004	0.008	0.010	0.000	0.031	0.014
Military Airports	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	8.253	1.443	0.000	0.498	0.822	0.353	1.728	0.322	0.337	1.024	0.000	0.916	0.810	3.409	3.401
Total	47.712	4.323	0.283	2.306	2.415	4.736	6.066	5.220	1.719	12.868	2.603	3.722	1.452	27.583	15.807

NOx 2005 Area Source Inventory - NO CONTROLS
NOx - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
Tons per Day

Category	pop	na	pop	pop	pop	pop	na	na	pop	emp	pop	na	emp	Total	Total
On-Site Incineration	7.006	0.000	0.001	0.006	0.010	0.013	0.012	0.599	0.385	3.705	0.787	1.118	0.371	6.964	0.042
Open Burning	1.665	0.000	0.087	0.315	0.364	0.137	0.062	0.000	0.000	0.386	0.219	0.095	0.000	0.700	0.965
Fuel Oil Consumption	12.199	0.813	0.187	0.317	0.503	2.121	1.917	0.598	0.397	3.255	0.719	1.107	0.264	6.340	5.046
Coal Consumption	8.748	0.000	0.088	1.401	1.106	0.176	0.652	0.570	0.399	2.938	0.949	0.416	0.053	5.325	3.423
Natural Gas and Liquefied Petroleum Gas Consumption	14.102	1.630	0.024	0.253	0.130	2.771	2.202	0.734	0.425	3.475	0.855	1.280	0.324	7.092	5.380
Forest Fires	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	0.206	0.041	0.000	0.000	0.000	0.000	0.000	0.016	0.010	0.084	0.019	0.029	0.007	0.165	0.000
Commercial Airports	9.930	0.000	0.000	0.000	0.000	0.000	0.000	2.850	0.000	3.540	3.540	0.000	0.000	9.930	0.000
General Aviation Airports	0.071	0.000	0.000	0.001	0.008	0.005	0.003	0.011	0.000	0.005	0.023	0.014	0.000	0.053	0.018
Military Airports	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	11.362	1.391	0.000	0.700	1.662	0.451	1.989	0.370	0.382	1.468	0.000	1.342	1.605	5.168	4.803
Total	65.415	3.875	0.393	3.022	3.796	5.698	6.881	5.747	1.999	18.866	7.111	5.405	2.624	41.751	19.789

Area	Dist. of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	Pr. Willm County	Stafford County	VA Total	MD Total
Total	1.235	0.964	1.484	1.406	2.022	1.277	1.151	1.149	1.135	1.434	3.004	1.465	1.982	1.423
Round 6.2	1.221	0.863	1.573	1.351	1.442	1.204	1.131	1.159	1.181	1.272	2.766	1.464	1.426	1.374

Control measures

Seasonal Open Burning Restrictions - VA 0.800 (100% ban * 80% rule compliance factor)
 Seasonal Open Burning Restrictions - MD 0.968 (100% ban * 96.8% rule compliance factor based on MARAMA report)
 Locomotive Emissions Reduction Factor 0.278 (New Standards would reduce NOx 27.8% by year 2005)

NOx 2005 Area Source Inventory - WITH CONTROLS
NOx - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
Tons per Day

Category	pop	na	pop	pop	pop	pop	na	na	pop	emp	pop	na	emp	Total	Total
On-Site Incineration	7.006	0.000	0.001	0.006	0.010	0.013	0.012	0.599	0.385	3.705	0.787	1.118	0.371	6.964	0.042
Open Burning	0.171	0.000	0.003	0.010	0.012	0.004	0.002	0.000	0.000	0.077	0.044	0.019	0.000	0.140	0.031
Fuel Oil Consumption	12.199	0.813	0.187	0.317	0.503	2.121	1.917	0.598	0.397	3.255	0.719	1.107	0.264	6.340	5.046
Coal Consumption	8.748	0.000	0.088	1.401	1.106	0.176	0.652	0.570	0.399	2.938	0.949	0.416	0.053	5.325	3.423
Natural Gas and Liquefied Petroleum Gas Consumption	14.102	1.630	0.024	0.253	0.130	2.771	2.202	0.734	0.425	3.475	0.855	1.280	0.324	7.092	5.380
Forest Fires	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	0.206	0.041	0.000	0.000	0.000	0.000	0.000	0.016	0.010	0.084	0.019	0.029	0.007	0.165	0.000
Commercial Airports	9.930	0.000	0.000	0.000	0.000	0.000	0.000	2.850	0.000	3.540	3.540	0.000	0.000	9.930	0.000
General Aviation Airports	0.071	0.000	0.000	0.001	0.008	0.005	0.003	0.011	0.000	0.005	0.023	0.014	0.000	0.053	0.018
Military Airports	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	8.462	1.263	0.000	0.506	1.200	0.325	1.436	0.267	0.276	1.060	0.000	0.969	1.159	3.731	3.467
Total - With CONTROLS	61.021	3.747	0.308	2.522	2.981	5.440	6.268	5.644	1.892	18.149	6.936	4.956	2.177	39.754	17.520

Check - 2005 NOx

Category	Uncontr	Controlled	Delta
On-Site Incineration	7.006	7.006	0.00
Open Burning	1.665	0.171	1.49
Fuel Oil Consumption	12.199	12.199	0.00
Coal Consumption	8.748	8.748	0.00
Natural Gas and Liquefied Petroleum Gas Consumption	14.102	14.102	0.00
Forest Fires	0.084	0.084	0.00
Slash/Prescribed Burning	0.019	0.019	0.00
Structure Fires	0.206	0.206	0.00
Commercial Airports	9.930	9.930	0.00
General Aviation Airports	0.071	0.071	0.00
Military Airports	0.023	0.023	0.00
Railroad Locomotives	11.362	8.462	2.90
Total	65.415	61.021	4.39

1990 Non-road Baseline Ozone Season Day Emissions - Metropolitan Washington Regic

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	2.61	0.43	0.74	1.76	11.97	5.66	0.41	2.02	9.96	1.43	2.20	0.64	20.56	16.65	39.82
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.54	0.22	0.22	0.00	0.00	0.37	0.98	1.35
Recreational-Land	0.00	0.30	0.63	0.91	0.00	0.00	0.00	0.00	0.00	0.71	0.47	0.37	1.84	1.55	3.39
Recreational-Marine	1.61	0.57	0.22	0.03	0.03	0.06	0.33	0.27	3.12	0.59	2.29	1.07	0.91	7.66	10.19
Light Commercial	0.59	0.02	0.07	0.18	1.02	0.87	0.22	0.17	1.08	0.11	0.18	0.04	2.16	1.80	4.55
Industrial	0.23	0.01	0.02	0.11	0.31	0.20	0.05	0.08	0.27	0.05	0.10	0.01	0.65	0.55	1.43
Construction	0.73	0.10	0.18	0.41	2.43	2.07	0.29	0.18	2.21	0.31	0.70	0.11	5.20	3.79	9.72
Agricultural	0.00	0.20	0.28	0.81	0.31	0.24	0.00	0.00	0.05	0.36	0.08	0.06	1.85	0.55	2.40
Logging	0.01	0.02	0.04	0.07	0.13	0.05	0.00	0.02	0.10	0.03	0.04	0.02	0.30	0.22	0.52
VOC - Totals	5.77	1.65	2.18	4.29	16.20	9.53	1.29	3.28	17.00	3.80	6.06	2.32	33.84	33.76	73.37

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.06	0.01	0.01	0.03	0.26	0.13	0.01	0.05	0.22	0.03	0.04	0.01	0.44	0.36	0.86
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.68	0.37	0.37	0.00	0.00	0.17	1.43	1.60
Recreational-Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Recreational-Marine	0.14	0.07	0.03	0.00	0.00	0.01	0.02	0.02	0.18	0.03	0.13	0.06	0.11	0.44	0.69
Light Commercial	0.08	0.00	0.01	0.02	0.14	0.12	0.03	0.02	0.15	0.01	0.02	0.01	0.30	0.25	0.62
Industrial	0.49	0.02	0.04	0.24	0.64	0.43	0.10	0.17	0.57	0.10	0.21	0.02	1.37	1.17	3.02
Construction	4.68	0.66	1.12	2.64	15.54	13.25	1.86	1.16	14.11	1.98	4.46	0.69	33.21	24.26	62.15
Agricultural	0.00	0.89	1.24	3.54	1.36	1.06	0.00	0.00	0.20	1.57	0.36	0.27	8.09	2.39	10.49
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	5.45	1.65	2.45	6.48	17.95	15.18	2.01	2.10	15.79	4.10	5.23	1.06	43.71	30.29	79.45

2002 Non-road Uncontrolled Ozone Season Day Emissions - Metropolitan Washington F

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	2.53	0.60	0.98	3.20	14.62	6.34	0.45	2.26	13.49	3.72	3.02	1.13	25.75	24.07	52.35
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.04	0.10	0.10	0.00	0.00	0.37	0.24	0.61
Recreational-Land	0.00	0.43	0.81	1.23	0.00	0.00	0.00	0.00	0.00	1.72	0.64	0.50	2.47	2.86	5.33
Recreational-Marine	1.43	0.83	0.28	0.04	0.03	0.07	0.38	0.30	3.80	1.41	3.14	1.44	1.26	10.47	13.16
Light Commercial	0.52	0.02	0.09	0.25	1.19	0.96	0.25	0.20	1.31	0.26	0.25	0.05	2.51	2.32	5.36
Industrial	0.23	0.01	0.02	0.21	0.37	0.23	0.05	0.09	0.37	0.12	0.14	0.02	0.84	0.78	1.85
Construction	0.71	0.14	0.23	0.75	2.97	2.32	0.32	0.20	2.99	0.81	0.95	0.19	6.42	5.47	12.60
Agricultural	0.00	0.20	0.28	0.81	0.31	0.24	0.00	0.00	0.05	0.36	0.08	0.06	1.85	0.55	2.40
Logging	0.01	0.02	0.04	0.07	0.13	0.05	0.00	0.02	0.10	0.03	0.04	0.02	0.30	0.22	0.52
VOC - Totals	5.42	2.27	2.74	6.56	19.63	10.58	1.45	3.10	22.20	8.53	8.27	3.42	41.78	46.98	94.18

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.06	0.01	0.01	0.05	0.32	0.14	0.01	0.05	0.30	0.08	0.06	0.02	0.54	0.52	1.12
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.44	0.51	0.51	0.00	0.00	0.17	1.46	1.63
Recreational-Land	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.03
Recreational-Marine	0.13	0.10	0.03	0.01	0.00	0.01	0.02	0.02	0.22	0.08	0.18	0.08	0.16	0.59	0.88
Light Commercial	0.07	0.00	0.01	0.03	0.16	0.13	0.03	0.03	0.18	0.04	0.03	0.01	0.35	0.32	0.73
Industrial	0.48	0.02	0.05	0.43	0.79	0.49	0.11	0.19	0.77	0.25	0.29	0.04	1.78	1.65	3.90
Construction	4.54	0.92	1.49	4.80	18.98	14.86	2.06	1.30	19.10	5.15	6.12	1.23	41.05	34.97	80.56
Agricultural	0.00	0.89	1.24	3.54	1.36	1.06	0.00	0.00	0.20	1.57	0.36	0.27	8.09	2.39	10.49
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	5.28	1.95	2.84	8.87	21.62	16.86	2.23	2.02	21.28	7.68	7.04	1.65	52.15	41.91	99.33

2002 Non-road Controlled Ozone Season Day Emissions - Metropolitan Washington Region

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	1.64	0.40	0.65	2.11	9.52	4.13	0.29	1.47	8.78	2.43	1.98	0.75	16.80	15.69	34.13
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.04	0.10	0.10	0.00	0.00	0.37	0.24	0.61
Recreational-Land	0.00	0.36	0.67	1.02	0.00	0.00	0.00	0.00	0.00	1.43	0.53	0.41	2.05	2.37	4.42
Recreational-Marine	1.31	0.77	0.26	0.04	0.03	0.06	0.34	0.27	3.44	1.28	2.85	1.30	1.16	9.49	11.96
Light Commercial	0.35	0.02	0.06	0.17	0.80	0.64	0.17	0.13	0.88	0.18	0.17	0.04	1.69	1.56	3.60
Industrial	0.22	0.01	0.02	0.20	0.37	0.22	0.05	0.09	0.36	0.12	0.14	0.02	0.83	0.77	1.81
Construction	0.67	0.13	0.22	0.71	2.81	2.20	0.30	0.19	2.83	0.77	0.90	0.18	6.08	5.18	11.93
Agricultural	0.00	0.20	0.28	0.79	0.30	0.24	0.00	0.00	0.04	0.35	0.08	0.06	1.80	0.53	2.33
Logging	0.00	0.01	0.02	0.04	0.08	0.03	0.00	0.01	0.06	0.02	0.03	0.02	0.19	0.14	0.34
VOC - Totals	4.20	1.90	2.18	5.08	13.92	7.90	1.16	2.20	16.50	6.67	6.67	2.77	30.97	35.97	71.14

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.06	0.01	0.01	0.05	0.30	0.13	0.01	0.05	0.28	0.07	0.06	0.02	0.51	0.48	1.04
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.44	0.51	0.51	0.00	0.00	0.17	1.46	1.63
Recreational-Land	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.03
Recreational-Marine	0.13	0.10	0.03	0.01	0.00	0.01	0.02	0.02	0.22	0.08	0.18	0.08	0.16	0.60	0.89
Light Commercial	0.07	0.00	0.01	0.03	0.16	0.13	0.03	0.03	0.18	0.03	0.03	0.01	0.34	0.31	0.72
Industrial	0.44	0.02	0.05	0.40	0.72	0.44	0.10	0.17	0.71	0.23	0.27	0.04	1.63	1.51	3.58
Construction	3.82	0.77	1.25	4.04	15.97	12.50	1.73	1.09	16.07	4.34	5.15	1.04	34.53	29.41	67.77
Agricultural	0.00	0.75	1.05	2.99	1.15	0.90	0.00	0.00	0.17	1.32	0.30	0.23	6.83	2.02	8.85
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	4.51	1.66	2.41	7.52	18.30	14.28	1.90	1.79	18.13	6.60	5.99	1.41	44.18	35.82	84.51

2005 Non-road Uncontrolled Ozone Season Day Emissions - Metropolitan Washington F

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	2.51	0.65	1.04	3.56	14.68	6.51	0.46	2.32	14.29	4.29	3.23	1.26	26.44	25.84	54.79
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.18	0.24	0.24	0.00	0.00	0.37	0.66	1.03
Recreational-Land	0.00	0.45	0.84	1.27	0.00	0.00	0.00	0.00	0.00	1.76	0.66	0.51	2.56	2.94	5.50
Recreational-Marine	1.39	0.90	0.30	0.05	0.03	0.07	0.39	0.31	3.97	1.62	3.36	1.53	1.35	11.17	13.91
Light Commercial	0.51	0.02	0.10	0.27	1.23	0.98	0.26	0.20	1.37	0.30	0.26	0.06	2.60	2.45	5.56
Industrial	0.22	0.01	0.02	0.23	0.37	0.23	0.05	0.09	0.39	0.14	0.15	0.02	0.87	0.84	1.93
Construction	0.71	0.15	0.25	0.84	2.98	2.39	0.33	0.21	3.16	0.93	1.02	0.21	6.60	5.87	13.18
Agricultural	0.00	0.20	0.28	0.81	0.31	0.24	0.00	0.00	0.05	0.36	0.08	0.06	1.85	0.55	2.40
Logging	0.01	0.02	0.04	0.07	0.13	0.05	0.00	0.02	0.10	0.03	0.04	0.02	0.30	0.22	0.52
VOC - Totals	5.34	2.40	2.86	7.08	19.75	10.85	1.49	3.32	23.56	9.67	8.80	3.68	42.95	50.53	98.82

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.06	0.01	0.02	0.06	0.32	0.15	0.01	0.05	0.32	0.09	0.06	0.02	0.56	0.55	1.17
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.59	1.00	1.00	0.00	0.00	0.17	2.58	2.75
Recreational-Land	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.03
Recreational-Marine	0.12	0.11	0.04	0.01	0.00	0.01	0.02	0.02	0.23	0.09	0.19	0.09	0.17	0.63	0.92
Light Commercial	0.07	0.00	0.01	0.04	0.17	0.14	0.04	0.03	0.19	0.04	0.04	0.01	0.36	0.33	0.76
Industrial	0.47	0.02	0.05	0.48	0.79	0.50	0.11	0.19	0.82	0.29	0.31	0.04	1.85	1.77	4.09
Construction	4.51	0.98	1.58	5.34	19.06	15.25	2.11	1.33	20.23	5.95	6.54	1.37	42.21	37.52	84.25
Agricultural	0.00	0.89	1.24	3.54	1.36	1.06	0.00	0.00	0.20	1.57	0.36	0.27	8.09	2.39	10.49
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	5.23	2.02	2.94	9.47	21.71	17.28	2.29	2.21	22.97	9.03	7.50	1.80	53.42	45.80	104.45

2005 Non-road Controlled Ozone Season Day Emissions - Metropolitan Washington Region

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	1.51	0.39	0.63	2.15	8.83	3.91	0.28	1.39	8.59	2.58	1.94	0.76	15.90	15.54	32.95
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.18	0.24	0.24	0.00	0.00	0.37	0.66	1.03
Recreational-Land	0.00	0.36	0.69	1.04	0.00	0.00	0.00	0.00	0.00	1.41	0.54	0.42	2.09	2.37	4.46
Recreational-Marine	1.11	0.74	0.24	0.04	0.03	0.06	0.30	0.24	3.10	1.27	2.62	1.19	1.11	8.73	10.95
Light Commercial	0.32	0.02	0.06	0.17	0.78	0.63	0.16	0.13	0.87	0.19	0.17	0.04	1.66	1.57	3.55
Industrial	0.18	0.01	0.02	0.18	0.30	0.18	0.04	0.07	0.31	0.11	0.12	0.02	0.69	0.66	1.53
Construction	0.66	0.14	0.23	0.78	2.79	2.24	0.31	0.20	2.96	0.87	0.95	0.20	6.18	5.50	12.34
Agricultural	0.00	0.19	0.27	0.77	0.30	0.23	0.00	0.00	0.04	0.34	0.08	0.06	1.76	0.52	2.28
Logging	0.00	0.01	0.02	0.04	0.08	0.03	0.00	0.01	0.06	0.02	0.03	0.01	0.18	0.13	0.31
VOC - Totals	3.78	1.87	2.16	5.17	13.10	7.65	1.10	2.22	16.17	7.03	6.45	2.70	29.95	35.67	69.40

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederick	Montgom	PG	Alexandri	Arlington	Fairfax	Loudoun	Pr.Willian	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.05	0.01	0.01	0.05	0.29	0.13	0.01	0.05	0.28	0.08	0.06	0.02	0.50	0.49	1.04
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.59	1.00	1.00	0.00	0.00	0.17	2.58	2.75
Recreational-Land	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.03
Recreational-Marine	0.12	0.11	0.04	0.01	0.00	0.01	0.02	0.02	0.23	0.09	0.20	0.09	0.17	0.65	0.95
Light Commercial	0.07	0.00	0.01	0.04	0.17	0.13	0.03	0.03	0.18	0.04	0.03	0.01	0.35	0.33	0.74
Industrial	0.37	0.02	0.04	0.38	0.62	0.39	0.09	0.15	0.64	0.23	0.24	0.03	1.44	1.38	3.20
Construction	3.51	0.76	1.23	4.15	14.82	11.86	1.64	1.04	15.73	4.62	5.08	1.07	32.82	29.17	65.50
Agricultural	0.00	0.68	0.95	2.70	1.04	0.81	0.00	0.00	0.15	1.19	0.27	0.21	6.18	1.82	8.00
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	4.12	1.59	2.28	7.33	16.93	13.50	1.79	1.87	18.21	7.27	5.89	1.42	41.64	36.45	82.22

Washington Dulles International				Ronald Reagan Washington International			Total		
		VOC	NOx		VOC	NOx		VOC	NOx
1990	Aircraft	1.251	2.389	Aircraft	0.345	2.713	Aircraft	1.596	5.102
1990	GSE/AGE/APU	0.432	0.552	GSE/AGE/APU	0.543	0.684	GSE/AGE/APU/Mobile Loun	0.984	1.430
1990	Mobile Lounge	0.009	0.193						
2002	Aircraft	0.615	3.545	Aircraft	0.168	1.730	Aircraft	0.783	5.275
2002	GSE/AGE/APU	0.185	0.701	GSE/AGE/APU	0.043	0.436	GSE/AGE/APU/Mobile Loun	0.243	1.457
2002	Mobile Lounge	0.015	0.319						
2005	Aircraft	1.410	7.080	Aircraft	0.380	2.850	Aircraft	1.790	9.930
2005	GSE/AGE/APU	0.460	1.510	GSE/AGE/APU	0.180	0.590	GSE/AGE/APU/Mobile Loun	0.660	2.580
2005	Mobile Lounge	0.02	0.48						

Emissions in tpd

Note: Airport emissions should be placed in Area Source category
GSE/AGE/APU emissions should be placed in Non-Road category

Appendix D

Draft Round 6.3 Cooperative Forecast Projections Area and Nonroad Inventories and Projections

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
777 North Capitol Street, N.E.
Washington, D.C. 20002

**RESOLUTION ADOPTING CHANGE TO THE
PROCESS FOR ADOPTING THE COOPERATIVE FORECASTS**

WHEREAS, on September 10, 1975, the Board of Directors of the Metropolitan Washington Council of Governments (hereinafter called the Council) authorized the development of a Cooperative Forecasting Program as a component of the Metropolitan Growth Policy Program; and

WHEREAS, the purpose of the Cooperative Forecasting Program is to provide current forecasts of population, households, and employment growth and change for use in metropolitan planning programs, including the Water Resources, Transportation Planning, Air Quality, Energy Resources, Metropolitan Development and Housing Programs; and

WHEREAS, the Council designated its Metropolitan Development Policy Committee as the policy body responsible for developing these forecasts through the Cooperative Forecasting Program; and

WHEREAS, each round of forecasts takes into account econometric modeling of the region's economy based on both national economic and demographic assumptions and as well as a series of economic and demographic assumptions specific to the region, with such a round of exhaustively reevaluated forecasts scheduled every three years, in support of federal transportation planning requirements; and

WHEREAS, beginning in 1991, the Council endorsed the first annual update to the forecasts of population, households, and employment as the basis for further study of land use/transportation relationships, and to enable local governments so inclined to adjust forecasts annually based on planning, zoning, and economic changes; and

WHEREAS, on September 9, 1998 the Council adopted Resolution R25-98, charging the Metropolitan Development Policy Committee, in conjunction with the Planning Directors Technical Advisory Committee and the Cooperative Forecasting and Data Subcommittee, with strengthening the Cooperative Forecasting Program submission, review, and approval process and to notify the Council's Board of Directors of actions taken; and

WHEREAS, in October 1998 the National Capital Region Transportation Planning Board (TPB) adopted its Transportation Vision, a broad-based vision planning process, which identified better inter-jurisdictional coordination of transportation and land use planning as one of its six goals; and

WHEREAS, in response to the TPB's Transportation Vision which recommended the creation of a map of Regional Activity Centers to enhance coordination of land use and transportation planning, on April 10, 2002 the Council adopted Resolution R13-02, accepting the 6 maps and associated data depicting Regional Activity Centers as a supplement to the Cooperative Forecasting program, to be updated approximately every three years in a cycle consistent with the TPB's transportation planning cycle; and

WHEREAS, the development, analysis, review and approval of each round of the Council's Cooperative Forecasts and corresponding updates to the TPB's Transportation Improvement Program (TIP) and the Financially-Constrained Long Range Plan (CLRP) should be carried out concurrently, with full consultation and coordination between the responsible technical and policy bodies; and

WHEREAS, to further enhance coordination between regional land use and transportation planning the Planning Directors Technical Advisory Committee and the Metropolitan Development Policy Committee have recommended that the Council approve each round of the Cooperative Forecasts concurrent with the completion of the TPB's Air Quality Conformity Analysis of the Transportation Improvement Program (TIP) and the Financially-Constrained Long Range Plan (CLRP).

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS THAT:

1. The Council shall approve each round of the Cooperative Forecasts concurrent with the completion of the National Capital Region Transportation Planning Board's (TPB) Air Quality Conformity Analysis of the Transportation Improvement Program (TIP) and the Financially-Constrained Long Range Plan (CLRP).
2. Council staff, the Cooperative Forecasting Subcommittee and the Planning Directors Technical Advisory Committee shall periodically brief Council's Board, Metropolitan Development Policy Committee, and Metropolitan Development Citizens Advisory Committee members to ensure that they are fully aware of the history and significance of the Cooperative Forecasting process.
3. To ensure consistency in the Cooperative Forecasting process, the Council shall prepare annual documentation of any jurisdiction-level modifications to the adopted forecasts, including actions taken or proposed to improve the forecasting process and preparation for subsequent Rounds.

Draft Emission Comparison - Base Year and 2005 (tpd)
10-Jan-03

1990 Baseline Emissions Comparison - VOC

	Severe-Area		
	Phase II Plan	Plan	Change
Point ¹	14.6	14.8	0.2
Area	191.2	191.2	0.0
Nonroad	70.4	70.4	0.0
On-road ³	251.1	300.5	49.4
Total	527.3	576.9	49.6

1990 Baseline Emissions Comparison - NOx

	Severe-Area		
	Phase II Plan	Plan	Change
Point ¹	334.8	359.8	25.0
Area	47.3	47.3	0.0
Nonroad	85.0	85.0	0.0
On-road ³	261.7	383.0	121.3
Total	728.8	875.1	146.3

2005 Controlled Emissions Comparison- VOC

	1999 Phase II Severe-Area				
	Plan	Plan	Change	Round6.3	diff '2003/99
Point ¹	16.2	17.6	1.4	17.6	1.4
Area ²	162.1	166.8	4.7	170.2	8.1
Nonroad ²	71.9	72.6	0.7	74.4	2.5
On-road ⁴	104.5	96.9	-7.6	96.7	-7.8
Total	354.7	353.9	-0.8	358.9	4.2

2005 Controlled Emissions Comparison - NOx

	1999 Phase II Severe-Area				
	Plan	Plan	Change	Round6.3	diff 03-99
Point ¹	81.5	107.3	25.8	110.2	28.7
Area ²	57.8	59.1	1.3	60.5	2.7
Nonroad ²	101.6	81.6	-20.0	82.7	-18.9
On-road ⁴	177.3	235.3	58.0	237	59.7
Total	418.2	483.3	65.1	490.4	72.2

Notes:

1. MDE changed ozone season point source methodology for severe area SIP
2. Minor changes remain to be made to the 2005 severe area SIP inventory
3. 1990 On-road emissions for severe area SIP as reported by DTP on 1/10/03
4. 2005 On-road emissions for severe area SIP as reported by DTP on 12/18/02

Severe Area Plan Percent Reductions - VOC

	1990 Baseline	2005 Controlled	% Change
Point ¹	14.8	17.6	18.9%
Area ²	191.2	166.8	-12.8%
Nonroad ²	70.4	72.6	3.1%
On-road ^{3,4}	300.5	96.9	-67.8%
Total	576.9	353.9	-38.7%

Severe Area Plan Percent Reductions - NOx

	1990 Baseline	2005 Controlled	% Change
Point ¹	359.8	107.3	-70.2%
Area ²	47.3	59.1	24.9%
Nonroad ²	85.0	81.6	-4.0%
On-road ^{3,4}	383.0	235.3	-38.6%
Total	875.1	483.3	-44.8%

Notes:

1. MDE changed ozone season point source methodology for severe area SIP
2. Minor changes remain to be made to the 2005 severe area SIP inventory
3. 1990 On-road emissions for severe area SIP as reported by DTP on 1/10/03
4. 2005 On-road emissions for severe area SIP as reported by DTP on 12/18/02

1990 Area Source Inventory - VOC
VOC - Ozone Nonattainment Area Jurisdictional Estimates

Tons per day

Category	NAA Total	Dist. Of Columbia County	Calvert County	Charles County	Fredrick County	Montgomery County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
gas Tank Truck Unloading (Stage I)															
gas Submerged	1.653	0.000	0.097	0.340	0.545	0.000	0.000	0.000	0.000	0.000	0.315	0.000	0.356	0.671	0.982
gas Submerged/Balanced	3.480	0.287	0.000	0.000	0.000	0.540	0.593	0.227	0.229	1.270	0.000	0.334	0.000	2.060	1.133
gas Vehicle Fueling	20.443	0.511	0.143	0.501	0.805	4.352	4.829	0.914	0.915	5.108	0.469	1.364	0.532	9.302	10.630
gas Underground Tank Breathing	1.955	0.159	0.013	0.045	0.073	0.397	0.436	0.082	0.083	0.458	0.042	0.120	0.047	0.832	0.964
gas Losses Fom Gasoline Tank Tru	0.080	0.006	0.000	0.001	0.002	0.011	0.012	0.005	0.005	0.026	0.002	0.007	0.003	0.048	0.026
emp Aircraft Refueling	0.215	0.000	0.000	0.000	0.008	0.003	0.139	0.021	0.000	0.014	0.019	0.011	0.000	0.065	0.150
emp Petroleum Vessel Loading and	0.029	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.017	0.000
pop Dry Cleaning	6.210	0.716	0.000	0.000	0.133	1.605	0.429	0.784	0.410	1.575	0.115	0.443	0.000	3.327	2.167
emp Surface Cleaning	7.110	0.267	0.045	0.142	0.326	1.436	1.406	0.179	0.223	1.930	0.185	0.904	0.067	3.488	3.355
pop Surface Coatings															
pop Architectural	32.142	4.972	0.421	0.829	1.230	6.201	5.974	1.400	0.911	6.945	0.706	2.051	0.502	12.515	14.655
pop Traffic Markings	3.772	0.584	0.049	0.097	0.144	0.728	0.701	0.164	0.107	0.815	0.083	0.241	0.059	1.469	1.719
emp Auto Refinishing	15.138	1.333	0.000	0.447	0.785	3.566	2.788	0.000	0.961	3.999	0.494	0.765	0.000	6.219	7.586
emp Industrial Product	19.017	0.644	0.036	0.968	2.671	1.333	10.495	0.151	0.219	1.249	0.466	0.728	0.057	2.870	15.503
emp Special Purpose	11.783	2.568	0.079	0.156	0.231	1.165	1.122	0.723	0.470	3.587	0.364	1.059	0.259	6.462	2.753
pop Graphic Arts	7.239	1.517	0.074	0.253	0.099	1.693	0.259	0.427	0.278	1.881	0.215	0.390	0.153	3.344	2.378
pop Asphalt Paving	0.021	0.003	0.000	0.001	0.001	0.004	0.004	0.001	0.001	0.005	0.000	0.001	0.000	0.008	0.010
na Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	6.216
pop Commercial/Consumer Solvent	33.860	5.238	0.443	0.873	1.296	6.533	6.294	1.475	0.960	7.316	0.743	2.161	0.528	13.183	15.439
emp Synthetic Organic Chemical Stc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp Barge, Tank, Tank Truck, Rail (	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Bakeries	1.667	0.258	0.022	0.043	0.064	0.321	0.310	0.073	0.047	0.360	0.037	0.106	0.026	0.649	0.760
pop Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Wineries	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.024
hhs Publicly Owned Treatment Wor	0.022	0.013	0.000	0.000	0.000	0.000	0.001	0.001	0.005	0.001	0.000	0.000	0.000	0.008	0.001
emp Industrial Wastewater Treatmer	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp aste Treatment, Storage & Disp	0.000													0.000	0.000
pop Municipal Landfills	3.021	0.000	0.000	0.115	0.341	0.357	0.844	0.000	0.000	1.046	0.035	0.119	0.164	1.364	1.657
pop On-Site Incineration	0.158	0.000	0.001	0.004	0.005	0.010	0.010	0.014	0.009	0.072	0.007	0.021	0.005	0.128	0.030
na Open Burning	7.910	0.000	0.415	1.494	1.731	0.652	0.295	0.000	0.000	1.835	1.038	0.450	0.000	3.323	4.587
pop Fuel Oil Consumption	0.126	0.019	0.002	0.003	0.005	0.024	0.023	0.006	0.004	0.027	0.003	0.008	0.002	0.050	0.057
pop Coal Consumption*	0.546	0.004	0.001	0.004	0.008	0.002	0.006	0.066	0.045	0.312	0.044	0.046	0.008	0.521	0.021
pop Natural Gas and Liquefied Petro	0.348	0.098	0.000	0.004	0.001	0.043	0.040	0.020	0.011	0.086	0.010	0.028	0.007	0.162	0.088
hhs Other Fuels Consumption (Resi	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	0.497
na Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Structure Fires	1.313	0.373	0.000	0.000	0.000	0.001	0.000	0.105	0.068	0.521	0.053	0.154	0.038	0.939	0.001
na Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Leaking Underground Storage	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	0.294
emp Commercial Airports	1.596	0.000	0.000	0.000	0.000	0.000	0.000	0.345	0.000	0.626	0.626	0.000	0.000	1.596	0.000
pop General Aviation Airports	0.302	0.000	0.000	0.005	0.039	0.027	0.018	0.067	0.000	0.030	0.056	0.060	0.000	0.213	0.089
na Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	0.097
emp Railroad Locomotives	0.408	0.114	0.000	0.021	0.035	0.015	0.075	0.014	0.016	0.044	0.000	0.039	0.035	0.148	0.146
1990 Area Source Total	191.132	20.129	2.054	6.597	12.889	33.986	38.498	7.404	6.047	41.572	7.072	11.904	2.980	76.979	94.024

	Area Total	Dist. of Columbia County	Calvert County	Charles County	Fredrick County	Montgomery County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	Pr. Will County	Stafford County	VA Total	MD Total
Growth Rates, Round 6.2															
Emp	1.189	0.971	1.498	1.368	1.818	1.218	1.123	1.116	1.094	1.366	2.440	1.378	2.309	1.342	1.226
Pop	1.214	1.000	1.455	1.260	1.353	1.176	1.140	1.124	1.182	1.221	2.423	1.451	1.640	1.328	1.189
Households	1.227	1.046	1.589	1.391	1.360	1.185	1.144	1.126	1.194	1.240	2.415	1.479	1.708	1.333	1.203
Gas	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165	1.165

2002 Area Source Inventory - VOC - UNCONTROLLED
VOC - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2

Tons per day		NAA	Dist. Of	Calvert	Charles	Fredrck	Montg	P.G.	Arlington	City of	Fairfax	LoudourP.	WillmStafford	VA	MD	
Category	Total	Total	Columbia	County	County	County	County	County	County	Alxndria	County	County	County	Total	Total	
gas	Tank Truck Unloading (Stage I)															
gas	Submerged	1.925	0.000	0.113	0.396	0.635	0.000	0.000	0.000	0.000	0.000	0.367	0.000	0.415	0.782	1.144
gas	Submerged/Balanced	4.054	0.334	0.000	0.000	0.000	0.629	0.691	0.264	0.267	1.479	0.000	0.389	0.000	2.399	1.320
gas	Vehicle Fueling	23.812	0.595	0.167	0.584	0.938	5.069	5.625	1.065	1.066	5.950	0.546	1.589	0.620	10.835	12.382
gas	Underground Tank Breathing	2.277	0.185	0.015	0.052	0.085	0.462	0.508	0.096	0.097	0.533	0.049	0.140	0.055	0.969	1.123
gas	Losses From Gasoline Tank Tru	0.093	0.007	0.000	0.001	0.002	0.013	0.014	0.006	0.006	0.030	0.002	0.008	0.003	0.056	0.030
emp	Aircraft Refueling	0.278	0.000	0.000	0.001	0.015	0.003	0.156	0.023	0.000	0.020	0.046	0.015	0.000	0.104	0.174
emp	Petroleum Vessel Loading and	0.035	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.023	0.000
pop	Dry Cleaning	7.483	0.716	0.000	0.000	0.180	1.887	0.489	0.881	0.485	1.923	0.279	0.643	0.000	4.210	2.556
emp	Surface Cleaning	9.373	0.259	0.067	0.194	0.593	1.749	1.579	0.200	0.244	2.636	0.451	1.246	0.155	4.932	4.182
	Surface Coatings															
pop	Architectural	39.036	4.972	0.613	1.045	1.664	7.292	6.810	1.574	1.077	8.480	1.711	2.976	0.823	16.640	17.424
pop	Traffic Markings	4.581	0.584	0.071	0.122	0.195	0.856	0.799	0.184	0.126	0.995	0.201	0.350	0.097	1.953	2.044
emp	Auto Refinishing	19.581	1.294	0.000	0.611	1.427	4.343	3.131	0.000	1.051	5.463	1.205	1.054	0.000	8.773	9.513
emp	Industrial Product	24.655	0.625	0.054	1.324	4.856	1.624	11.786	0.169	0.240	1.706	1.137	1.003	0.132	4.386	19.644
emp	Special Purpose	15.091	2.494	0.118	0.213	0.420	1.419	1.260	0.807	0.514	4.900	0.888	1.459	0.598	9.166	3.431
pop	Graphic Arts	8.807	1.517	0.108	0.319	0.134	1.991	0.295	0.480	0.329	2.297	0.521	0.566	0.251	4.443	2.847
	Graphic Arts - Lithography		0.971	0.069	0.204	0.086	1.274	0.189	0.307	0.210	1.470	0.333	0.362	0.161	2.844	1.822
	Graphic Arts - Flexographic		0.273	0.019	0.057	0.024	0.358	0.053	0.086	0.059	0.413	0.094	0.102	0.045	0.800	0.512
	Graphic Arts - Rotogravure		0.273	0.019	0.057	0.024	0.358	0.053	0.086	0.059	0.413	0.094	0.102	0.045	0.800	0.512
pop	Asphalt Paving	0.025	0.003	0.000	0.001	0.001	0.005	0.005	0.001	0.001	0.006	0.000	0.001	0.000	0.010	0.012
na	Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	6.216
pop	Commercial/Consumer Solvent	41.121	5.238	0.645	1.100	1.753	7.683	7.175	1.658	1.135	8.933	1.800	3.136	0.866	17.522	18.356
emp	Synthetic Organic Chemical Stc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Barge, Tank, Tank Truck, Rail (	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Bakeries	2.025	0.258	0.032	0.054	0.087	0.377	0.353	0.082	0.056	0.440	0.090	0.154	0.043	0.863	0.904
pop	Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Wineries	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000
pop	Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.024
hhs	Publicly Owned Treatment Wor	0.025	0.013	0.000	0.000	0.000	0.000	0.001	0.001	0.007	0.002	0.000	0.000	0.000	0.010	0.002
emp	Industrial Wastewater Treatmer	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	aste Treatment, Storage & Disp	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Municipal Landfills	3.792	0.000	0.000	0.145	0.461	0.420	0.962	0.000	0.000	1.277	0.085	0.173	0.269	1.804	1.988
pop	On-Site Incineration	0.206	0.000	0.001	0.005	0.007	0.012	0.011	0.016	0.011	0.088	0.017	0.030	0.008	0.170	0.036
na	Open Burning	7.910	0.000	0.415	1.494	1.731	0.652	0.295	0.000	0.000	1.835	1.038	0.450	0.000	3.323	4.587
pop	Fuel Oil Consumption	0.153	0.019	0.003	0.004	0.007	0.028	0.026	0.007	0.005	0.033	0.007	0.012	0.003	0.067	0.068
pop	Coal Consumption*	0.725	0.004	0.001	0.005	0.011	0.002	0.007	0.074	0.053	0.381	0.107	0.067	0.013	0.695	0.027
pop	Natural Gas and Liquefied Petro	0.417	0.098	0.000	0.005	0.001	0.051	0.046	0.022	0.013	0.105	0.024	0.041	0.011	0.217	0.103
hhs	Other Fuels Consumption (Resi	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na	Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	0.497
na	Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Structure Fires	1.623	0.373	0.000	0.000	0.000	0.001	0.000	0.118	0.080	0.636	0.128	0.223	0.062	1.249	0.001
na	Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Leaking Underground Storage	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	0.294
emp	Commercial Airports	1.898	0.000	0.000	0.000	0.000	0.000	0.000	0.410	0.000	0.744	0.744	0.000	0.000	1.898	0.000
pop	General Aviation Airports	0.445	0.000	0.000	0.006	0.053	0.031	0.021	0.076	0.000	0.037	0.135	0.086	0.000	0.334	0.112
na	Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	0.097
emp	Railroad Locomotives	0.533	0.111	0.000	0.029	0.064	0.018	0.084	0.016	0.018	0.060	0.000	0.054	0.081	0.228	0.195
	2002 Area Source Total	231.550	20.145	2.637	7.962	17.630	39.587	43.524	8.369	6.948	51.428	12.526	16.158	4.637	111.339	
	Uncontrolled															

2002 Area Source Inventory - CONTROLLED
VOC - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
tons per day

Category	NAA	Dist. Of	Calvert	Charles	Fredrck	Montg	P.G.	Arlington	City of	Fairfax	LoudourP.	Willm Stafford	VA	MD
Total	Total	Columbia	County	County	County	County	County	County	Alxndria	County	County	County	Total	Total
Tank Truck Unloading (Stage I)														

gas	Submerged	0.690	0.000	0.020	0.072	0.115	0.000	0.000	0.000	0.000	0.000	0.367	0.000	0.116	0.483	0.207
gas	Submerged/Balanced	4.054	0.334	0.000	0.000	0.000	0.629	0.691	0.264	0.267	1.479	0.000	0.389	0.000	2.399	1.320
gas	Vehicle Fueling	6.142	0.531	0.040	0.141	0.227	1.225	1.359	0.257	0.258	1.438	0.132	0.384	0.150	2.618	2.992
gas	Underground Tank Breathing	2.277	0.185	0.015	0.052	0.085	0.462	0.508	0.096	0.097	0.533	0.049	0.140	0.055	0.969	1.123
gas	Losses From Gasoline Tank Tru	0.093	0.007	0.000	0.001	0.002	0.013	0.014	0.006	0.006	0.030	0.002	0.008	0.003	0.056	0.030
emp	Aircraft Refueling	0.278	0.000	0.000	0.001	0.015	0.003	0.156	0.023	0.000	0.020	0.046	0.015	0.000	0.104	0.174
emp	Petroleum Vessel Loading and	0.035	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.023	0.000
pop	Dry Cleaning	7.483	0.716	0.000	0.000	0.180	1.887	0.489	0.881	0.485	1.923	0.279	0.643	0.000	4.210	2.556
emp	Surface Cleaning	4.309	0.151	0.021	0.060	0.184	0.542	0.489	0.116	0.142	1.530	0.262	0.723	0.090	2.863	1.295
	Surface Coatings															
pop	Architectural	31.229	3.978	0.490	0.836	1.331	5.834	5.448	1.259	0.861	6.784	1.369	2.381	0.659	13.312	13.939
pop	Traffic Markings	3.665	0.467	0.057	0.098	0.156	0.685	0.639	0.147	0.101	0.796	0.161	0.280	0.077	1.563	1.635
emp	Auto Refinishing	10.279	0.832	0.000	0.245	0.571	1.737	1.252	0.000	0.676	3.512	0.775	0.678	0.000	5.641	3.805
emp	Industrial Product	19.724	0.500	0.043	1.059	3.885	1.299	9.429	0.135	0.192	1.365	0.910	0.803	0.105	3.509	15.715
emp	Special Purpose	12.072	1.995	0.095	0.171	0.336	1.135	1.008	0.645	0.411	3.920	0.711	1.167	0.478	7.333	2.745
	Graphic Arts															
pop	Graphic Arts - Lithography (64%)	3.094	0.602	0.028	0.082	0.034	0.510	0.076	0.190	0.130	0.911	0.207	0.225	0.100	1.763	0.729
pop	Graphic Arts - Flexographic (16%)	0.870	0.169	0.008	0.023	0.010	0.143	0.021	0.054	0.037	0.256	0.058	0.063	0.028	0.496	0.205
pop	Graphic Arts - Rotogravure (16%)	0.995	0.169	0.012	0.037	0.016	0.230	0.034	0.054	0.037	0.256	0.058	0.063	0.028	0.496	0.329
pop	Asphalt Paving	0.025	0.003	0.000	0.001	0.001	0.005	0.005	0.001	0.001	0.006	0.000	0.001	0.000	0.010	0.012
na	Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	6.216
pop	Commercial/Consumer Solvent	37.030	4.717	0.580	0.991	1.579	6.918	6.461	1.493	1.022	8.044	1.621	2.824	0.780	15.783	16.530
emp	Synthetic Organic Chemical Stc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Barge, Tank, Tank Truck, Rail (	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Bakeries	2.025	0.258	0.032	0.054	0.087	0.377	0.353	0.082	0.056	0.440	0.090	0.154	0.043	0.863	0.904
pop	Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Wineries	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000
pop	Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.024
hhs	Publicly Owned Treatment Wor	0.025	0.013	0.000	0.000	0.000	0.000	0.001	0.001	0.007	0.002	0.000	0.000	0.000	0.010	0.002
emp	Industrial Wastewater Treatmer	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp	Hazardous Waste Treatment, S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Municipal Landfills	1.414	0.000	0.000	0.054	0.172	0.157	0.359	0.000	0.000	0.476	0.032	0.064	0.100	0.672	0.741
pop	On-Site Incineration	0.206	0.000	0.001	0.005	0.007	0.012	0.011	0.016	0.011	0.088	0.017	0.030	0.008	0.170	0.036
na	Open Burning	0.811	0.000	0.013	0.048	0.055	0.021	0.009	0.000	0.000	0.367	0.208	0.090	0.000	0.665	0.147
pop	Fuel Oil Consumption	0.153	0.019	0.003	0.004	0.007	0.028	0.026	0.007	0.005	0.033	0.007	0.012	0.003	0.067	0.068
pop	Coal Consumption*	0.725	0.004	0.001	0.005	0.011	0.002	0.007	0.074	0.053	0.381	0.107	0.067	0.013	0.695	0.027
pop	Natural Gas and Liquified Petro	0.417	0.098	0.000	0.005	0.001	0.051	0.046	0.022	0.013	0.105	0.024	0.041	0.011	0.217	0.103
hhs	Other Fuels Consumption (Resi	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na	Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	0.497
na	Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop	Structure Fires	1.623	0.373	0.000	0.000	0.000	0.001	0.000	0.118	0.080	0.636	0.128	0.223	0.062	1.249	0.001
na	Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na	Leaking Underground Storage	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	0.294
emp	Commercial Airports	0.783	0.000	0.000	0.000	0.000	0.000	0.000	0.168	0.000	0.308	0.308	0.000	0.000	0.783	0.000
pop	General Aviation Airports	0.445	0.000	0.000	0.006	0.053	0.031	0.021	0.076	0.000	0.037	0.135	0.086	0.000	0.334	0.112
na	Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	0.097
emp	Railroad Locomotives	0.518	0.109	0.000	0.028	0.062	0.018	0.081	0.015	0.017	0.058	0.000	0.052	0.078	0.220	0.188
	2002 Area Source Total Controlled	163.059	16.677	1.674	4.328	11.491	26.924	30.389	6.341	5.032	36.175	9.007	11.900	3.121	71.577	74.806

2002 Reduction Factors:

Stage II Vapor Recovery	0.65	Weighted average of reduction factors obtained in MOBILE6. 70% control efficiency in MD, 77% in VA
Gasoline Volatility Controls	0.11	Weighted average of reduction factors obtained in MOBILE6.
MD-Surface Cleaning/Degreasing Te	0.59	(67% reduction from technology rules and 0.06857 from good housekeeping practices; 0.8 remaining after reformulatic
DC & VA -Surface Cleaning/Degreas	0.32	[0.8*(Measure1: 0.1*0.8 + Measure2: 1.0*0.4*0.8)] ??
Landfills - MD & VA	0.63	(98% reduction factor * 80% capture efficiency * 80% rule effectiveness factor)
Seasonal Open Burning Restrictions	0.80	(100% ban * 80% rule compliance factor)
Seasonal Open Burning Restrictions	0.97	(100% ban * 96.8% rule compliance factor based on MARAMA report)
Stage I Vapor Recovery Expansion -	0.82	(90% reduction factor * 91% rule effectiveness, applied in Frederick, Charles, and Calvert Counties)
Stage I Vapor Recovery Expansion -	0.72	(90% reduction factor * 80% rule effectiveness, applied in Stafford County)
Graphic Arts Controls - VA and DC	0.38	(75% reduction factor * 80% rule effectiveness * 64% Penetration)

Graphic Arts Controls MD-Lithograph	0.60	(75% reduction factor * 80% rule effectiveness * 64% Penetration)
Graphic Arts Controls MD-Flexograph	0.43	(60% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Graphic Arts Controls MD-Rotogravure	0.50	(70% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Autobody Refinishing - MD	0.60	
Autobody Refinishing - VA, DC	0.36	
Architectural and Industrial Coatings	0.20	(National Standards for Architectural coatings - 20% reduction)
Consumer and Commercial Products	0.10	(National Standards for Consumer/Commercial solvents - 20% reduction on 49.7449% Penetration - 3.9 lbs/person su
Locomotives	0.03	(Locomotives New standards - 3.3% reduction)

CHECK:

Category	2002 Uncontrolled	2002 Controlled	Delta
Tank Truck Unloading (Stage I)			
gas Submerged	1.93	0.69	1.24
gas Submerged/Balanced	4.05	4.05	0.00
gas Vehicle Fueling	23.81	6.14	17.67
gas Underground Tank Breathing	2.28	2.28	0.00
gas Losses From Gasoline Tank Trucks	0.09	0.09	0.00
emp Aircraft Refueling	0.28	0.28	0.00
emp Petroleum Vessel Loading and Unloading	0.03	0.03	0.00
pop Dry Cleaning	7.48	7.48	0.00
emp Surface Cleaning	9.37	4.31	5.06
pop Surface Coating			
pop Architectural	39.04	31.23	7.81
pop Traffic Markings	4.58	3.66	0.92
emp Auto Refinishing	19.58	10.28	9.30
emp Industrial Product	24.65	19.72	4.93
emp Special Purpose	15.09	12.07	3.02
pop Graphic Arts	8.81	4.96	3.85
pop Asphalt Paving	0.02	0.02	0.00
na Pesticide Application	7.31	7.31	0.00
pop Commercial/Consumer Solvent	41.12	37.03	4.09
emp Synthetic Organic Chemical Solvent	0.00	0.00	0.00
emp Barge, Tank, Tank Truck, Railroad	0.00	0.00	0.00
pop Bakeries	2.02	2.02	0.00
pop Breweries	0.00	0.00	0.00
pop Wineries	0.00	0.00	0.00
pop Distilleries	0.00	0.00	0.00
na Oil Spills	0.10	0.10	0.00
hhs Publicly Owned Treatment Works	0.03	0.03	0.00
emp Industrial Wastewater Treatment	0.00	0.00	0.00
emp Hazardous Waste Treatment, Storage, and Disposal	0.00	0.00	0.00
pop Municipal Landfills	3.79	1.41	2.38
pop On-Site Incineration	0.21	0.21	0.00
na Open Burning	7.91	0.81	7.10
pop Fuel Oil Consumption	0.15	0.15	0.00
pop Coal Consumption*	0.73	0.73	0.00
pop Natural Gas and Liquified Petroleum Gas	0.42	0.42	0.00
hhs Other Fuels Consumption (Residential)	0.00	0.00	0.00
pop Small Electric Utility Boilers	0.00	0.00	0.00
na Slash/Prescribed Burning	0.01	0.01	0.00
na Forest Fires	0.50	0.50	0.00
na Agricultural Burning	0.00	0.00	0.00
pop Structure Fires	1.62	1.62	0.00
na Orchard Heaters	0.00	0.00	0.00
na Leaking Underground Storage Tanks	1.46	1.46	0.00
emp Commercial Airports	1.90	0.78	1.11
pop General Aviation Airports	0.45	0.45	0.00
na Military Airports	0.18	0.18	0.00
emp Railroad Locomotives	0.53	0.52	0.02
2002 Area Source Total-VOC	231.55	163.06	68.49
	<i>Uncontrolled</i>	<i>Controlled</i>	<i>Delta</i>

1990 Area Source Inventory - NOx
NOx - Ozone Nonattainment Area Jurisdictional Estimates
Tons per Day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	4.686	0.000	0.001	0.004	0.005	0.010	0.010	0.521	0.339	2.584	0.262	0.763	0.187	4.656	0.030
Open Burning	1.665	0.000	0.087	0.315	0.364	0.137	0.062	0.000	0.000	0.386	0.219	0.095	0.000	0.700	0.965
Fuel Oil Consumption	9.714	0.942	0.119	0.235	0.349	1.761	1.696	0.516	0.336	2.559	0.260	0.756	0.185	4.612	4.160
Coal Consumption	6.387	0.000	0.056	1.037	0.767	0.146	0.577	0.492	0.338	2.310	0.343	0.284	0.037	3.804	2.583
Natural Gas and Liquefied Petroleum Gas Consumption	11.566	1.890	0.015	0.187	0.090	2.301	1.948	0.633	0.360	2.732	0.309	0.874	0.227	5.135	4.541
Forest Fires	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	0.167	0.048	0.000	0.000	0.000	0.000	0.000	0.013	0.009	0.066	0.007	0.020	0.005	0.120	0.000
Commercial Airports	5.102	0.000	0.000	0.000	0.000	0.000	0.000	2.713	0.000	1.195	1.195	0.000	0.000	5.102	0.000
General Aviation Airports	0.045	0.000	0.000	0.001	0.006	0.004	0.003	0.009	0.000	0.004	0.008	0.010	0.000	0.031	0.014
Military Airports	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	8.253	1.443	0.000	0.498	0.822	0.353	1.728	0.322	0.337	1.024	0.000	0.916	0.810	3.409	3.401
Total	47.712	4.323	0.283	2.306	2.415	4.736	6.066	5.220	1.719	12.868	2.603	3.722	1.452	27.583	15.807

NOx 2002 Area Source Inventory - NO CONTROLS
NOx - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
Tons per Day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	pop 6.644	0.000	0.001	0.005	0.009	0.012	0.011	0.581	0.371	3.530	0.639	1.051	0.432	6.605	0.039
Open Burning	na 1.665	0.000	0.087	0.315	0.364	0.137	0.062	0.000	0.000	0.386	0.219	0.095	0.000	0.700	0.965
Fuel Oil Consumption	pop 12.020	0.942	0.173	0.296	0.472	2.071	1.933	0.580	0.397	3.125	0.630	1.097	0.303	6.132	4.946
Coal Consumption	pop 8.332	0.000	0.081	1.307	1.038	0.172	0.658	0.553	0.400	2.821	0.831	0.412	0.061	5.077	3.255
Natural Gas and Liquefied Petroleum Gas Consumption	pop 14.058	1.890	0.022	0.236	0.122	2.706	2.221	0.711	0.426	3.336	0.749	1.268	0.372	6.862	5.306
Forest Fires	na 0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	na 0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	pop 0.207	0.048	0.000	0.000	0.000	0.000	0.000	0.015	0.010	0.081	0.017	0.028	0.008	0.160	0.000
Commercial Airports	emp 6.066	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.000	1.420	1.420	0.000	0.000	6.066	0.000
General Aviation Airports	pop 0.067	0.000	0.000	0.001	0.008	0.005	0.003	0.010	0.000	0.005	0.020	0.014	0.000	0.050	0.018
Military Airports	na 0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	emp 11.207	1.401	0.000	0.681	1.494	0.430	1.941	0.359	0.369	1.399	0.000	1.262	1.870	5.259	4.546
Total	60.392	4.281	0.370	2.870	3.519	5.557	6.871	6.037	1.972	16.109	4.525	5.233	3.047	36.924	19.168

Area	Dist. of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	Pr. Will County	Stafford County	VA Total	MD Total	
Growth Rates 1990-2002 Round 6.2	1.189	0.971	1.498	1.368	1.818	1.218	1.123	1.116	1.094	1.366	2.440	1.378	2.309	1.342	1.226
Emp Pop	1.214	1.000	1.455	1.260	1.353	1.176	1.140	1.124	1.182	1.221	2.423	1.451	1.640	1.328	1.189

Control measures

Seasonal Open Burning Restrictions - VA 0.800 (100% ban * 80% rule compliance factor)
 Seasonal Open Burning Restrictions - MD 0.968 (100% ban * 96.8% rule compliance factor based on MARAMA report)
 Locomotive Emissions Reduction Factor 0.278 (New Standards would reduce NOx 27.8% by year 2005)

NOx 2002 Area Source Inventory - WITH CONTROLS
NOx - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
Tons per Day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	pop 6.644	0.000	0.001	0.005	0.009	0.012	0.011	0.581	0.371	3.530	0.639	1.051	0.432	6.605	0.039
Open Burning	na 0.171	0.000	0.003	0.010	0.012	0.004	0.002	0.000	0.000	0.077	0.044	0.019	0.000	0.140	0.031
Fuel Oil Consumption	pop 12.020	0.942	0.173	0.296	0.472	2.071	1.933	0.580	0.397	3.125	0.630	1.097	0.303	6.132	4.946
Coal Consumption	pop 8.332	0.000	0.081	1.307	1.038	0.172	0.658	0.553	0.400	2.821	0.831	0.412	0.061	5.077	3.255
Natural Gas and Liquefied Petroleum Gas Consumption	pop 14.058	1.890	0.022	0.236	0.122	2.706	2.221	0.711	0.426	3.336	0.749	1.268	0.372	6.862	5.306
Forest Fires	na 0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	na 0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	pop 0.207	0.048	0.000	0.000	0.000	0.000	0.000	0.015	0.010	0.081	0.017	0.028	0.008	0.160	0.000
Commercial Airports	emp 5.275	0.000	0.000	0.000	0.000	0.000	0.000	1.730	0.000	1.773	1.773	0.000	0.000	5.275	0.000
General Aviation Airports	pop 0.067	0.000	0.000	0.001	0.008	0.005	0.003	0.010	0.000	0.005	0.020	0.014	0.000	0.050	0.018
Military Airports	na 0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	emp 8.352	1.273	0.000	0.492	1.079	0.310	1.401	0.259	0.266	1.010	0.000	0.911	1.350	3.797	3.282
Total - With CONTROLS	55.253	4.152	0.286	2.376	2.751	5.305	6.272	4.441	1.870	15.764	4.703	4.806	2.527	34.111	16.990

Check - 2002 NOx

Category	Uncontr	Controlled	Delta
On-Site Incineration	6.644	6.644	0.00
Open Burning	1.665	0.171	1.49
Fuel Oil Consumption	12.020	12.020	0.00
Coal Consumption	8.332	8.332	0.00
Natural Gas and Liquefied Petroleum Gas Consumption	14.058	14.058	0.00
Forest Fires	0.084	0.084	0.00
Slash/Prescribed Burning	0.019	0.019	0.00
Structure Fires	0.207	0.207	0.00
Commercial Airports	6.066	5.275	0.79
General Aviation Airports	0.067	0.067	0.00
Military Airports	0.023	0.023	0.00
Railroad Locomotives	11.207	8.352	2.85
Total	60.392	55.253	5.14

1990 Area Source Inventory - VOC
 VOC - Ozone Nonattainment Area Jurisdictional Estimates
 Tons per day

Category	NAA Total	Dist. Of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	Pr. Will County	Stafford County	VA Total	MD Total
Tank Truck Unloading (Stage I)															
gas Submerged	1.653	0.000	0.097	0.340	0.545	0.000	0.000	0.000	0.000	0.000	0.315	0.000	0.356	0.671	0.982
gas Submerged/Balanced	3.480	0.287	0.000	0.000	0.000	0.540	0.593	0.227	0.229	1.270	0.000	0.334	0.000	2.060	1.133
gas Vehicle Fueling	20.443	0.511	0.143	0.501	0.805	4.352	4.829	0.914	0.915	5.108	0.469	1.364	0.532	9.302	10.630
gas Underground Tank Breathing	1.955	0.159	0.013	0.045	0.073	0.397	0.436	0.082	0.083	0.458	0.042	0.120	0.047	0.832	0.964
gas Losses From Gasoline Tank Truc	0.080	0.006	0.000	0.001	0.002	0.011	0.012	0.005	0.005	0.026	0.002	0.007	0.003	0.048	0.026
emp Aircraft Refueling	0.215	0.000	0.000	0.000	0.008	0.003	0.139	0.021	0.000	0.014	0.019	0.011	0.000	0.065	0.150
emp Petroleum Vessel Loading and U	0.029	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.017	0.000
pop Dry Cleaning	6.210	0.716	0.000	0.000	0.133	1.605	0.429	0.784	0.410	1.575	0.115	0.443	0.000	3.327	2.167
emp Surface Cleaning	7.110	0.267	0.045	0.142	0.326	1.436	1.406	0.179	0.223	1.930	0.185	0.904	0.067	3.488	3.355
Surface Coatings															
pop Architectural	32.142	4.972	0.421	0.829	1.230	6.201	5.974	1.400	0.911	6.945	0.706	2.051	0.502	12.515	14.655
pop Traffic Markings	3.772	0.584	0.049	0.097	0.144	0.728	0.701	0.164	0.107	0.815	0.083	0.241	0.059	1.469	1.719
emp Auto Refinishing	15.138	1.333	0.000	0.447	0.785	3.566	2.788	0.000	0.961	3.999	0.494	0.765	0.000	6.219	7.586
emp Industrial Product	19.017	0.644	0.036	0.968	2.671	1.333	10.495	0.151	0.219	1.249	0.466	0.728	0.057	2.870	15.503
emp Special Purpose	11.783	2.568	0.079	0.156	0.231	1.165	1.122	0.723	0.470	3.587	0.364	1.059	0.259	6.462	2.753
pop Graphic Arts	7.239	1.517	0.074	0.253	0.099	1.693	0.259	0.427	0.278	1.881	0.215	0.390	0.153	3.344	2.378
pop Asphalt Paving	0.021	0.003	0.000	0.001	0.001	0.004	0.004	0.001	0.001	0.005	0.000	0.001	0.000	0.008	0.010
na Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	6.216
pop Commercial/Consumer Solvent U	33.860	5.238	0.443	0.873	1.296	6.533	6.294	1.475	0.960	7.316	0.743	2.161	0.528	13.183	15.439
emp Synthetic Organic Chemical Stor	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp Barge, Tank, Tank Truck, Rail C:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Bakeries	1.667	0.258	0.022	0.043	0.064	0.321	0.310	0.073	0.047	0.360	0.037	0.106	0.026	0.649	0.760
pop Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Wineries	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.024
hhs Publicly Owned Treatment Work:	0.022	0.013	0.000	0.000	0.000	0.000	0.001	0.001	0.005	0.001	0.000	0.000	0.000	0.008	0.001
emp Industrial Wastewater Treatment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
emp Waste Treatment, Storage & Dispc	0.000													0.000	0.000
pop Municipal Landfills	3.021	0.000	0.000	0.115	0.341	0.357	0.844	0.000	0.000	1.046	0.035	0.119	0.164	1.364	1.657
pop On-Site Incineration	0.158	0.000	0.001	0.004	0.005	0.010	0.010	0.014	0.009	0.072	0.007	0.021	0.005	0.128	0.030
na Open Burning	7.910	0.000	0.415	1.494	1.731	0.652	0.295	0.000	0.000	1.835	1.038	0.450	0.000	3.323	4.587
pop Fuel Oil Consumption	0.126	0.019	0.002	0.003	0.005	0.024	0.023	0.006	0.004	0.027	0.003	0.008	0.002	0.050	0.057
pop Coal Consumption*	0.546	0.004	0.001	0.004	0.008	0.002	0.006	0.066	0.045	0.312	0.044	0.046	0.008	0.521	0.021
pop Natural Gas and Liquefied Petrole	0.348	0.098	0.000	0.004	0.001	0.043	0.040	0.020	0.011	0.086	0.010	0.028	0.007	0.162	0.088
hhs Other Fuels Consumption (Resid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
na Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	0.497
na Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
pop Structure Fires	1.313	0.373	0.000	0.000	0.000	0.001	0.000	0.105	0.068	0.521	0.053	0.154	0.038	0.939	0.001
na Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
na Leaking Underground Storage T:	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	0.294
emp Commercial Airports	1.596	0.000	0.000	0.000	0.000	0.000	0.000	0.345	0.000	0.626	0.626	0.000	0.000	1.596	0.000
pop General Aviation Airports	0.302	0.000	0.000	0.005	0.039	0.027	0.018	0.067	0.000	0.030	0.056	0.060	0.000	0.213	0.089
na Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	0.097
emp Railroad Locomotives	0.408	0.114	0.000	0.021	0.035	0.015	0.075	0.014	0.016	0.044	0.000	0.039	0.035	0.148	0.146
1990 Area Source Total	191.132	20.129	2.054	6.597	12.889	33.986	38.498	7.404	6.047	41.572	7.072	11.904	2.980	#####	94.024

	Area Total	Dist. of Columbia	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	Pr. Will County	Stafford County	VA Total	MD Total
Growth Rates, Round 6.2															
Emp	1.237	0.964	1.622	1.460	2.022	1.273	1.153	1.145	1.117	1.449	2.800	1.472	2.636	1.427	1.283
Pop	1.268	1.000	1.569	1.325	1.442	1.221	1.175	1.155	1.228	1.274	2.778	1.563	1.800	1.410	1.237
Households	1.283	1.057	1.737	1.489	1.449	1.231	1.180	1.158	1.242	1.298	2.769	1.599	1.885	1.416	1.254
Gas	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206

2005 Area Source Inventory - VOC - UNCONTROLLED

VOC - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2

Tons per day

Table with columns for Category, NAA Total, and 15 regional/county categories (Dist. Of Columbia, Calvert County, Charles County, Fredrck County, Montg County, P.G. County, Arlington County, City of Alexandria, Fairfax County, Loudou County, P. Willm County, Staffor County, VA Total, MD Total). Rows include various industrial and commercial activities like Tank Truck Unloading, Automotive Refinishing, and Graphic Arts.

2005 Area Source Inventory - CONTROLLED

VOC - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2

tons per day

Table with columns for Category, NAA Total, and 15 regional/county categories, identical structure to the first table.

Tank Truck Unloading (Stage I)																
gas	Submerged	0.714	0.000	0.021	0.074	0.119	0.000	0.000	0.000	0.000	0.380	0.000	0.120	0.500	0.214	
gas	Submerged/Balanced	4.197	0.346	0.000	0.000	0.000	0.651	0.715	0.274	0.276	1.532	0.000	0.403	0.000	1.366	
gas	Vehicle Fueling	7.299	0.559	0.048	0.169	0.272	1.472	1.633	0.309	0.309	1.727	0.159	0.461	0.180	3.146	
gas	Underground Tank Breathing	2.358	0.192	0.016	0.054	0.088	0.479	0.526	0.099	0.100	0.552	0.051	0.145	0.057	1.003	
gas	Losses Fom Gasoline Tank Truc	0.096	0.007	0.000	0.001	0.002	0.013	0.014	0.006	0.006	0.031	0.002	0.008	0.004	0.058	
emp	Aircraft Refueling	0.294	0.000	0.000	0.001	0.016	0.003	0.160	0.024	0.000	0.021	0.053	0.016	0.000	0.114	
emp	Petroleum Vessel Loading and U	0.036	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025	0.000	0.000	0.000	0.025	
pop	Dry Cleaning	7.799	0.716	0.000	0.000	0.192	1.960	0.504	0.906	0.503	2.007	0.319	0.692	0.000	4.427	
emp	Surface Cleaning	4.571	0.149	0.023	0.064	0.204	0.566	0.502	0.119	0.145	1.623	0.301	0.772	0.103	3.063	
	Surface Coatings	0.000														
pop	Architectural	32.600	3.978	0.528	0.879	1.419	6.057	5.616	1.294	0.895	7.078	1.569	2.565	0.723	14.123	
pop	Traffic Markings	3.826	0.467	0.062	0.103	0.166	0.711	0.659	0.152	0.105	0.831	0.184	0.301	0.085	1.658	
emp	Auto Refinishing	10.854	0.826	0.000	0.261	0.635	1.816	1.286	0.000	0.690	3.726	0.889	0.724	0.000	6.030	
emp	Industrial Product	20.837	0.497	0.047	1.131	4.321	1.358	9.681	0.138	0.196	1.448	1.044	0.857	0.120	3.803	
emp	Special Purpose	12.709	1.980	0.103	0.182	0.374	1.186	1.035	0.662	0.420	4.158	0.815	1.247	0.546	7.849	
Graphic Arts																
pop	Graphic Arts - Lithography (64%)	3.231	0.602	0.030	0.086	0.037	0.529	0.078	0.196	0.135	0.951	0.237	0.242	0.109	1.870	
pop	Graphic Arts - Flexographic (16%)	0.998	0.169	0.012	0.034	0.015	0.211	0.031	0.055	0.038	0.267	0.067	0.068	0.031	0.526	
pop	Graphic Arts - Rotogravure (16%)	0.960	0.169	0.010	0.030	0.013	0.185	0.027	0.055	0.038	0.267	0.067	0.068	0.031	0.526	
pop	Asphalt Paving	0.026	0.003	0.000	0.001	0.001	0.005	0.005	0.001	0.001	0.006	0.000	0.002	0.000	0.010	
na	Pesticide Application	7.308	0.015	0.167	0.152	2.206	2.707	0.984	0.000	0.000	0.032	0.830	0.127	0.088	1.077	
pop	Commercial/Consumer Solvent U	38.655	4.717	0.626	1.042	1.683	7.183	6.660	1.534	1.062	8.393	1.859	3.042	0.856	16.745	
emp	Synthetic Organic Chemical Stor	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
emp	Barge, Tank, Tank Truck, Rail C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
pop	Bakeries	2.114	0.258	0.035	0.057	0.092	0.392	0.364	0.084	0.058	0.459	0.103	0.166	0.047	0.916	
pop	Breweries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
pop	Wineries	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	
pop	Distilleries	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
na	Oil Spills	0.101	0.076	0.000	0.005	0.003	0.006	0.010	0.000	0.000	0.001	0.000	0.000	0.000	0.001	
hhs	Publicly Owned Treatment Work	0.026	0.014	0.000	0.000	0.000	0.000	0.001	0.001	0.007	0.002	0.000	0.000	0.000	0.011	
emp	Industrial Wastewater Treatment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
emp	Hazardous Waste Treatment, Str	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
pop	Municipal Landfills	1.485	0.000	0.000	0.057	0.183	0.163	0.370	0.000	0.000	0.497	0.036	0.069	0.110	0.712	
pop	On-Site Incineration	0.218	0.000	0.002	0.005	0.007	0.012	0.012	0.016	0.011	0.092	0.019	0.033	0.009	0.180	
na	Open Burning	0.811	0.000	0.013	0.048	0.055	0.021	0.009	0.000	0.000	0.367	0.208	0.090	0.000	0.665	
pop	Fuel Oil Consumption	0.160	0.019	0.003	0.004	0.007	0.029	0.027	0.007	0.005	0.034	0.008	0.013	0.004	0.071	
pop	Coal Consumption*	0.769	0.004	0.002	0.005	0.012	0.002	0.007	0.076	0.055	0.397	0.122	0.072	0.014	0.738	
pop	Natural Gas and Liquefied Petrol	0.435	0.098	0.000	0.005	0.001	0.053	0.047	0.023	0.014	0.110	0.028	0.044	0.013	0.230	
hhs	Other Fuels Consumption (Resid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
pop	Small Electric Utility Boilers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
na	Slash/Prescribed Burning	0.008	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	
na	Forest Fires	0.504	0.000	0.032	0.072	0.073	0.142	0.178	0.000	0.000	0.001	0.001	0.003	0.002	0.007	
na	Agricultural Burning	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
pop	Structure Fires	1.699	0.373	0.000	0.000	0.000	0.001	0.000	0.121	0.084	0.664	0.147	0.241	0.068	1.325	
na	Orchard Heaters	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
na	Leaking Underground Storage T	1.462	0.342	0.014	0.014	0.028	0.112	0.126	0.140	0.070	0.322	0.112	0.140	0.042	0.826	
emp	Commercial Airports	1.790	0.000	0.000	0.000	0.000	0.000	0.000	0.380	0.000	0.705	0.705	0.000	0.000	1.790	
pop	General Aviation Airports	0.481	0.000	0.000	0.006	0.057	0.033	0.021	0.078	0.000	0.039	0.154	0.093	0.000	0.364	
na	Military Airports	0.184	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.000	0.060	0.003	0.024	0.000	0.087	
emp	Railroad Locomotives	0.548	0.109	0.000	0.030	0.068	0.018	0.084	0.016	0.017	0.062	0.000	0.056	0.089	0.239	
2005 Area Source Total		172.167	16.697	1.792	4.581	12.352	28.077	31.468	6.765	5.240	38.487	10.474	12.783	3.450	#####	78.270
Controlled																

2005 Reduction Factors:

Stage II Vapor Recovery	0.63	Weighted average of reduction factors obtained in MOBILE6. 70% control efficiency in MD, 77% in VA
Gasoline Volatility Controls	0.09	
MD-Surface Cleaning/Degreasing Tec	0.59	(67% reduction from technology rules and 0.06857 from good housekeeping practices; 0.8 remaining after reformul
DC & VA -Surface Cleaning/Degreasin	0.32	[0.8*(Measure1: 0.1*0.8 + Measure2: 1.0*0.4*0.8)] ??
Landfills - MD & VA	0.63	(98% reduction factor * 80% capture efficiency * 80% rule effectiveness factor)
Seasonal Open Burning Restrictions -	0.80	(100% ban * 80% rule compliance factor)
Seasonal Open Burning Restrictions -	0.97	(100% ban * 96.8% rule compliance factor based on MARAMA report)
Stage I Vapor Recovery Expansion - M	0.82	(90% reduction factor * 91% rule effectiveness, applied in Frederick, Charles, and Calvert Counties)
Stage I Vapor Recovery Expansion - V	0.72	(90% reduction factor * 80% rule effectiveness, applied in Stafford County)

Graphic Arts Controls - VA and DC	0.38	(75% reduction factor * 80% rule effectiveness * 64% Penetration)
Graphic Arts Controls MD-Lithography	0.60	(75% reduction factor * 80% rule effectiveness * 64% Penetration)
Graphic Arts Controls MD-Flexography	0.43	(60% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Graphic Arts Controls MD-Rotogravure	0.50	(70% reduction factor * 90% emissions from ink solvent evaporation * 80% rule effectiveness * 18% Penetration)
Autobody Refinishing - MD	0.60	
Autobody Refinishing - VA, DC	0.36	
Architectural and Industrial Coatings	0.20	(National Standards for Architectural coatings - 20% reduction)
Consumer and Commercial Products	0.10	(National Standards for Consumer/Commercial solvents - 20% reduction on 49.7449% Penetration - 3.9 lbs/person)
Locomotives	0.03	(Locomotives New standards - 3.3% reduction)

CHECK:

Category	2005 Uncontrolled	2005 Controlled	Delta	
Tank Truck Unloading (Stage I)				
gas Submerged	1.99	0.71	1.28	
gas Submerged/Balanced	4.20	4.20	0.00	
gas Vehicle Fueling	24.65	7.30	17.35	
gas Underground Tank Breathing	2.36	2.36	0.00	
gas Losses From Gasoline Tank Truck	0.10	0.10	0.00	
emp Aircraft Refueling	0.29	0.29	0.00	
emp Petroleum Vessel Loading and Unloading	0.04	0.04	0.00	
pop Dry Cleaning	7.80	7.80	0.00	
emp Surface Cleaning	9.92	4.57	5.35	
Surface Coating				
pop Architectural	40.75	32.60	8.15	
pop Traffic Markings	4.78	3.83	0.96	17.49
emp Auto Refinishing	20.66	10.85	9.80	
emp Industrial Product	26.05	20.84	5.21	
emp Special Purpose	15.89	12.71	3.18	
pop Graphic Arts	9.20	5.19	4.01	
pop Asphalt Paving	0.03	0.03	0.00	
na Pesticide Application	7.31	7.31	0.00	
pop Commercial/Consumer Solvent Use	42.93	38.66	4.27	
emp Synthetic Organic Chemical Storage	0.00	0.00	0.00	
emp Barge, Tank, Tank Truck, Railroad Car	0.00	0.00	0.00	
pop Bakeries	2.11	2.11	0.00	
pop Breweries	0.00	0.00	0.00	
pop Wineries	0.00	0.00	0.00	
pop Distilleries	0.00	0.00	0.00	
na Oil Spills	0.10	0.10	0.00	
hhs Publicly Owned Treatment Works	0.03	0.03	0.00	
emp Industrial Wastewater Treatment	0.00	0.00	0.00	
emp Hazardous Waste Treatment, Storage, and Disposal	0.00	0.00	0.00	
pop Municipal Landfills	3.98	1.48	2.50	
pop On-Site Incineration	0.22	0.22	0.00	
na Open Burning	7.91	0.81	7.10	
pop Fuel Oil Consumption	0.16	0.16	0.00	
pop Coal Consumption*	0.77	0.77	0.00	
pop Natural Gas and Liquefied Petroleum Gas	0.43	0.43	0.00	
hhs Other Fuels Consumption (Residual)	0.00	0.00	0.00	
pop Small Electric Utility Boilers	0.00	0.00	0.00	
na Slash/Prescribed Burning	0.01	0.01	0.00	
na Forest Fires	0.50	0.50	0.00	
na Agricultural Burning	0.00	0.00	0.00	
pop Structure Fires	1.70	1.70	0.00	
na Orchard Heaters	0.00	0.00	0.00	
na Leaking Underground Storage Tanks	1.46	1.46	0.00	
emp Commercial Airports	1.97	1.79	0.18	
pop General Aviation Airports	0.48	0.48	0.00	
na Military Airports	0.18	0.18	0.00	
emp Railroad Locomotives	0.56	0.55	0.02	
2005 Area Source Total-VOC	241.52	172.17	69.35	
	<i>Uncontrolled</i>	<i>Controlled</i>	<i>Delta</i>	

1990 Area Source Inventory - NOx
NOx - Ozone Nonattainment Area Jurisdictional Estimates
Tons per Day

Category	NAA Total	Dist. Of Columbia County	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	4.686	0.000	0.001	0.004	0.005	0.010	0.010	0.521	0.339	2.584	0.262	0.763	0.187	4.656	0.030
Open Burning	1.665	0.000	0.087	0.315	0.364	0.137	0.062	0.000	0.000	0.386	0.219	0.095	0.000	0.700	0.965
Fuel Oil Consumption	9.714	0.942	0.119	0.235	0.349	1.761	1.696	0.516	0.336	2.559	0.260	0.756	0.185	4.612	4.160
Coal Consumption	6.387	0.000	0.056	1.037	0.767	0.146	0.577	0.492	0.338	2.310	0.343	0.284	0.037	3.804	2.583
Natural Gas and Liquefied Petroleum Gas Consumption	11.566	1.890	0.015	0.187	0.090	2.301	1.948	0.633	0.360	2.732	0.309	0.874	0.227	5.135	4.541
Forest Fires	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	0.167	0.048	0.000	0.000	0.000	0.000	0.000	0.013	0.009	0.066	0.007	0.020	0.005	0.120	0.000
Commercial Airports	5.102	0.000	0.000	0.000	0.000	0.000	0.000	2.713	0.000	1.195	1.195	0.000	0.000	5.102	0.000
General Aviation Airports	0.045	0.000	0.000	0.001	0.006	0.004	0.003	0.009	0.000	0.004	0.008	0.010	0.000	0.031	0.014
Military Airports	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	8.253	1.443	0.000	0.498	0.822	0.353	1.728	0.322	0.337	1.024	0.000	0.916	0.810	3.409	3.401
Total	47.712	4.323	0.283	2.306	2.415	4.736	6.066	5.220	1.719	12.868	2.603	3.722	1.452	27.583	15.807

NOx 2005 Area Source Inventory - NO CONTROLS
NOx - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
Tons per Day

Category	pop	NAA Total	Dist. Of Columbia County	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	na	7.111	0.000	0.002	0.006	0.010	0.013	0.012	0.597	0.379	3.744	0.734	1.123	0.493	7.069	0.042
Open Burning	na	1.665	0.000	0.087	0.315	0.364	0.137	0.062	0.000	0.000	0.386	0.219	0.095	0.000	0.700	0.965
Fuel Oil Consumption	pop	12.592	0.942	0.187	0.311	0.503	2.150	1.993	0.596	0.413	3.260	0.722	1.182	0.333	6.506	5.144
Coal Consumption	pop	8.814	0.000	0.088	1.374	1.106	0.178	0.678	0.568	0.415	2.943	0.953	0.444	0.067	5.390	3.424
Natural Gas and Liquefied Petroleum Gas Consumption	pop	14.676	1.890	0.024	0.248	0.130	2.810	2.289	0.731	0.442	3.481	0.858	1.366	0.409	7.287	5.500
Forest Fires	na	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	na	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	pop	0.217	0.048	0.000	0.000	0.000	0.000	0.000	0.015	0.011	0.084	0.019	0.031	0.009	0.169	0.000
Commercial Airports	emp	6.311	0.000	0.000	0.000	0.000	0.000	0.000	3.356	0.000	1.478	1.478	0.000	0.000	6.311	0.000
General Aviation Airports	pop	0.073	0.000	0.000	0.001	0.008	0.005	0.004	0.011	0.000	0.005	0.023	0.015	0.000	0.054	0.018
Military Airports	na	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	emp	11.935	1.391	0.000	0.727	1.662	0.449	1.992	0.369	0.376	1.484	0.000	1.348	2.135	5.712	4.831
Total		63.520	4.271	0.392	3.011	3.796	5.766	7.071	6.243	2.036	16.873	5.006	5.609	3.446	39.212	20.037

Area	Dist. of Columbia County	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	Pr. Willm County	Stafford County	VA Total	MD Total		
Total	1.237	0.964	1.622	1.460	2.022	1.273	1.153	1.145	1.117	1.449	2.800	1.472	2.636	1.427	1.283	
Round 6.2	Emp	1.268	1.000	1.569	1.325	1.442	1.221	1.175	1.155	1.228	1.274	2.778	1.563	1.800	1.410	1.237

Control measures

Seasonal Open Burning Restrictions - VA 0.800 (100% ban * 80% rule compliance factor)
 Seasonal Open Burning Restrictions - MD 0.968 (100% ban * 96.8% rule compliance factor based on MARAMA report)
 Locomotive Emissions Reduction Factor 0.278 (New Standards would reduce NOx 27.8% by year 2005)

NOx 2005 Area Source Inventory - WITH CONTROLS
NOx - Ozone Nonattainment Area Jurisdictional Estimates, Round 6.2
Tons per Day

Category	pop	NAA Total	Dist. Of Columbia County	Calvert County	Charles County	Fredrick County	Montg County	P.G. County	Arlington County	City of Alexandria	Fairfax County	Loudoun County	P. Willm County	Stafford County	VA Total	MD Total
On-Site Incineration	pop	7.111	0.000	0.002	0.006	0.010	0.013	0.012	0.597	0.379	3.744	0.734	1.123	0.493	7.069	0.042
Open Burning	na	0.171	0.000	0.003	0.010	0.012	0.004	0.002	0.000	0.000	0.077	0.044	0.019	0.000	0.140	0.031
Fuel Oil Consumption	pop	12.592	0.942	0.187	0.311	0.503	2.150	1.993	0.596	0.413	3.260	0.722	1.182	0.333	6.506	5.144
Coal Consumption	pop	8.814	0.000	0.088	1.374	1.106	0.178	0.678	0.568	0.415	2.943	0.953	0.444	0.067	5.390	3.424
Natural Gas and Liquefied Petroleum Gas Consumption	pop	14.676	1.890	0.024	0.248	0.130	2.810	2.289	0.731	0.442	3.481	0.858	1.366	0.409	7.287	5.500
Forest Fires	na	0.084	0.000	0.005	0.012	0.012	0.024	0.030	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.083
Slash/Prescribed Burning	na	0.019	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.017
Structure Fires	pop	0.217	0.048	0.000	0.000	0.000	0.000	0.000	0.015	0.011	0.084	0.019	0.031	0.009	0.169	0.000
Commercial Airports	emp	9.930	0.000	0.000	0.000	0.000	0.000	0.000	2.850	0.000	3.540	3.540	0.000	0.000	9.930	0.000
General Aviation Airports	pop	0.073	0.000	0.000	0.001	0.008	0.005	0.004	0.011	0.000	0.005	0.023	0.015	0.000	0.054	0.018
Military Airports	na	0.023	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.008	0.000	0.003	0.000	0.011	0.012
Railroad Locomotives	emp	8.876	1.263	0.000	0.525	1.200	0.324	1.439	0.266	0.272	1.071	0.000	0.974	1.542	4.124	3.488
Total - With CONTROLS		62.586	4.143	0.308	2.504	2.981	5.509	6.458	5.634	1.931	18.214	6.894	5.158	2.852	40.683	17.760

Check - 2005 NOx

Category	Uncontr	Controlled	Delta
On-Site Incineration	7.111	7.111	0.00
Open Burning	1.665	0.171	1.49
Fuel Oil Consumption	12.592	12.592	0.00
Coal Consumption	8.814	8.814	0.00
Natural Gas and Liquefied Petroleum Gas Consumption	14.676	14.676	0.00
Forest Fires	0.084	0.084	0.00
Slash/Prescribed Burning	0.019	0.019	0.00
Structure Fires	0.217	0.217	0.00
Commercial Airports	6.311	9.930	-3.62
General Aviation Airports	0.073	0.073	0.00
Military Airports	0.023	0.023	0.00
Railroad Locomotives	11.935	8.876	3.06
Total	63.520	62.586	0.93

2002 Non-road Category Ozone Season Day Emissions - Metropolitan Washington Region

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederic	Montgor	PG	Alexandr	Arlington	Fairfax	Loudoun	Pr.Williar	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	1.64	0.43	0.67	2.11	9.49	4.13	0.29	1.46	8.86	2.28	1.99	0.97	16.83	15.84	34.31
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.04	0.10	0.10	0.00	0.00	0.37	0.24	0.61
Recreational-Land	0.00	0.36	0.66	1.02	0.00	0.00	0.00	0.00	0.00	1.43	0.56	0.50	2.04	2.50	4.54
Recreational-Marine	1.47	0.77	0.25	0.04	0.03	0.07	0.35	0.27	3.45	1.29	3.01	1.59	1.16	9.97	12.60
Light Commercial	0.39	0.02	0.06	0.17	0.81	0.67	0.17	0.13	0.88	0.18	0.18	0.04	1.72	1.59	3.70
Industrial	0.22	0.01	0.02	0.20	0.36	0.22	0.05	0.09	0.36	0.11	0.14	0.03	0.83	0.77	1.82
Construction	0.67	0.15	0.23	0.71	2.80	2.21	0.30	0.19	2.86	0.72	0.91	0.24	6.09	5.21	11.98
Agricultural	0.00	0.20	0.28	0.79	0.30	0.24	0.00	0.00	0.04	0.35	0.08	0.06	1.80	0.53	2.33
Logging	0.00	0.01	0.02	0.04	0.08	0.03	0.00	0.01	0.06	0.02	0.03	0.02	0.19	0.14	0.34
VOC - Totals	4.40	1.94	2.20	5.08	13.88	7.93	1.16	2.20	16.62	6.47	6.89	3.44	31.03	36.78	72.21

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederic	Montgor	PG	Alexandr	Arlington	Fairfax	Loudoun	Pr.Williar	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.06	0.01	0.01	0.05	0.30	0.13	0.01	0.05	0.28	0.07	0.06	0.02	0.51	0.48	1.05
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.44	0.51	0.51	0.00	0.00	0.17	1.46	1.63
Recreational-Land	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.04
Recreational-Marine	0.14	0.10	0.03	0.01	0.00	0.01	0.02	0.02	0.22	0.08	0.19	0.10	0.16	0.63	0.93
Light Commercial	0.08	0.00	0.01	0.03	0.16	0.14	0.03	0.03	0.18	0.03	0.03	0.01	0.35	0.32	0.74
Industrial	0.44	0.02	0.05	0.40	0.72	0.45	0.10	0.17	0.71	0.22	0.27	0.05	1.63	1.52	3.58
Construction	3.82	0.83	1.29	4.04	15.92	12.52	1.71	1.09	16.21	4.06	5.17	1.34	34.60	29.59	68.01
Agricultural	0.00	0.75	1.05	2.99	1.15	0.90	0.00	0.00	0.17	1.32	0.30	0.23	6.83	2.02	8.85
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	4.54	1.73	2.45	7.52	18.25	14.31	1.87	1.79	18.28	6.31	6.03	1.75	44.26	36.03	84.83

2005 Non-road Category Ozone Season Day Emissions - Metropolitan Washington Region

VOC Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederic	Montgor	PG	Alexandr	Arlington	Fairfax	Loudoun	Pr.Williar	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	1.51	0.43	0.65	2.15	9.16	3.92	0.27	1.39	8.68	2.41	1.95	1.01	16.30	15.71	33.52
Airport Service	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.18	0.24	0.24	0.00	0.00	0.37	0.66	1.03
Recreational-Land	0.00	0.36	0.68	1.04	0.00	0.00	0.00	0.00	0.00	1.42	0.57	0.51	2.08	2.49	4.57
Recreational-Marine	1.29	0.74	0.24	0.04	0.03	0.06	0.31	0.24	3.10	1.27	2.80	1.51	1.10	9.24	11.63
Light Commercial	0.37	0.02	0.06	0.17	0.80	0.65	0.17	0.13	0.87	0.19	0.18	0.05	1.69	1.59	3.66
Industrial	0.18	0.01	0.02	0.18	0.31	0.19	0.04	0.07	0.31	0.10	0.12	0.02	0.70	0.66	1.54
Construction	0.66	0.16	0.24	0.78	2.90	2.24	0.30	0.19	2.99	0.81	0.96	0.27	6.32	5.53	12.51
Agricultural	0.00	0.19	0.27	0.77	0.30	0.23	0.00	0.00	0.04	0.34	0.08	0.06	1.76	0.52	2.28
Logging	0.00	0.01	0.02	0.04	0.08	0.03	0.00	0.01	0.06	0.02	0.03	0.01	0.18	0.13	0.31
VOC - Totals	4.01	1.92	2.18	5.17	13.56	7.68	1.10	2.21	16.30	6.80	6.68	3.43	30.51	36.54	71.06

NOx Emissions (tpsd)

Equipment Category	DC	Calvert	Charles	Frederic	Montgor	PG	Alexandr	Arlington	Fairfax	Loudoun	Pr.Williar	Stafford	MD Total	VA Total	Region Total
Lawn and Garden	0.05	0.01	0.01	0.05	0.30	0.13	0.01	0.05	0.29	0.07	0.06	0.02	0.51	0.50	1.06
Airport Service	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.59	1.00	1.00	0.00	0.00	0.17	2.58	2.75
Recreational-Land	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.03
Recreational-Marine	0.14	0.11	0.04	0.01	0.00	0.01	0.02	0.02	0.23	0.10	0.21	0.11	0.17	0.69	1.00
Light Commercial	0.08	0.00	0.01	0.04	0.17	0.14	0.04	0.03	0.18	0.04	0.04	0.01	0.36	0.33	0.76
Industrial	0.37	0.02	0.04	0.38	0.64	0.39	0.09	0.15	0.65	0.21	0.25	0.05	1.47	1.39	3.23
Construction	3.51	0.83	1.27	4.15	15.38	11.88	1.61	1.03	15.89	4.31	5.11	1.42	33.51	29.37	66.39
Agricultural	0.00	0.68	0.95	2.70	1.04	0.81	0.00	0.00	0.15	1.19	0.27	0.21	6.18	1.82	8.00
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NOx - Total	4.15	1.66	2.33	7.33	17.53	13.53	1.77	1.86	18.39	6.93	5.93	1.82	42.38	36.70	83.23

Appendix E

Point Source Inventories and Projections

District of Columbia - Point Source Emission Projections with EGAS v3.0 (Base year 1990)
NO CONTROLS

SOURCE NAME	Base Year 1990		1996		1999		2002		2005	
	Pounds/Day		Pounds per Day		Pounds per Day		Pounds per Day		Pounds per Day	
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
PEPCO Benning	186.2	8819.0	186.2	8819.0	186.2	8819.0	186.2	8819.0	186.2	8819.0
Capitol Power Plant	7.2	1224.7	7.4	1267.3	7.6	1308.4	7.8	1338.7	8.0	1361.2
GSA West & Central Heating	11.6	1262.9	12.3	1359.9	12.4	1371.4	12.1	1337.8	11.7	1289.3
Georgetown Univ Power Plant	14.7	1203.1	15.4	1259.3	15.6	1271.7	15.3	1250.1	14.9	1216.1
PEPCO Buzzard	77.4	1455.2	77.4	1455.2	77.4	1455.2	77.4	1455.2	77.4	1455.2
St. Eli. Hospital	2.2	127.3	2.3	137.3	2.3	135.7	2.2	127.4	2.0	117.3
US Soldiers Home	1.9	93.1	2.1	100.3	2.0	99.2	1.9	93.1	1.8	85.7
Naval Research Lab	3.4	175.5	3.5	180.3	3.6	184.5	3.6	186.4	3.6	186.8
Howard University	4.2	284.2	4.2	284.2	4.2	284.2	4.2	284.2	4.2	284.2
Solid Waste Transfer Center*	203.8	597.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bureau of Engraving & Printing	951.6	0.0	951.6	0.0	951.6	0.0	951.6	0.0	951.6	0.0
Government Printing Office	466.2	0.0	466.2	0.0	466.2	0.0	466.2	0.0	466.2	0.0
Washington Hospital Center**	3.5	180.3	3.5	183.0	3.7	188.9	3.8	194.2	3.8	198.4
Walter Reed Army Med Ctr**	2.9	157.1	3.0	159.5	3.1	164.7	3.2	169.3	3.2	172.9
Totals (Pounds per Day)	1937	15600	1735	15205	1736	15283	1735	15255	1735	15186
Totals (Tons per Day)	0.97	7.80	0.87	7.60	0.87	7.64	0.87	7.63	0.87	7.59
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
	BaseYear 1990		Year 1996		Year 1999		Year 2002		Year 2005	

* Source closed during 1992-93
 ** New sources meeting the severe area 25tpy threshold

District of Columbia - Point Source Emissions EGASv3.0 Projections
WITH CONTROLS (Non-CTG VOC RACT, NOx RACT, NOx Budget Rule and NOx SIP Call)

SOURCE NAME	Base Year 1990		1996		1999		2002		2005	
	Pounds/Day		Pounds per Day		Pounds per Day		Pounds per Day		Pounds per Day	
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
PEPCO Benning ^{1,2,3}	186.2	8819.0	186.2	5825.4	186.2	5825.4	186.2	4579.1	186.2	2575.2
Capitol Power Plant ¹	7.2	1224.7	7.4	831.3	7.6	858.3	7.8	878.1	8.0	892.9
GSA West & Central Heating ^{1,2,3}	11.6	1282.9	12.3	1033.1	12.4	1044.6	12.1	652.3	11.7	326.8
Georgetown Univ Power Plant ¹	14.7	1203.1	15.4	1037.1	15.6	1049.4	15.3	1027.9	14.9	993.9
PEPCO Buzzard ²	77.4	1455.2	77.4	1455.2	77.4	1455.2	77.4	1034.0	77.4	1034.0
St. Eli. Hospital	2.2	127.3	2.3	137.3	2.3	135.7	2.2	127.4	2.0	117.3
US Soldiers Home ¹	1.9	93.1	2.1	80.5	2.0	79.5	1.9	74.7	1.8	68.7
Naval Research Lab	3.4	175.5	3.5	180.3	3.6	184.5	3.6	186.4	3.6	186.8
Howard University	4.2	284.2	4.2	284.2	4.2	284.2	4.2	284.2	4.2	284.2
Solid Waste Transfer Center*	203.8	597.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bureau of Engraving & Printing ⁴	951.6	0.0	951.6	0.0	545.2	0.0	522.7	0.0	496.7	0.0
Government Printing Office ⁴	466.2	0.0	466.2	0.0	267.1	0.0	256.1	0.0	248.4	0.0
Washington Hospital Center**	3.5	180.3	3.5	183.0	3.7	188.9	3.8	194.2	3.8	198.4
Walter Reed Army Med Ctr**	2.9	157.1	3.0	159.5	3.1	164.7	3.2	169.3	3.2	172.9
Totals (Pounds per Day)	1937	15600	1735	11207	1130	11270	1096	9208	1062	6851
Totals (Tons per Day)	0.97	7.80	0.87	5.60	0.57	5.64	0.55	4.60	0.53	3.43
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
	BaseYear 1990		Year 1996		Year 1999		Year 2002		Year 2005	

* Source closed during 1992-93
 ** New sources meeting the severe area 25tpy threshold

Regulatory Controls	Sources
¹ NOx RACT Post-1995 (50-100 MMBTU/hr facilities - 0.30lb/MMBTU; Over 100MMBTU/hr facilities - coal: 0.43lb; #2 oils: 0.25 lb; Natural Gas: 0.20lb/MMBTU) ² NOx Budget Rule, Post-2000 ³ NOx SIP Call, Post-2003 ⁴ Non-CTG VOC RACT	PEPCO-Benning, Capitol Power Plant, GSA, Georgetown Univ. power plant, and US Soldiers home PEPCO-Benning (350.3 tons/season), GSA (49.9 tons/season), and PEPCO-Buzzard (79.1 tons/season) PEPCO-Benning (197 tons/season), and GSA (25 tons/season) Bureau of Engraving & Printing, and Government Printing Office

POINT SOURCE INVENTORIES - PROJECTED EMISSIONS

District of Columbia

Tons per Day

Point Source Inventories	1996		1999		2002		2005	
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
EMISSIONS WITHOUT CONTROLS	0.87	7.60	0.87	7.64	0.87	7.63	0.87	7.59
EMISSIONS WITH CONTROLS (NOx RACT, NOx Budget Rule & NOx SIP Call, and VOC RACT)	0.87	5.60	0.57	5.64	0.55	4.60	0.53	3.43
Emission Reductions (tpd)	0.00	2.00	0.30	2.01	0.32	3.02	0.34	4.17

District of Columbia, Point Sources - NOx Reductions, tons per day

Control Regulation	1996		1999		2002		2005	
NOx RACT (Post-1995)		2.00		2.01		2.01		2.01
NOx Budget Rule (Post-1999)		-		-		1.01		1.01
NOx SIP Call (Post-2003)		-		-		-		1.14
Total NOx Reductions, tpd		2.00		2.01		3.02		4.17

District of Columbia, Point Sources - VOC Reductions, tons per day

Control Regulation	1996		1999		2002		2005	
Non-CTG VOC RACT	0.00		0.30		0.02		0.02	
Total VOC Reductions, tpd			0.30		0.32		0.34	

Maryland		VOC (tons per ozone day)						
County	Premise ID	Company Name	SIC	1990	1999	2002	2005	2008
Charles	0014	POTOMAC ELECTRIC MORGANTOWN	4911	0.3626	0.3626	0.3626	0.3626	0.3626
Charles	0040	NAVAL SURFACE WARFARE CNTR-INDIAN HD	9711	1.0617	1.1823	1.2222	1.2491	1.2801
Charles	0072	AUTOMATED GRAPHIC SYSTEMS	2731	0.0465	0.0574	0.0634	0.0691	0.0711
Frederick	0003	LEHIGH PORTLAND CEMENT	3295	0.0020	0.0022	0.0023	0.0024	0.0026
Frederick	0005	EASTALCO ALUMINUM	3334	0.0025	0.0030	0.0032	0.0034	0.0037
Frederick	0010	MOORE COMMUNICATIONS SERVICES	2761	0.0870	0.1074	0.1186	0.1293	0.1348
Frederick	0013	ESSROC MATERIALS	3241	0.0035	0.0039	0.0041	0.0042	0.0045
Frederick	0029	GENSTAR STONE PRODUCTS - FRED. PLT 1	3295	0.0528	0.0597	0.0613	0.0614	0.0534
Frederick	0037	KLINE, RICHARD F., INC.	2951	0.1188	0.1344	0.1380	0.1382	0.0600
Frederick	0131	FORT DETRICK	9711	0.0365	0.0366	0.0365	0.0363	0.0294
Frederick	0254	CANAM STEEL	3441	0.7640	1.0131	1.1566	1.2925	1.3874
Frederick	0317	METALFAB - GROVE ROAD	3479	0.0405	0.0462	0.0481	0.0493	0.0515
Frederick	0320	FREDERICK MOTOR COMPANY	5511	0.0380	0.0433	0.0451	0.0463	0.0483
Montgomery	0019	POTOMAC ELECTRIC DICKERSON	4911	0.1379	0.1515	0.1564	0.1600	0.1611
Montgomery	0224	GIANT FOOD - SILVER SPRING	2051	0.2040	0.2125	0.2197	0.2251	0.2346
Montgomery	0324	NATIONAL INSTITUTE OF HEALTH	9431	0.0175	0.0178	0.0175	0.0172	0.0168
Montgomery	1078	GORDON'S, HERB AUTO WORLD	5511	0.0370	0.0422	0.0439	0.0451	0.0470
Montgomery	1124	NATIONAL NAVAL MEDICAL CENTER	9711	0.0164	0.0167	0.0165	0.0162	0.0158
Montgomery	1396	EU SERVICES	2752	0.1305	0.1612	0.1779	0.1939	0.2022
Montgomery	1565	GUDE/SOUTHLAWN LANDFILL	4953	0.0795	0.0795	0.0795	0.0795	0.0795
Montgomery	1673	PRESSTAR PRINTING CORPORATION	2752	0.0545	0.0673	0.0743	0.0810	0.0844
Montgomery	1680	SMITH LITHO	2752	0.0750	0.0926	0.1022	0.1115	0.1162
Montgomery	1761	REPRODUCTIONS - RICKENBACKER DRIVE	2752	0.0495	0.0611	0.0675	0.0736	0.0767
Prince George's	0010	UNIVERSITY OF MARYLAND	8221	0.0127	0.0134	0.0133	0.0132	0.0126
Prince George's	0014	POTOMAC ELECTRIC - CHALK POINT	4911	0.4511	0.4698	0.4765	0.4816	0.4829
Prince George's	0069	SMITH, A.H. - BRANDYWINE #2	2951	0.1188	0.1344	0.1380	0.1382	0.1441
Prince George's	0096	DURON, INCORPORATED	2911	0.2220	0.2490	0.2580	0.2641	0.2741
Prince George's	0429	STONE INDUSTRIAL	2655	0.1160	0.1323	0.1377	0.1413	0.1473
Prince George's	0476	EDITORS PRESS	2752	0.1188	0.1467	0.1620	0.1766	0.1841
Prince George's	0543	SAFEBAY BREAD PLANT	2051	0.2640	0.2750	0.2844	0.2913	0.3037
Prince George's	0578	CRAFTSMAN PRESS	2751	0.0585	0.0722	0.0797	0.0869	0.0906
Prince George's	0655	ANDREWS AIR FORCE BASE	9711	0.2459	0.2790	0.2958	0.3105	0.3294
Prince George's	0667	AGRICULTURAL RESEARCH CENTER	8733	0.0015	0.0015	0.0015	0.0015	0.0015
Prince George's	0951	HOLLADAY TYLER PRINTING	2752	0.2445	0.3019	0.3333	0.3633	0.3789
Prince George's	1091	CAIRNS, BILL PONTIAC	5511	0.0535	0.0610	0.0635	0.0652	0.0680
Prince George's	1133	PRINTERS II	2759	0.1115	0.1377	0.1520	0.1657	0.1728
Prince George's	1322	KELLY PRESS	2752	0.0805	0.0994	0.1097	0.1195	0.1246
Prince George's	1511	PEAKE PRINTERS	2752	0.1770	0.2186	0.2413	0.2630	0.2743
Prince George's	1666	CORPORATE PRESS	2752	0.0420	0.0519	0.0573	0.0624	0.0651
TOTAL				5.7365	6.5984	7.0211	7.3914	7.5777

Maryland			NOx (tons per ozone day)				
County	Premise ID	Company Name	1990	1999	2002	2005	2008
Charles	0014	POTOMAC ELECTRIC MORGANTOWN	131.5024	131.5024	131.5024	131.5024	131.5024
Charles	0040	NAVAL SURFACE WARFARE CNTR-INDIAN HD	1.3560	1.1838	1.1314	1.0814	1.0492
Charles	0072	AUTOMATED GRAPHIC SYSTEMS	0.0000	0.0000	0.0000	0.0000	0.0000
Frederick	0003	LEHIGH PORTLAND CEMENT	0.9600	1.0662	1.1166	1.1531	1.2376
Frederick	0005	EASTALCO ALUMINUM	0.1510	0.1781	0.1930	0.2049	0.2197
Frederick	0010	MOORE COMMUNICATIONS SERVICES	0.0000	0.0000	0.0000	0.0000	0.0000
Frederick	0013	ESSROC MATERIALS	11.7313	13.0283	13.6441	14.0899	15.1233
Frederick	0029	GENSTAR STONE PRODUCTS - FRED. PLT 1	0.0011	0.0006	0.0006	0.0006	0.0006
Frederick	0037	KLING, RICHARD F., INC.	0.2170	0.2455	0.2520	0.2524	0.2632
Frederick	0131	FORT DETRICK	0.8966	0.9107	0.9086	0.9052	0.8925
Frederick	0254	CANAM STEEL	0.0000	0.0000	0.0000	0.0000	0.0000
Frederick	0317	METALFAB - GROVE ROAD	0.0025	0.0023	0.0024	0.0024	0.0025
Frederick	0320	FREDERICK MOTOR COMPANY	0.0010	0.0000	0.0000	0.0000	0.0000
Montgomery	0019	POTOMAC ELECTRIC DICKERSON	33.9882	37.2959	38.4922	39.3837	39.6283
Montgomery	0224	GIANT FOOD - SILVER SPRING	0.0180	0.0189	0.0194	0.0198	0.0197
Montgomery	0324	NATIONAL INSTITUTE OF HEALTH	0.7515	0.8003	0.7521	0.6933	0.6159
Montgomery	1078	GORDON'S, HERB AUTO WORLD	0.0000	0.0000	0.0000	0.0000	0.0000
Montgomery	1124	NATIONAL NAVAL MEDICAL CENTER	0.1707	0.1797	0.1802	0.1792	0.1731
Montgomery	1396	EU SERVICES	0.0000	0.0000	0.0000	0.0000	0.0000
Montgomery	1565	GUDE/SOUTHLAWN LANDFILL	0.1855	0.1855	0.1855	0.1855	0.1855
Montgomery	1673	PRESSTAR PRINTING CORPORATION	0.0015	0.0019	0.0020	0.0022	0.0023
Montgomery	1680	SMITH LITHO	0.0015	0.0019	0.0020	0.0022	0.0023
Montgomery	1761	REPRODUCTIONS - RICKENBACKER DRIVE	0.0000	0.0000	0.0000	0.0000	0.0000
Prince George's	0010	UNIVERSITY OF MARYLAND	0.6554	0.6911	0.6878	0.6783	0.6496
Prince George's	0014	POTOMAC ELECTRIC - CHALK POINT	109.3354	117.7000	120.7255	122.9798	123.5984
Prince George's	0069	SMITH, A.H. - BRANDYWINE #2	0.1236	0.1390	0.1424	0.1425	0.1483
Prince George's	0096	DURON, INCORPORATED	0.0000	0.0000	0.0000	0.0000	0.0000
Prince George's	0429	STONE INDUSTRIAL	0.0015	0.0017	0.0018	0.0018	0.0019
Prince George's	0476	EDITORS PRESS	0.0092	0.0114	0.0126	0.0137	0.0143
Prince George's	0543	SAFEWAY BREAD PLANT	0.0100	0.0104	0.0108	0.0110	0.0114
Prince George's	0578	CRAFTSMAN PRESS	0.0050	0.0062	0.0068	0.0074	0.0077
Prince George's	0655	ANDREWS AIR FORCE BASE	0.2756	0.2936	0.2760	0.2545	0.2262
Prince George's	0667	AGRICULTURAL RESEARCH CENTER	0.0539	0.0573	0.0539	0.0498	0.0444
Prince George's	0951	HOLLADAY TYLER PRINTING	0.0120	0.0148	0.0164	0.0178	0.0186
Prince George's	1091	CAIRNS, BILL PONTIAC	0.0000	0.0000	0.0000	0.0000	0.0000
Prince George's	1133	PRINTERS II	0.0045	0.0056	0.0061	0.0067	0.0070
Prince George's	1322	KELLY PRESS	0.0000	0.0000	0.0000	0.0000	0.0000
Prince George's	1511	PEAKE PRINTERS	0.0000	0.0000	0.0000	0.0000	0.0000
Prince George's	1666	CORPORATE PRESS	0.0000	0.0000	0.0000	0.0000	0.0000
TOTAL			292.4220	305.5330	310.3247	313.8217	315.6460

POINT SOURCE VOC EMISSION REDUCTION ESTIMATES FOR 2005

Facility	Uncontrolled Emissions	Control Year	RACT/ Shutdown	Total Reduction	Controlled Emissions
DC Corrections - Lorton	0.236	2002	-0.236	-0.236	0.000
Stephenson Inc.	0.180	1999	-0.130		0.050
Tuscarora Plastics	0.373	1996	-0.145		0.228
Insulated Building	0.247	1996	-0.247	-0.247	0.000
Treasure Chest	0.333	1996	-0.200		0.133
Cellofoam	0.286	1996	-0.066		0.220
Brake Parts Inc.	0.226	1999	-0.223		0.003
TOTALS	1.881		-1.247	-0.483	0.634

Reduction Estimation Methodologies:

DC Correction/Lorton - Facility permanently closed.

Stephenson Inc. - Application of RACT (72% reduction).

Tuscarora Plastics - Application of RACT (39% reduction).

Insulated Building - Facility permanently closed.

Treasure Chest - Application of RACT (60% reduction).

Cellofoam - Application of RACT (23% reduction).

Brake Parts Inc. - Application of RACT (99% reduction).

POINT SOURCE NO_x EMISSION REDUCTION ESTIMATES FOR 2005

Facility	Uncontrolled Emissions	Control Year	RACT/ Shutdown	MWC Rule	NO _x Transport	Total Reduction	Controlled Emissions
Dominion Virginia Power - Possum Point	24.15	2002/2003	-8.98		-8.06	-17.04	7.11
Mirant - Potomac River	27.01	2002/2003	-9.11		-11.24	-20.35	6.66
Covanta - Fairfax	4.99	2002		-1.69		-1.69	3.30
Covanta - Alexandria/Arlington	1.87	2002		-0.55		-0.55	1.32
Transcontinental Gas Pipeline	5.67	1996	-4.88			-4.88	0.79
Washington Gas Light	1.44	1996	-1.24			-1.24	0.20
DC Corrections - Lorton	0.17	2002	-0.17			-0.17	0.00
TOTALS	65.29		-24.38	-2.24	-19.3	-45.92	19.38

Reduction Estimation Methodologies:

Dominion Virginia Power & Mirant - Emission reductions determined by applying an emission rate limit of 0.38 lbs/mmBtu for RACT and ozone season emissions caps of about 1,000 tons/season for final plan compliance.

Covanta - Fairfax & Alexandria/Arlington - Emission reductions estimated by determining reduction percentages from uncontrolled emission rate for these facilities to the MWC rule emission rate of 205 parts per million.

Transcontinental Gas Pipeline - Emission reduction from the application of SCR control technology as a result of a RACT determination for the facility.

DC Corrections (Lorton) - Facility has permanently closed.

NOVA POINT SOURCE VOC PROJECTIONS

COUNTY	PLANT ID	PLANT NAME	NO-CONTROL 1990	CONTROLLED 1990
013	0010	PENTAGON RESERVATION	0.000	0.000
013	0018	ALRINGTON POLLUTION CONTROL	0.033	0.033
013	0196	OGDEN AVIATION SERVICES	0.011	0.011
059	0018	US ARMY FT BELVIER	0.085	0.085
059	0024	DC CORRECTIONS - LORTON	0.193	0.193
059	0034	EXXON MOBIL COMPANY	1.120	1.120
059	0061	AMOCO OIL	0.852	0.852
059	0063	CITGO PETROLEUM	0.676	0.676
059	0064	MOTIVA SPRINGFIELD	0.839	0.839
059	0069	MOTIVA ENTERPRISES	0.695	0.695
059	0074	CROWN CENTRAL	0.375	0.375
059	0082	OLD DOMINION TERMINAL	0.573	0.573
059	0281	NORMAN COLE POLLUTION CONTROL	0.027	0.027
059	0421	GEORGE BUSH CENTER	0.062	0.062
059	0430	UNITED LITHO SERVICES	0.031	0.031
059	0439	GANNETT OFFSET SPRINGFIELD	0.080	0.080
059	0551	STEPHENSON INC	0.127	0.127
059	0560	COVANTA - FAIRFAX	0.044	0.044
059	0575	MICHIGAN COGENERATION	0.033	0.033
059	0733	AMERICA ONLINE	0.000	0.000
107	0064	OGDEN AVIATION SERVICES	0.013	0.013
107	0073	TUSCARORA PLASTICS	0.305	0.305
107	0125	COLUMBIA GAS TRANSMISSION	0.033	0.033
107	0134	AMERICA ONLINE	0.000	0.000
107	0092	INSULATED BUILDING	0.202	0.202
153	0002	DOMINION - POSSUM POINT	0.189	0.189
153	0010	MCB - QUANTICO	0.012	0.012
153	0021	LOCKHEED MARTIN	0.120	0.120
153	0059	MANASSAS ICE & FUEL	0.030	0.030
153	0060	TOSCO - MANASSAS TERMINAL	0.552	0.552
153	0072	TREASURE CHEST	0.239	0.239
153	0086	TRANSCO GPL-185	0.134	0.134
153	0090	CITY OF MANASSAS/VMEA	0.008	0.008
179	0029	CELLOFOAM	0.235	0.235
179	0039	BRAKE PARTS INC	0.189	0.189
510	0001	VIRGINIA PAVING COMPANY	0.044	0.044
510	0003	MIRANT - POTOMAC RIVER	0.109	0.109
510	0139	COVANTA - ALEX/ARLINGTON	0.026	0.026
TOTALS			8.296	8.296

NOVA POINT SOURCE NOX PROJECTIONS

COUNTY	PLANT		NO-CONTROL	CONTROLLED	
	ID	PLANT NAME	1990	1990	
013	0010	PETAGON RESERVATION	0.160	0.160	70030
013	0018	ARLINGTON POLLUTION CONTR	0.030	0.030	70026
059	0018	US ARMY FT BELVIOR	0.391	0.391	70550
059	0024	DC CORRECTIONS - LORTON	0.200	0.200	70028
059	0056	WASHINGTON GAS LIGHT	1.394	1.394	70151
059	0281	NORMAN COLE POLLUTION COI	0.325	0.325	70714
059	0421	GEORGE BUSH CENTER	0.009	0.009	71757
059	0430	UNITED LITHO SERVICES	0.000	0.000	71865
059	0439	GANNETT OFFSET SPRINGFIELD	0.000	0.000	71883
059	0551	STEPHENSON PRINTING	0.000	0.000	71908
059	0560	COVANTA -FAIRFAX	4.990	4.990	71920
059	0575	MICHIGAN COGENERATION	0.300	0.300	71961
059	0733	AMERICA ONLINE	0.000	0.000	72296
107	0073	TUSCARORA INC	0.013	0.013	71814
107	0125	COLUMBIA GAS TRANSMISSION	0.134	0.134	72265
107	0134	AMERICA ONLINE	0.000	0.000	72346
153	0002	DOMINION - POSSUM PT	21.616	21.616	70225
153	0010	MCB - QUANTICO	0.493	0.493	70267
153	0021	LOCKHEED MARTIN	0.075	0.075	70261
153	0059	MANASAS FUEL & ICE	0.000	0.000	71196
153	0072	TREASURE CHEST ADVERT	0.000	0.000	71871
153	0086	TRANSCO GPL-185	5.508	5.508	71958
153	0090	CITY OF MANASAS/VMEA	0.226	0.226	71977
179	0029	CELEFOAM	0.000	0.000	40696
510	0001	VIRGINIA PAVING COMPANY	0.150	0.150	70579
510	0003	MIRANT - POTOMAC RIVER	23.268	23.268	70228
510	0139	COVANTA - ALEX/ARLINGTON	1.868	1.868	71895
			61.150	61.150	

NOVA POINT SOURCE VOC PROJECTIONS

COUNTY	PLANT ID	PLANT NAME	NO-CONTROL 1999	CONTROLLED 1999
013	0010	PENTAGON RESERVATION	0.000	0.000
013	0018	ALRINGTON POLLUTION CONTROL	0.033	0.033
013	0196	OGDEN AVIATION SERVICES	0.014	0.014
059	0018	US ARMY FT BELVIER	0.095	0.095
059	0024	DC CORRECTIONS - LORTON	0.217	0.217
059	0034	EXXON MOBIL COMPANY	1.400	1.400
059	0061	AMOCO OIL	1.071	1.071
059	0063	CITGO PETROLEUM	0.847	0.847
059	0064	MOTIVA SPRINGFIELD	1.053	1.053
059	0069	MOTIVA ENTERPRISES	0.869	0.869
059	0074	CROWN CENTRAL	0.466	0.466
059	0082	OLD DOMINION TERMINAL	0.717	0.717
059	0281	NORMAN COLE POLLUTION CONTROL	0.027	0.027
059	0421	GEORGE BUSH CENTER	0.076	0.076
059	0430	UNITED LITHO SERVICES	0.031	0.031
059	0439	GANNETT OFFSET SPRINGFIELD	0.080	0.080
059	0551	STEPHENSON INC	0.153	0.093
059	0560	COVANTA - FAIRFAX	0.044	0.044
059	0575	MICHIGAN COGENERATION	0.033	0.033
059	0733	AMERICA ONLINE	0.000	0.000
107	0064	OGDEN AVIATION SERVICES	0.016	0.016
107	0073	TUSCARORA PLASTICS	0.334	0.204
107	0125	COLUMBIA GAS TRANSMISSION	0.033	0.033
107	0134	AMERICA ONLINE	0.000	0.000
107	0092	INSULATED BUILDING	0.221	0.000
153	0002	DOMINION - POSSUM POINT	0.197	0.197
153	0010	MCB - QUANTICO	0.013	0.013
153	0021	LOCKHEED MARTIN	0.121	0.121
153	0059	MANASSAS ICE & FUEL	0.037	0.037
153	0060	TOSCO - MANASSAS TERMINAL	0.694	0.694
153	0072	TREASURE CHEST	0.285	0.114
153	0086	TRANSCO GPL-185	0.137	0.137
153	0090	CITY OF MANASSAS/VMEA	0.008	0.008
179	0029	CELLOFOAM	0.257	0.198
179	0039	BRAKE PARTS INC	0.211	0.003
510	0001	VIRGINIA PAVING COMPANY	0.044	0.044
510	0003	MIRANT - POTOMAC RIVER	0.119	0.119
510	0139	COVANTA - ALEX/ARLINGTON	0.026	0.026
TOTALS			9.979	9.130

NOVA POINT SOURCE NOX PROJECTIONS

COUNTY	PLANT		NO-CONTROL	CONTROLLED	
	ID	PLANT NAME	1999	1999	
013	0010	PETAGON RESERVATION	0.160	0.160	70030
013	0018	ARLINGTON POLLUTION CONTR	0.030	0.030	70026
059	0018	US ARMY FT BELVIOR	0.416	0.416	70550
059	0024	DC CORRECTIONS - LORTON	0.196	0.196	70028
059	0056	WASHINGTON GAS LIGHT	1.419	0.790	70151
059	0281	NORMAN COLE POLLUTION COI	0.325	0.325	70714
059	0421	GEORGE BUSH CENTER	0.009	0.009	71757
059	0430	UNITED LITHO SERVICES	0.000	0.000	71865
059	0439	GANNETT OFFSET SPRINGFIELD	0.000	0.000	71883
059	0551	STEPHENSON PRINTING	0.000	0.000	71908
059	0560	COVANTA -FAIRFAX	4.991	4.991	71920
059	0575	MICHIGAN COGENERATION	0.300	0.300	71961
059	0733	AMERICA ONLINE	0.100	0.100	72296
107	0073	TUSCARORA INC	0.013	0.013	71814
107	0125	COLUMBIA GAS TRANSMISSION	0.134	0.134	72265
107	0134	AMERICA ONLINE	0.240	0.240	72346
153	0002	DOMINION - POSSUM PT	23.168	23.168	70225
153	0010	MCB - QUANTICO	0.438	0.438	70267
153	0021	LOCKHEED MARTIN	0.076	0.076	70261
153	0059	MANASAS FUEL & ICE	0.000	0.000	71196
153	0072	TREASURE CHEST ADVERT	0.000	0.000	71871
153	0086	TRANSCO GPL-185	5.599	0.790	71958
153	0090	CITY OF MANASAS/VMEA	0.226	0.226	71977
179	0029	CELEFOAM	0.000	0.000	40696
510	0001	VIRGINIA PAVING COMPANY	0.150	0.150	70579
510	0003	MIRANT - POTOMAC RIVER	25.559	25.559	70228
510	0139	COVANTA - ALEX/ARLINGTON	1.868	1.868	71895
			65.417	59.979	

NOVA POINT SOURCE VOC PROJECTIONS

COUNTY	PLANT ID	PLANT NAME	NO-CONTROL 2002	CONTROLLED 2002
013	0010	PENTAGON RESERVATION	0.000	0.000
013	0018	ALRINGTON POLLUTION CONTROL	0.033	0.033
013	0196	OGDEN AVIATION SERVICES	0.015	0.015
059	0018	US ARMY FT BELVIER	0.100	0.100
059	0024	DC CORRECTIONS - LORTON	0.228	0.000
059	0034	EXXON MOBIL COMPANY	1.539	1.539
059	0061	AMOCO OIL	1.180	1.180
059	0063	CITGO PETROLEUM	0.933	0.933
059	0064	MOTIVA SPRINGFIELD	1.159	1.159
059	0069	MOTIVA ENTERPRISES	0.956	0.956
059	0074	CROWN CENTRAL	0.511	0.511
059	0082	OLD DOMINION TERMINAL	0.790	0.790
059	0281	NORMAN COLE POLLUTION CONTROL	0.027	0.027
059	0421	GEORGE BUSH CENTER	0.084	0.084
059	0430	UNITED LITHO SERVICES	0.031	0.031
059	0439	GANNETT OFFSET SPRINGFIELD	0.080	0.080
059	0551	STEPHENSON INC	0.167	0.047
059	0560	COVANTA - FAIRFAX	0.044	0.044
059	0575	MICHIGAN COGENERATION	0.033	0.033
059	0733	AMERICA ONLINE	0.000	0.000
107	0064	OGDEN AVIATION SERVICES	0.018	0.018
107	0073	TUSCARORA PLASTICS	0.355	0.217
107	0125	COLUMBIA GAS TRANSMISSION	0.033	0.033
107	0134	AMERICA ONLINE	0.000	0.000
107	0092	INSULATED BUILDING	0.235	0.000
153	0002	DOMINION - POSSUM POINT	0.199	0.199
153	0010	MCB - QUANTICO	0.014	0.014
153	0021	LOCKHEED MARTIN	0.121	0.121
153	0059	MANASSAS ICE & FUEL	0.041	0.041
153	0060	TOSCO - MANASSAS TERMINAL	0.765	0.765
153	0072	TREASURE CHEST	0.309	0.124
153	0086	TRANSCO GPL-185	0.137	0.137
153	0090	CITY OF MANASSAS/VMEA	0.008	0.008
179	0029	CELLOFOAM	0.273	0.210
179	0039	BRAKE PARTS INC	0.220	0.003
510	0001	VIRGINIA PAVING COMPANY	0.044	0.044
510	0003	MIRANT - POTOMAC RIVER	0.123	0.123
510	0139	COVANTA - ALEX/ARLINGTON	0.026	0.026
TOTALS			10.831	9.645

NOVA POINT SOURCE NOX PROJECTIONS

COUNTY	PLANT		NO-CONTROL	CONTROLLED	
	ID	PLANT NAME	2002	2002	
013	0010	PETAGON RESERVATION	0.160	0.160	70030
013	0018	ARLINGTON POLLUTION CONTR	0.030	0.030	70026
059	0018	US ARMY FT BELVIOR	0.391	0.390	70550
059	0024	DC CORRECTIONS - LORTON	0.186	0.000	70028
059	0056	WASHINGTON GAS LIGHT	1.429	0.790	70151
059	0281	NORMAN COLE POLLUTION COI	0.325	0.325	70714
059	0421	GEORGE BUSH CENTER	0.009	0.009	71757
059	0430	UNITED LITHO SERVICES	0.000	0.000	71865
059	0439	GANNETT OFFSET SPRINGFIELD	0.000	0.000	71883
059	0551	STEPHENSON PRINTING	0.000	0.000	71908
059	0560	COVANTA -FAIRFAX	4.992	3.300	71920
059	0575	MICHIGAN COGENERATION	0.300	0.300	71961
059	0733	AMERICA ONLINE	0.100	0.100	72296
107	0073	TUSCARORA INC	0.013	0.013	71814
107	0125	COLUMBIA GAS TRANSMISSION	0.134	0.134	72265
107	0134	AMERICA ONLINE	0.240	0.240	72346
153	0002	DOMINION - POSSUM PT	23.729	14.749	70225
153	0010	MCB - QUANTICO	0.418	0.398	70267
153	0021	LOCKHEED MARTIN	0.077	0.077	70261
153	0059	MANASAS FUEL & ICE	0.000	0.000	71196
153	0072	TREASURE CHEST ADVERT	0.000	0.000	71871
153	0086	TRANSCO GPL-185	5.636	0.790	71958
153	0090	CITY OF MANASAS/VMEA	0.226	0.226	71977
179	0029	CELEFOAM	0.000	0.000	40696
510	0001	VIRGINIA PAVING COMPANY	0.150	0.150	70579
510	0003	MIRANT - POTOMAC RIVER	26.388	17.278	70228
510	0139	COVANTA - ALEX/ARLINGTON	1.868	1.320	71895
			66.801	40.779	

NOVA POINT SOURCE VOC PROJECTIONS

COUNTY	PLANT ID	PLANT NAME	NO-CONTROL 2005	CONTROLLED 2005
013	0010	PENTAGON RESERVATION	0.000	0.000
013	0018	ALRINGTON POLLUTION CONTROL	0.033	0.033
013	0196	OGDEN AVIATION SERVICES	0.016	0.016
059	0018	US ARMY FT BELVIER	0.103	0.103
059	0024	DC CORRECTIONS - LORTON	0.236	0.000
059	0034	EXXON MOBIL COMPANY	1.675	1.675
059	0061	AMOCO OIL	1.287	1.287
059	0063	CITGO PETROLEUM	1.016	1.016
059	0064	MOTIVA SPRINGFIELD	1.263	1.263
059	0069	MOTIVA ENTERPRISES	1.041	1.041
059	0074	CROWN CENTRAL	0.556	0.556
059	0082	OLD DOMINION TERMINAL	0.860	0.860
059	0281	NORMAN COLE POLLUTION CONTROL	0.027	0.027
059	0421	GEORGE BUSH CENTER	0.092	0.092
059	0430	UNITED LITHO SERVICES	0.031	0.031
059	0439	GANNETT OFFSET SPRINGFIELD	0.080	0.080
059	0551	STEPHENSON INC	0.180	0.050
059	0560	COVANTA - FAIRFAX	0.044	0.044
059	0575	MICHIGAN COGENERATION	0.033	0.033
059	0733	AMERICA ONLINE	0.000	0.000
107	0064	OGDEN AVIATION SERVICES	0.019	0.019
107	0073	TUSCARORA PLASTICS	0.373	0.228
107	0125	COLUMBIA GAS TRANSMISSION	0.033	0.033
107	0134	AMERICA ONLINE	0.000	0.000
107	0092	INSULATED BUILDING	0.247	0.000
153	0002	DOMINION - POSSUM POINT	0.201	0.201
153	0010	MCB - QUANTICO	0.014	0.014
153	0021	LOCKHEED MARTIN	0.121	0.121
153	0059	MANASSAS ICE & FUEL	0.045	0.045
153	0060	TOSCO - MANASSAS TERMINAL	0.835	0.835
153	0072	TREASURE CHEST	0.333	0.133
153	0086	TRANSCO GPL-185	0.138	0.138
153	0090	CITY OF MANASSAS/VMEA	0.008	0.008
179	0029	CELLOFOAM	0.286	0.220
179	0039	BRAKE PARTS INC	0.226	0.003
510	0001	VIRGINIA PAVING COMPANY	0.044	0.044
510	0003	MIRANT - POTOMAC RIVER	0.126	0.126
510	0139	COVANTA - ALEX/ARLINGTON	0.026	0.026
TOTALS			11.648	10.401

NOVA POINT SOURCE NOX PROJECTIONS

COUNTY	PLANT		NO-CONTROL	CONTROLLED	
	ID	PLANT NAME	2005	2005	
013	0010	PETAGON RESERVATION	0.160	0.160	70030
013	0018	ARLINGTON POLLUTION CONTR	0.030	0.030	70026
059	0018	US ARMY FT BELVIOR	0.360	0.360	70550
059	0024	DC CORRECTIONS - LORTON	0.174	0.000	70028
059	0056	WASHINGTON GAS LIGHT	1.440	0.790	70151
059	0281	NORMAN COLE POLLUTION COI	0.325	0.325	70714
059	0421	GEORGE BUSH CENTER	0.008	0.008	71757
059	0430	UNITED LITHO SERVICES	0.000	0.000	71865
059	0439	GANNETT OFFSET SPRINGFIELD	0.000	0.000	71883
059	0551	STEPHENSON PRINTING	0.000	0.000	71908
059	0560	COVANTA -FAIRFAX	4.993	3.300	71920
059	0575	MICHIGAN COGENERATION	0.300	0.300	71961
059	0733	AMERICA ONLINE	0.100	0.100	72296
107	0073	TUSCARORA INC	0.013	0.013	71814
107	0125	COLUMBIA GAS TRANSMISSION	0.134	0.134	72265
107	0134	AMERICA ONLINE	0.240	0.240	72346
153	0002	DOMINION - POSSUM PT	24.148	7.110	70225
153	0010	MCB - QUANTICO	0.398	0.398	70267
153	0021	LOCKHEED MARTIN	0.077	0.077	70261
153	0059	MANASAS FUEL & ICE	0.000	0.000	71196
153	0072	TREASURE CHEST ADVERT	0.000	0.000	71871
153	0086	TRANSCO GPL-185	5.673	0.790	71958
153	0090	CITY OF MANASAS/VMEA	0.226	0.226	71977
179	0029	CELEFOAM	0.000	0.000	40696
510	0001	VIRGINIA PAVING COMPANY	0.150	0.150	70579
510	0003	MIRANT - POTOMAC RIVER	27.005	6.660	70228
510	0139	COVANTA - ALEX/ARLINGTON	1.868	1.320	71895
			67.820	22.491	

Appendix F

Use of NO_x Substitution in Rate of Progress RACT Fix-Up Documentation

MEMORANDUM

February 26, 2003

To: Severe SIP File

From: Beth Lowe, MWCOG/DEP

Subject: VOC-NOx Substitution for Demonstration of Rate of Progress

The following memo summarizes EPA guidance for determining what percentage of NOx can be substituted for the VOC reductions required to meet the 9% Rate of Progress requirement.

In its December 1993 "NOx Substitution Guidance", EPA says that states can justify substituting NOx for VOC in a rate of progress demonstration if they can demonstrate "consistency" between the modeled attainment inventory and the proposed rate of progress reductions.

In order to demonstrate consistency, states must demonstrate that the percentage reduction of NOx used in demonstrating all rates of progress does not exceed the percentage reduction of NOx assumed in the region's attainment modeling. The following paragraphs demonstrate that use of 9% NOx reductions for the 2002 and 2005 ROP demonstrations is consistent with the Washington region's attainment modeling:

To determine the percentage NOx reduction shown in the region's attainment modeling, we calculate the percentage change between the 1990 modeled baseline and the modeled attainment inventory:

1990 Modeled Base Year Inventory (tpd NOx):	728.8
Modeled Attainment Inventory (tpd NOx):	515.3
Percentage NOx Reduction Needed:	29.3%

[Reference: State Implementation Plan (SIP) Revision to the Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area, Table 3-1.]

We then calculate the total percentage NOx reduction we expect to use in demonstrating reasonable further progress during the period 1990-2005:

NOx Reductions Used in 15% Plan:	0%
NOx Reductions Used in 1999 ROP:	8%
Maximum NOx Reductions for 2002 ROP:	9%
Maximum NOx Reductions for 2005 ROP:	9%
Total Possible NOx Reductions 1999-2005:	26%

As the total 26% NOx reduction the Washington region could use to meet rate of progress from 1990-2005 does not exceed the 29.3% NOx reduction shown in the modeling demonstration, we conclude that the Washington region can demonstrate rate of progress using 9% NOx, 0% VOC in both the 1999-2002 and 2002-2005 rate of progress demonstrations.

Calculation of RACT Fix-Up Loudoun County Stage I Refueling

1 April 2003

Methodology as described in Appendix B of *"Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate-of-Progress Plans"*

Approved by Chris Cripps, EPA Region III on 1 April 2003

Baseline Emissions		
1990 Loudoun Tank Truck Emissions (uncontrolled)	0.315	tpd VOC

Calculate 1996 Controlled Emissions		
1996 Loudoun Tank Truck Emissions (uncontrolled)	0.355	tpd VOC
Control Efficiency	90%	
Rule Effectiveness	80%	
1996 Loudoun Tank Truck Emissions (controlled)	0.2556	tpd VOC

Size of Ract Fix-Up		
1990 Uncontrolled - 1996 Controlled	0.059	tpd VOC

Therefore 0.059 tpd VOC is subtracted from the 1996 VOC Target Level.