**PRELIMINARY DRAFT OF PM REDESIGNATION REQUEST AND MAINTENANCE PLAN (DRAFT 9/7/11)**

## PART 2. MAINTENANCE PLAN

This part of the document is the Maintenance Plan adopted by the Washington, DC/MD/VA area for ensuring continued compliance with the 1997 PM2.5 annual NAAQS of 15 ug/m3.

### 2.1 Overview of Maintenance Plan Approach

[need text]

Provisions for Future Updates
As required by Section 175A(b) of the CAA, _____ commits to submit to the Administrator, eight years after redesignation, an additional revision of this SIP. The revision will contain _____'s plan for maintaining the national primary fine particles air quality standard for ten years beyond the first ten-year period after redesignation.

### 2.2 Control Measures for Maintenance Plan

[need to estimate the emission reductions once we have the inventories completed]

**Controls to Remain in Effect**
Maryland, Virginia, and the District of Columbia commit to maintain the control measures listed above after redesignation, or submit to U.S. EPA, as a SIP revision, any changes to its rules or emission limits applicable to NOx, SO2, or direct PM2.5 sources as required for maintenance of the annual standard for fine particles in the metropolitan Washington, DC/MD/VA region.

[States], through [Agencies], have the legal authority and necessary resources to actively enforce any violations of its rules or permit provisions. After redesignation, it intends to continue enforcing all rules that relate to the emission of fine particles and fine particle precursors in the area.

**POINT SOURCE MEASURES**

**RACT and Regional Transport Requirements (federal and state regulation)**

- $NO_x$ Reasonably Available Control Technology (RACT), as required for 8-hour ozone nonattainment areas;
- "$NO_x$ Budget" rules that required a second phase of stationary source $NO_x$ reductions as part of a coordinated regulatory initiative by the Ozone Transport Region (OTR) states to further reduce $NO_x$ emissions in the Northeast;
- "$NO_x$ SIP Call" to reduce ozone transport in the eastern United States;
- EPA's Clean Air Interstate Rule (CAIR) and Cross State Air Pollution Rule (CSAPR); and
- Maryland's Healthy Air Act (HAA).

**Control Strategy**

RACT

States implemented $NO_x$ RACT to meet the requirements for 8-hour ozone nonattainment areas. For each $PM_{2.5}$ nonattainment area, 40 CFR 51.1010 notes that a SIP revision demonstrating that all reasonably available control measures, including RACT for stationary sources, necessary to demonstrate attainment as expeditiously as practicable, have been adopted. The section of the implementation rule goes on to state that potential measures that are reasonably available, considering technical and economic feasibility, must be adopted as Reasonably Available Control Measures (RACM) if, considered collectively, they would advance the attainment date by one year or more. As discussed in Section 7.2.1, the states determined that there are no additional control measures that could be adopted by January 1, 2008. Further, existing measures, and those planned for implementation by 2009, are expected to enable the region to continue to demonstrate compliance with the $PM_{2.5}$ NAAQS (1997) through the 2009 attainment date. As such, no further actions on RACT is warranted.

$NO_x$ OTC Phase II Budget Rules

In the late 1990's Maryland and the District adopted "$NO_x$ Budget" rules to require a second phase of stationary source $NO_x$ reductions as part of a coordinated regulatory initiative by the OTR states to further reduce $NO_x$ emissions in the Northeast. The rules required large stationary sources to reduce summertime $NO_x$ emissions by approximately 65 percent from 1990 levels. The regulation also included provisions allowing sources to comply by trading "allowances." This regulation required affected sources to reduce their emissions to meet these requirements by May 2001.

$NO_x$ SIP Call

In late 1998, the EPA adopted a rule called the "$NO_x$ SIP Call" to reduce ozone transport in the eastern United States. This regional $NO_x$ reduction program required 22 states, including Maryland and Virginia, and the District of Columbia, to further reduce large point source $NO_x$ emissions to EPA-identified state emission budget levels by 2007. State regulation adoption timelines notwithstanding, the majority of the 22 SIP call states had these regulations in place by 2003/2004.

Clean Air Interstate Rule (CAIR)

On May 12, 2005, the EPA promulgated the Clean Air Interstate Rule, which requires reductions in emissions of $NO_x$ and $SO_2$ from large fossil fuel fired electric generating units. The rule is set up in several phases with the first phase of $NO_x$ reductions to come by 2009. The first phase of $SO_2$ reductions are expected by 2010. The rule sets up both an annual emissions budget and an ozone season emissions budget. The rule requires that units with nameplate capacity greater than 25 megawatts (MW) emit no more $NO_x$ or $SO_2$ than their allocations determined by the state either through emission controls or banking and trading.

Cross State Air Pollution Rule (CSAPR)

On July 6, 2011, the US Environmental Protection Agency (EPA) finalized a rule that protects the health of millions of Americans by helping states reduce air pollution and attain clean air standards. This rule, known as the Cross-State Air Pollution Rule (CSAPR), requires 27 states to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states.

This rule replaces EPA's 2005 Clean Air Interstate Rule (CAIR). A December 2008 court decision kept the requirements of CAIR in place temporarily but directed EPA to issue a new rule to implement Clean Air Act requirements concerning the transport of air pollution across state boundaries.

Virginia CAIR and New Source Review Permitting

Virginia has adopted state regulations codifying the requirements of the CAIR. Virginia's rules create an emissions cap based on the allowances allocated to the facility. These nonattainment area requirements are enforceable as regulations of the State Air Pollution Control Board as provided in the Virginia Air Pollution Control Law [Chapter 13 (§ 10.1- 1300 et seq.) of Title 10.1 of the Code of Virginia] and enforceable to meet emissions reductions necessary for attainment under this plan; however, they have not been submitted to be part of the Virginia SIP in order to implement the federal CAIR program or meet the requirements of § 110(a)(2)(D)(i) of the federal Clean Air Act.

The Possum Point Power Station initiated a new source review action resulting in a netting exercise that reduced emissions. The netting exercise relied on a fuel switch from coal to natural gas for several units, thereby providing emissions reductions in $SO_2$.

Maryland Healthy Air Act (HAA)

In April of 2006, the Maryland General Assembly enacted the Maryland Healthy Air Act. The Maryland General Assembly record related to the HAA and the final version of the Act itself can be found at http://mlis.state.md.us/2006rs/billfile/SB0154.htm. The Maryland Department of the Environment (MDE) Regulations (Code of Maryland Regulations) can be found at http://www.mde.state.md.us/assets/document/CPR_12-26-06_Emergency_and_Permanent_HAA_Regs_for_AELR.pdf. The HAA is one of the toughest power plant emission laws on the East Coast. The HAA requires reductions in nitrogen oxide ($NO_x$), sulfur dioxide ($SO_2$), and mercury emissions from large coal burning power plants. The HAA also requires that Maryland become involved in the Regional Greenhouse Gas Initiative (RGGI), which is aimed at reducing greenhouse gas emissions. The MDE has been charged with implementing the HAA through regulations. As enacted, these regulations constitute the most sweeping air pollution emission reduction measure proposed in Maryland history. To meet the requirements of Maryland's regulations a company's "system" (covered units owned by the same company) must meet a system-wide cap by 2009. Compliance cannot be achieved through the purchase of allowances under the HAA.

District of Columbia CAIR

The District of Columbia was subject to a Federal Implementation Plan (FIP) under CAIR. The District of Columbia is not subject to specific requirements under CSAPR.

**Visibility Standards (federal and state regulation)**

**Control Strategy**

Virginia

The visibility regulations for existing facilities were adopted in Virginia under 9 VAC 5 Chapter 40 "Existing Stationary Sources" Part II "Emission Standards" Article 1 "Visible Emissions and Fugitive Dust/Emissions (Rule 4-1)." See http://www.deq.virginia.gov/air/regulations/air40.html
The paragraphs under the article are

- 9 VAC 5-40-80 "Standard for Visible Emissions"
- 9 VAC 5-40-90 "Standard for Fugitive Dust/Emissions"

The visibility regulations for new and modified units were adopted under 9 VAC 5 Chapter 50 "New and Modified Stationary Sources" Part II "Emission Standards" Article 1 "Visible Emissions and Fugitive Dust/Emissions (Rule 5-1)." See http://www.deq.virginia.gov/air/regulations/air50.html The paragraphs under the article are

- 9 VAC 5-50-80 "Standard for Visible Emissions"
- 9 VAC 5-50-90 "Standard for Fugitive Dust/Emissions"

District of Columbia

The opacity regulations in the District of Columbia were adopted in 1984 with District of Columbia Air Pollution Control Act. The official cite is 20 DCMR 606, and the effective date is March 15, 1985.

Maryland

The visibility regulations in Maryland were adopted in 1968 and have been amended several times since that time. See Chapter 9 for additional details.

**AREA SOURCE MEASURES**

**Seasonal Open Burning Restrictions (state rule)**

This measure involves amending and/or adopting state regulations to ban the open burning of such items as trees, shrubs, and brush from land clearing; trimmings from landscaping; and household or business trash during the peak ozone season. The measure is authorized by state regulations but is enforced by the local governments.

**Source Type Affected**

The measure affects all citizens and businesses that burn solid waste.

**Control Strategy**

Under the 15% VOC Reduction Plan, Maryland and Virginia adopted state regulations to prohibit open burning during peak ozone season in the Washington, D.C. ozone nonattainment area. The emissions benefits will remain constant through 2009.

**NONROAD MEASURES**

The following nonroad emission reduction measures, discussed in greater detail later in this section:

- EPA Nonroad Gasoline Engines Rule
- EPA Nonroad Diesel Engines Rule
- Emissions Standards for Spark-Ignition Marine Engines
- Emissions Standards for Large Spark-Ignition Engines
- Emission Standards for Locomotives

**Phase I and Phase II Emissions Standards for Gasoline-Powered Nonroad Utility Engines (federal rule)**

This measure takes credit for emissions reductions attributable to emissions standards promulgated by the EPA for small nonroad, spark-ignition (SI) (i.e., gasoline-powered) utility engines, as authorized under 42 U.S.C. §7547. The measure affects gasoline-powered (or other SI) lawn and garden equipment, construction equipment, chain saws, and other such utility equipment as chippers and stump grinders, wood splitters, etc., rated at or below 19 kilowatts (kW) [an equivalent of 25 or fewer horsepower (hp)]. Phase 2 of the rule applied further controls on handheld and nonhandheld outdoor equipment.

**Control Strategy**

Federal emissions standards promulgated under §7547 (a) apply to SI nonroad utility engines. The EPA's Phase 1 Spark Ignition Nonroad Final Rule on such emissions standards was published in 60 *Federal Register* 34581 (July 3, 1995) and was effective beginning August 2, 1995. Compliance was required by the 1997 model year. The Phase 2 final rule for handheld nonroad equipment was published in 65 *Federal Register* 24267 (April 25, 2000). The Phase 2 final rule for nonhandheld equipment was published in 64 *Federal Register* 15207 (March 30, 1999).

**Emissions Standards for Diesel-Powered Nonroad Utility Engines of 50 or More Horsepower (federal rule)**

This measure takes credit for emissions reductions attributable to emissions standards promulgated by the EPA for nonnroad, compression-ignition (i.e., diesel-powered) utility engines, as authorized under 42 U.S.C. § 7547. The measure affects diesel-powered (or other compression-ignition)

construction equipment, industrial equipment, etc., rated at or above 37 kW (37 kW is approximately equal to 50 hp).

**Control Strategy**

Federal emissions standards applicable to compression-ignition nonroad utility engines are promulgated under §7547 (a).

EPA's first rule on such emissions standards was published in 59 *Federal Register* 31306 (June 17, 1994) and was effective on July 18, 1994.

Tier 2 and Tier 3 Emission Standards were promulgated in 1998. This program includes the first set of standards for nonroad diesel engines less than 37 kW (phasing in between 1999 and 2000), including marine engines in this size range. It also phases in more stringent Tier 2 emission standards from 2001 to 2006 for all engine sizes and adds yet more stringent Tier 3 standards for engines between 37 and 560 kW (50 and 750 hp) from 2006 to 2008.

EPA adopted a comprehensive national program to greatly reduce emissions from future nonroad diesel engines by integrating engine and fuel controls as a system to gain the greatest air quality benefits. This rule was published June 29, 2004. The requirement to reduce sulfur levels in nonroad diesel fuel by more than 99 percent will allow, for the first time, advanced emission control systems to be used on the engines used in construction, agricultural, industrial, and airport service equipment.

**Emissions Standards for Spark-Ignition (SI) Marine Engines (federal rule)**

This EPA measure controls exhaust $NO_x$ emissions from new spark-ignition (SI) gasoline marine engines, including outboard engines, personal watercraft engines, and jet boat engines.

**Control Strategy**

EPA is imposing emission standards for two-stroke technology, outboard and personal watercraft engines. This will involve increasingly stringent control over the course of a 9-year phase-in period beginning in model year 1998. By the end of the phase-in, each manufacturer must meet a $NO_x$ emission standard.

**Implementation**

This program is implemented by the EPA under 42 U.S.C. § 7547 (a).

**Emissions Standards for Large Spark-Ignition (SI) Engines (federal rule)**

This EPA measure controls emissions from several groups of previously unregulated nonroad engines, including large industrial SI engines.

**Control Strategy**

The EPA requirements vary depending upon the type of engine or vehicle, taking into account environmental impacts, usage rates, the need for high performance models, costs, and other factors. The emission standards apply to all new engines sold in the United States and any imported engines manufactured after these standards began.

Controls on the category of large industrial SI engines were first required in 2004. Controls on the other engine categories began in years after 2005. Large industrial SI engines are those rated over 19 kW used in a variety of commercial applications; most use liquefied petroleum gas, with others operating on gasoline or natural gas.

EPA adopted two tiers of emission standards for large SI engines. The first tier of standards, which started in 2004, are based on a simple laboratory measurement using steady-state procedures. The Tier 1 standards are the same as those adopted earlier by the California Air Resources Board for engines used in California. Tier 2 standards became effective in 2007.

**Implementation**

This program is implemented by the EPA under 42 U.S.C. § 7547 (a).

**Standards for Locomotives (federal rule)**

This measure sets $NO_x$ standards for locomotive engines remanufactured and manufactured after 2001.

**Source Type Affected**

This program includes all locomotives originally manufactured from 2002 through 2004. It also applies to the remanufacture of all engines built since 1973. Regulation of the remanufacturing process is critical because locomotives are generally remanufactured five to ten times during their total service lives, which are typically 40 years or more.

**Control Strategy**

Three separate sets of emissions standards have been adopted, with the applicability of the standards dependent on the date a locomotive is first manufactured. The first set of standards (Tier 0) applies to locomotives and locomotive engines originally manufactured from 1973 through 2001, any time they are manufactured or remanufactured. The second set of standards (Tier 1) apply to locomotives and locomotive engines originally manufactured from 2002 through 2004. These locomotives are required to meet the Tier 1 standards at the time of manufacture and at each subsequent remanufacture. The final set of standards (Tier 2) apply to locomotives and locomotive engines originally manufactured in 2005 and later. Electric locomotives, historic steam-powered locomotives and locomotives manufactured before 1973 do not significantly contribute to the emissions problem and, therefore, are not included in the regulation.

**Implementation**

This program is implemented by the EPA under the *Final Emissions Standards for Locomotives* (EPA420-F-97-048) published in December 1997.

## ON-ROAD MEASURES

The following onroad emission reduction measures:

- Enhanced Inspection and Maintenance (I/M)
- Federal Tier 1 Vehicle Standards
- National Low Emission Vehicle Standards
- Federal Tier 2 Vehicle Standards
- Heavy Duty Diesel Engine Rule

### Enhanced Vehicle Emissions Inspection and Maintenance (Enhanced I/M) (federal regulation)

This measure involves requiring a regional vehicle emissions I/M program with requirements stricter than "basic" programs, as required under 42 U.S.C. §7511a(c)(3) and 7521. Before 1994, "basic" automobile emissions testing checked only tailpipe emissions while idling and sometimes at 2,500 rpm. The new procedures include a dynamometer (treadmill) test that checks the car's emissions under driving conditions. In addition, evaporative emissions and the on-board diagnostic computer are checked.

#### Source Type Affected

This measure affects light-duty gasoline and diesel vehicles and trucks.

#### Control Strategy

Maryland, the District of Columbia, and Virginia committed to EPA Performance Standard Enhanced I/M programs in the 15% VOC Emissions Reduction Plan. Each affected vehicle in the region is given a high-tech emissions test every two years, and there is extensive use of on-board diagnostics. In Maryland and the District of Columbia, emissions tests are performed at test-only stations. Virginia tests vehicles in stations that may also perform repairs using a decentralized program.

### Federal Tier I New Vehicle Emission and New Federal Evaporative Emissions Standards (federal regulation)

Under 42 U.S.C. §7521, EPA issued a new and cleaner set of federal motor vehicle emission standards (Tier I standards), which were phased in beginning with model year 1994.

The benefits of this program are reflected in the 2002 baseline inventory and the 2008 and 2009 projections thereof.

#### Source Type Affected

These federally implemented programs affected light-duty vehicles and light-duty trucks (LDT).

**Control Strategy**

The Federal Motor Vehicle Control Program requires more stringent exhaust emission standards as well as a uniform level of evaporative emission controls, demonstrated through the new federal evaporative test procedures. Under 42 U.S.C. §7521(g), all post-1995 model year cars must achieve the Tier I (or Phase I) exhaust standards, which are as follows (emissions are in grams/mile and are related to durability timeframes of 5 yrs/50,000 miles and 10 yrs/100,000 miles):

| Vehicle Type | *5 yrs/50,000 miles* | | | *10 yrs/100,000 miles* | | |
|---|---|---|---|---|---|---|
| | VOCs | CO | $NO_x$ | VOCs | CO | $NO_x$ |
| Light-duty vehicles; light-duty trucks (loaded weight 3,750 lbs) | 0.25 | 3.4 | 0.4[a] | 0.31 | 4.2 | 0.6[a] |
| Light-duty trucks (loaded weight of 3,751 to 5,750 lbs) | 0.32 | 4.4 | 0.7[b] | 0.40 | 5.5 | 0.97 |

[a]For diesel-fueled light-duty vehicles and for LDTs at 3,750 lbs, before model year 2004, the applicable $NO_x$ standards shall be 1.0 at 5 yrs/50,000 miles and 1.25 at 10 yrs/100,000 miles.
[b]This $NO_x$ standard does not apply to diesel-fueled trucks of 3,751 to 5,750 lbs.

**Implementation**
This program is implemented by the EPA under 42 U.S.C. §7521.

**National Low Emission Vehicle Program (federal regulation)**

Under the National Low-Emission Vehicle (LEV) program, auto manufacturers have agreed to comply with tailpipe standards that are more stringent than EPA can mandate prior to model year (MY) 2004. Once manufacturers committed to the program, the standards became enforceable in the same manner in which other federal motor vehicle emissions control requirements are enforceable. The program went into effect throughout the Ozone Transport Region (OTR), including Maryland, Virginia, and the District of Columbia, in MY 1999 and was in place nationwide in MY 2001.

The benefits of this program are reflected in the 2002 baseline inventory and the 2008 and 2009 projections thereof. Additional reductions from this measure are not expected.

**Source Type Affected**

These federally implemented programs affect light-duty vehicles and trucks.

**Control Strategy**

The National Low Emission Vehicle Program requires more stringent exhaust emission standards than the Federal Motor Vehicle Control Program Tier I (or Phase I) exhaust standards.

**Implementation**

This program is implemented by the EPA, under 40 CFR Part 86 Subpart R. Nine states within the OTR, including the MWAQC states, have opted-in to the program as have all the auto manufacturers. EPA found the program to be in effect on March 2, 1998.

**Tier 2 Motor Vehicle Emission Regulations (federal regulation)**

The EPA promulgated a rule on February 10, 2000, requiring more stringent tailpipe emissions standards for all passenger vehicles, including sport utility vehicles (SUVs), minivans, vans, and pick-up trucks. These regulations also require lower levels of sulfur in gasoline, which will ensure the effectiveness of low emission-control technologies in vehicles and reduce harmful air pollution.

**Source Type Affected**

These federally implemented programs affect light-duty vehicles and trucks.

**Control Strategy**

The new tailpipe and sulfur standards require passenger vehicles to be 77 to 95 percent cleaner than those built before the rule was promulgated and will reduce the sulfur content of gasoline by up to 90 percent. The new tailpipe standards are set at an average standard of 0.07 grams/mile for $NO_x$ for all classes of passenger vehicles beginning in 2004. This includes all light-duty trucks, as well as the largest SUVs. Vehicles weighing less than 6000 pounds are being phased-in to this standard between 2004 and 2007.

Beginning in 2004, the refiners and importers of gasoline have the flexibility to manufacture gasoline with a range of sulfur levels as long as all of their production is capped at 300 parts per million (ppm) and their annual corporate average sulfur levels are 120 ppm. In 2005, the refinery average was set at 30 ppm, with a corporate average of 90 ppm and a cap of 300 ppm. Finally, in 2006, refiners met a 30 ppm average sulfur level with a maximum cap of 80 ppm.

As newer, cleaner cars enter the national fleet, the new tailpipe standards will significantly reduce emissions of nitrogen oxides from vehicles by about 74 percent by 2030.

**Implementation**
EPA implements this program under 40 CFR Parts 80, 85, and 86.

**Heavy-Duty Diesel Engine Rule (federal regulation)**

Under the Heavy-Duty Diesel Engine Rule, truck manufacturers must comply with more stringent tailpipe standards by 2004 and 2007. The standards are enforceable in the same manner that other federal motor vehicle emissions control requirements are enforceable.

**Source Type Affected**

These federally implemented programs affect heavy-duty diesel engines used in trucks.

**Control Strategy**

The Heavy-Duty Diesel Engine Rule requires more stringent exhaust emission standards. The rule also mandates use of ultra-low sulfur diesel fuel. Sulfur in diesel fuel must be lowered to enable modern pollution-control technology to be effective on these trucks and buses. EPA requires a 97 percent reduction in the sulfur content of highway diesel fuel from its former level of 500 ppm (low sulfur diesel, or LSD) to 15 ppm (ultra-low sulfur diesel, or ULSD). Refiners began producing the cleaner-burning diesel fuel, ULSD, for use in highway vehicles beginning June 1, 2006.

**Implementation**

This program is implemented by the EPA, under 40 CFR Parts 9 and 86 Control of Emissions of Air Pollution From Highway Heavy-Duty Engines; Final Rule.

**Transportation Control Measures (TCMs) and Vehicle Technology, Fuel, and Maintenance-based Measures (state and local program)**

Section 108(f) of the Clean Air Act Amendments provides examples of TCMs that can be implemented to reduce emissions from mobile sources. Most TCMs are designed to improve the flow of traffic or reduce vehicle miles traveled (VMT) or vehicle trips.

In conjunction with state departments of transportation and local transit authorities, state air agencies have identified a number of projects designed to reduce vehicle travel and mitigate traffic congestion in the Metropolitan Washington nonattainment area. These measures include purchase of alternative-fueled vehicles, improvements to bicycle and pedestrian facilities, improvements to transit services, and access to transit facilities. All responsible agencies have committed to implementing these projects by January 1, 2005.

Additional information on TCMs is contained in Appendix F.

**Source Type Affected**
Transportation-related activities in the Metropolitan Washington nonattainment area

**Implementation**
District of Columbia – Department of Transportation
Maryland - Department of Transportation
Virginia - Department of Transportation

Washington Metropolitan Area Transit Authority
Northern Virginia Local Governments

## SUPPLEMENTAL CONTROL MEASURES

### Supplemental Control Measures

The local governments and state agencies in the Washington region have taken a coordinated, proactive approach to reducing emissions. These actions reduce $SO_2$ and $NO_x$ emissions from a variety of source sectors. Programs include

Point Source Measures

- Renewable Energy Programs
  - Regional Wind Power Purchase Program
  - Clean Energy Rewards Program
  - Renewable Portfolio Standards
- Energy Efficiency Programs
  - Light-Emitting Diode (LED) Traffic Signal Retrofit Program
  - Building Energy Efficiency Programs
- Green Building Programs
- High Electricity Demand Day Initiative (HEDD)

Mobile Source Measures

- Diesel Particulate Reductions*
- Low-Emission Vehicle Purchases*
- Telecommuting Initiative*

* Explicitly reserved for use as TERMs in transportation conformity.

Other Programs

- Clean Air Partners
- Tree Canopy Programs

Additional Programs Being Implemented or under Development**

- Early Adoption of Low-Sulfur Fuel for Off-Road Applications
- Restrictions on Installation of Wood Burning Fireplaces
- Dust Suppression for Construction
- Idling Controls
- CAIR Plus
- Distributed Generation Rule
- Industrial, Commercial, and Institutional Boiler Rule
- Energy Performance Contracting
- Airport Initiatives
- Heavy Duty I/M, Smoke Testing
- Low-Sulfur Home Heating Oil

** No further information on these initiatives is provided herein.

**Source Type Affected**

These supplemental controls reflect commitments by owners, operators, purchasers, or users of the following types of emissions-related items/equipment in the Metropolitan Washington area: commercial power generation, municipal buildings, commuting, fleets, and urban forest trees.

**Implementation**

Arlington County, Virginia
City of Alexandria, Virginia
City of Falls Church, Virginia
City of Greenbelt, Maryland
Fairfax City, Virginia
Fairfax County, Virginia
Loudoun County, Virginia
Maryland Department of Transportation
Maryland National Capital Parks and Planning Commission
Montgomery County, Maryland
Prince George's County, Maryland
Prince William County, Virginia
Washington Surburban Sanitary Commission, Maryland

**[[[Outstanding Sections to be written]]]**

2.3 Emission Inventory and Projections

2.4 Motor Vehicle Emission Budgets for Conformity
[need to have safety margin discussion - do we want to include one?]

2.5 AQ Monitoring Network

2.6 Verified Continued Attainment

2.7 Contingency Measures (COG, States, Locals)
Triggers [see separate memorandum, decision needed]
List of contingency measures [need control measures workgroup to be engaged]

2.8 Interagency Consultation, TAC, MWAQC, ACPAC Review and Approval

2.9 Public Comment and Response