Washington County, Early Action Compact

December 31,2003 Progress Report

DRAFT

Submitted and prepared by:

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December 31,2003

I. Background of EAC

The Early Action Compact (EAC) for Washington County is an agreement with U.S. Environmental Protection Agency (EPA), in partnership with Maryland Department of the Environment (MDE) and Washington County to enter into a commitment to develop state implementation plans (SIP) that will achieve local reductions earlier than otherwise required to demonstrate attainment of the 8-hour ozone standard. The submittal date for the EAC programs was December 31, 2002, which was formally announced to states in the EPA Holmstead Memorandum, dated November 14, 2002. The goal of the program is to meet attainment of the 8-hour ozone NAAQS by December 31, 2007.

Washington County and MDE submitted "The Early Action Compact for Washington County, Maryland" on December 31, 2002, and EPA approved it on the same day. The first submittal of the EAC process required the local area to identify and describe the local control measures that will be considered during the local planning process by June 16, 2003 to remain eligible in the program. With cooperation of local stakeholders, Washington County submitted this document to EPA on June 11, 2003.

The second required submission, due June 30, 2003, required local areas to assess and report the progress against milestones in a regular, public process. Washington County submitted the progress report to EPA on June 27, 2003. Additional progress reports are due every six months in accordance with EPA guidance memorandum dated April 4, 2003. The submission of this progress report meets the requirements of the December 31, 2003 milestone. At a minimum, the progress reports are required to include:

- Documented progress in developing the stakeholder process and a brief summary of stakeholder meetings.
- Progress on evaluating and selecting emission reduction measures for the local control strategies.
- Description of public outreach activities.
- An update on modeling/technical planning activities.

Originally, a technical submission was due August 31, 2003 that was to include the initial modeling inventory, conceptual model and base case. However, technical difficulties processing MOBILE6 emissions through the SMOKE emissions preprocessor have delayed this technical milestone. Subsequent submissions and actions are outlined in EPA memorandums dated November 14, 2002 and April 4, 2003.

The EAC provides the opportunity to meet the 8-hour ozone standard expeditiously through local actions to reduce ozone precursor emissions. If successful, Washington County will avoid EPA designations as "non-attainment" and any requirements of the designation and classification.

II. Description of Program Area

Location Boundaries

Washington County is located in west-central Maryland, bounded by Pennsylvania, Virginia and West Virginia. The county extends east to South Mountain, south to the merging of the Shenandoah and Potomac Rivers, north to the Pennsylvania border and west to Sideling Hill Creek. It is bordered by the Appalachian Highlands, and situated at the center of the Cumberland Valley with low rolling hills, cultivated valleys, moderate woodlands, with elevations of 500-800 feet above sea level. Hagerstown, the county seat, is located in the center of the county and approximately 75 miles west of Washington, DC, and Baltimore.

Demographics

Washington County enjoys a high employment rate and moderate incomes, with a lower cost of living than nearby metropolitan areas. From the 2000 Census and Maryland Department of Labor, basic Washington County's demographics are provided in the Table 1. The population is projected to grow to more than 145,000 by year 2020.

Table 1: Demographic Profile of Washington County for 2000

Population	Households	Employment Force
131,923	**49,726**	**70,857**

*SOURCE: Population & Households: U.S. Census Bureau (2000). Employment Force: MD Department of Labor, Licensing & Regulation, Office of Labor Market Analysis & Information (2003).

Washington County has extensive surface transportation grids relative to its population and economy. Interstate 81 bisects the County north/south, connecting New England to the southern states. U.S. Interstate 70 runs east/west, from Baltimore to California. U.S. Interstate 68 begins at the town of Hancock, taking commercial and public traffic to Morgantown, WV and other corridors West. Interstates 70 and 81 are major long distance routes for passengers and freight. U.S. Route 40 runs east/west through the City of Hagerstown, generally north of and parallel to 1-70. Other prominent federal highways include U.S. Routes 11, Alternate 40, and 522.

The location provides access to over 50% of the nation's population by overnight truck. Suppliers, customers and freight relay operations are plentiful in or near Washington County.

Development of new business and industry has been continuing with new investments created and an estimated million square feet under construction.

Existing businesses have enjoyed growth, joining new companies in Washington County's commercial family. Both public and private sectors make up the top employers in the county. The top 10 employers are provided in Table 2.

Table 2: Top 10 Employers in Washington County

Number	Employer	Employees
1	Washington County Health System	3,000
2	State of Maryland	2,591
3	Washington County Public Schools	2,563
4	Citicorp Credit Services, Inc.	2,500
5	First Data Merchants Services	2,081
6	Garden State Tanning	1,140
7	Mack Trucks, Inc.	1,133
8	Washington County Government	830
9	Phoenix Color Corporation	725
10	Federal Government	655

*Source: Economic Development Commission 2002 Annual Report, Hagerstown-Washington County.

III. Existing Control Measures in Washington County

Existing Control Measures

The existing air pollution controls being implemented in Washington County are already much more stringent than the existing pollution controls in neighboring states. AS such, Washington County commences work on its Early Action Plan (EAP) from a much higher rate of controls, and therefore has fewer and possibly less efficient control measures to choose from. Because Maryland is part of the Ozone Transport Region, Washington County is already subject to New Source Review, Enhanced Vehicle Emissions Inspection Program, VOC and NOx RACT and many other control programs. Below is a detailed list of other control measures already being implemented in Washington County.

<u>Area Sources</u>

1. Automotive and light-duty truck coating
2. Can coating
3. Coil coating
4. Large appliance coating
5. Paper, fabric, vinyl and other plastic parts coating
6. Control of VOC emissions from solid resin decorative surface manufacturing

7. Metal furniture coating
8. Flexographic and rotogravure printing
9. Lithographic printing
10. Dry cleaning installations
11. Miscellaneous metal coating
12. Aerospace coating operations
13. Brake shoe coating operations
14. Control of VOC from structural steel coating operations
15. Manufacture of synthesized pharmaceutical products
16. Paint, resin and adhesive manufacturing and adhesive application
17. Control of VOC equipment leaks
18. Control of VOC emissions from yeast manufacturing
19. Control of VOC emissions from screen printing and digital imaging
20. Control of VOC emissions from expandable polystyrene operations
21. Control of landfill gas emissions from municipal solid waste landfills
22. Control of VOC emissions from commercial bakery ovens
23. Control of VOC from vinegar generators
24. Control of VOC emissions from leather coating
25. Control of VOC from explosives and propellant manufacturing
26. Control of VOC emissions from reinforced plastic manufacturing
27. Control of VOC from marine vessel coating operations
28. Control of VOC from bread and snack food drying operations
29. Control of VOC from distilled spirits facilities
30. Control of VOC from organic chemical production
31. Control of VOC from asphalt paving
32. Control of gasoline and VOC storage and handling (Stage I)

<u>Mobile Sources</u>

1. Motor vehicle emission control devices (federal mandates, Tier I, etc.)
2. Maryland Enhanced Vehicle Emissions Inspection Program (high enhanced I/M)
3. Diesel vehicle emissions control program
4. National Low Emissions Vehicle (NLEV)

OTC Control Regulations

1. Control of VOC from vehicle refinishing-mobile equipment repair and refinishing
2. Control of VOC emissions from cold and vapor degreasing

In addition, many federal controls are scheduled for implementation by 2007, providing substantial VOC and NOx reductions. They include Tier 2 vehicles and low sulfur gasoline starting in 2004, the 2004 heavy-duty engine standards, and low sulfur diesel scheduled for 2007.

Ozone Transport into Washington County

High ozone levels in Washington County are significantly affected by ozone pollution floating in from distant upwind areas, like the Ohio River Valley, and closer neighboring area like the Baltimore and Washington, DC metropolitan areas.

MDE has conducted significant research to estimate the role of ozone transport into Maryland. On most high ozone days in Washington County, the MDE research indicates that over 90% of the problem originates from sources outside of the county. Despite the overwhelming role of ozone transport, the early reductions to be achieved under this EAP will help bring cleaner air to the area more quickly.

Because Maryland's high ozone levels are so significantly affected by ozone transport, Maryland was the first state in EPA Region III to submit its transport regulations (called the NOx SIP Call) and has filed a petition under Section 126 of the Clean Air Act to compel ozone precursor emissions reductions in upwind states.

Efforts included in the EAP are under way to update regional transport modeling efforts as described in the Technical Efforts Section.

IV. Technical Efforts

Status of Emissions Inventories

The three states comprising Virginia (VA), West Virginia (WV), and Maryland (MD) are combining resources to complete the EAP modeling exercise. After numerous discussions with EPA Region 3 it was agreed by all three states to use the 1999 National Emissions Inventory (NEI) for the EAC base case modeling. We know that there are issues and possible problems with this inventory, but it is currently the inventory available to us that covers the entire domain of the three states and all source categories. In addition, the 1999 NEI also uses both MOBILE6 and the NONROAD model. The emissions preprocessing will be completed using the SMOKE model. The output from

the SMOKE model will serve as emissions input into the photochemical model. The only problems encountered have been issues dealing with the MOBILE6 model. Based on other state's experiences, MOBILE6 has a different input file structure than that of MOBILE5b. This different file structure presents problems when the MOBILE6 data needs to be processed by the SMOKE model. MDE will soon begin the process of creating a more recent inventory (2002), but it is not expected to be ready for the EAP.

Photochemical Modeling for Attainment Demonstration

Maryland and Virginia has modelers on staff who will be responsible for running the SMOKE emissions preprocessor, MM5 meteorological model and the photochemical model MODELS3/CMAQ. The modeling domain will cover the EAP areas in VA, WV, and MD.

After numerous meetings between the three states of VA, WV and MD it was decided to model an ozone episode in 1999 as the base year. The year 1999 was selected because it matched the year of the emission inventory to be used in the modeling exercise. The three states have preliminarily selected the ozone episode that occurred during the time period August 12, 1999 –August 13, 1999. This ozone episode had monitored concentrations at the Hagerstown monitor in MD's EAP area of Washington County compare well to the current design value. The 2002 8-hr design value for Washington County is 87 ppb, and maximum 8-hr ozone concentrations on August 12 was 87.50 ppb and on August 13 were 88.37 ppb, 88.25 ppb, 87.87 ppb, 86.75 ppb, 86.25 ppb, and 86.12 ppb.

Meteorological Model

VA is in the process of running the MM5 meteorological model. The output from the MM5 model will be used as the meteorological inputs required to run the photochemical model. The purpose of using the MM5 model data as input into the photochemical model is to recreate the atmospheric interaction needed to form ozone.

Status of the Modeling Activities

Several communications pertaining to the EAC modeling process have occurred between the Virginia Department of Environmental Quality (VDEQ) and the EPA. VDEQ air modeling staff met most recently to discuss the 8-hour modeling for EAC areas in Virginia, West Virginia, and Maryland on Friday, December 12, 2003. The following email communications summarize the technical difficulties experienced with the modeling process to date.

Ballou Thomas

To: 'ellsworth.todd@epa.gov'; 'anderson.kathleen@epa.gov'; morris.makeba@epa.gov
Cc: Daniel John; Sydnor James; Chaudhari Kirit; Qin Guangyan; fdurham@mail.dep.state.wv.us; gaburn@mde.state.md.us; rmosier@mde.state.md.us; mwoodman@mde.state.md.us
Subject: Early Action Plan Modeling Status
Date: 8/19/03 11:19 AM

Greetings to all. The purpose of this email is to bring you up to date on the ozone modeling efforts underway to support the development of early action plans for jurisdictions in Virginia, West Virginia, and Maryland that have entered into early action compacts.

As you will recall, our original plan was to model a July 1997 episode to support the development of the early action plans for these areas. This was due to the fact that the meteorological and emissions data for this episode was readily available. However, after further discussions with EPA and the release of the April 4th early action guidance memo, it was determined that this episode and inventory could not be used for EAP effort. As a result, we had to select a new episode for use in this process, and obtain and process new meteorological and emissions data for this episode. After evaluating the historical ozone monitoring data for the study area, an August 1999 episode (August 8th to 18th) was chosen for this purpose. The main reasons for choosing this episode were as follows:

- Representative of a typical high ozone weather pattern (winds and resulting transport from the Southwest).
- Monitored exceedances recorded at all study area monitors (Frederick, Roanoke, & Washington Counties).
- 1999 NEI inventory was available for emissions inventory purposes (including MOBILE6 & NOROAD modeled emissions).

This revised modeling plan was developed in April in consultation with EPA, and an extension of the base case modeling milestone to August 31st was also granted to accommodate this change in episodes and the resulting new data needs.

After the development of the revised modeling plan, our efforts have been focussed on obtaining and processing the necessary data to simulate the selected episode. These efforts in general have been hampered by various problems such as staffing shortages and computer problems. However, despite all this we have been successful in processing all meteorological and emissions data (except MOBILE6) and have the base case model running in good order using MOBILE5-based mobile emissions. **HOWEVER…**

The insistence on using MOBILE6 emissions in this exercise has caused us major difficulties and delays. Despite our best efforts, we have thus far been unable to process MOBILE6 emissions through the SMOKE emissions preprocessor. The main reason for this is that the latest version of SMOKE (Version 1.5) is the only one that supports the use of MOBILE6. This version of SMOKE is new and still in draft (Beta) form. Numerous problems have been encountered in attempting to install and run this version of the emissions model. We have now resorted to hiring the developers of SMOKE to install and process the 1999 NEI mobile emissions through this version of SMOKE. Until we complete this process, we cannot move forward with the base case modeling process.

Obviously, this situation is impacting our schedule to complete the base case modeling. We will not be able to complete this stage of the modeling exercise by August 31st. However, we do believe that if all goes well with the outside assistance, the base case modeling can be completed in short order. Everything other than the MOBILE6 emissions is ready to go and working properly. We remain committed to complete the overall modeling project in time to support the early action plan development process.

Ballou Thomas
To: 'ellsworth.todd@epa.gov'; 'anderson.kathleen@epa.gov'; morris.makeba@epa.gov

Cc: Daniel John; Sydnor James; Chaudhari Kirit; Qin Guangyan; fdurham@mail.dep.state.wv.us; gaburn@mde.state.md.us; rmosier@mde.state.md.us; mwoodman@mde.state.md.us
Subject: Early Action Plan Modeling Status
Date: 10/15/03 3:03 PM

Greetings. As you know, we have a scheduled call with EPA tomorrow to discuss the status of the modeling exercise to support the development of Early Action Plans in Virginia, West Virginia, and Maryland. I apologize for not getting an update on this out to you earlier but things have been very hectic around here lately.

The current status of the EAP modeling is this. If you will recall, we ran into several problems in processing the 1999 NEI emissions inventory through the latest version of SMOKE. Because of this, we hired the Carolina Environmental Program (CEP), the developers of SMOKE, to solve these problems and process the necessary inventory data. Unfortunately, this processing step took longer than we had originally anticipated and was not completed until the end of September. Since then, we have been performing base-case modeling runs at 36 km and 12 km grid resolution. We are currently experiencing some episode "performance issues" that we are working to resolve. We have also just hired two new regional modelers that are being thrown into the fray to solve these problems and move forward with the modeling as quickly as possible.

We will have a further update on these efforts and our future plans during the conference call tomorrow. We also need to discuss the concept and request from EPA that the EAP areas from Winchester/Frederick, VA up to Washington County, MD enter into some sort of agreement to join forces as one EAP area. Hopefully, Kathleen Anderson will have more information on this for us tomorrow.

Tom Ballou
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Virginia Department of Environmental Quality
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Components of the Modeling Process

The modeling activities will include the selection of a photochemical model, representative modeling domain, and a representative base case modeling ozone episode. Due to the regional nature of ground level ozone and transport that is prevalent in the Eastern United States, combined with the reasonable assumption that the early action areas are impacted by ozone transport, a regional photochemical modeling exercise has been selected for EAC project. This modeling selection will allow for the evaluation of the impact of transport on the EAC areas, as well as the impact of regional and national control strategies in reducing ozone transport into these areas. The model selected for this purpose will be EPA's MODELS3/CMAQ photochemical model, which is EPA's latest modeling platform for such analyses. The meteorological inputs required to run the model will be developed using the MM5 meteorology model, and the emissions inputs will be developed using the SMOKE emissions preprocessor model. The purpose of these model data input preprocessors is to temporally and spatially allocate these inputs to a grid system used by the photochemical model to recreate the atmospheric interaction of all these factors in promoting ozone formation.

Due to the need to model a larger region for ozone transport assessment, a regional domain that covers a large portion of the mid-atlantic states has been chosen to support the early action plan modeling. The domain will cover the EAP areas in VA, WV, and MD and consist of a 36 km by 36 km grid and a more refined grid of 12 km by 12 km centered on VA.

V. Public Process

EAP public involvement has been and will continue to be conducted by Washington County, with assistance from MDE. Outreach will include several of the following techniques: public meetings and presentations, stakeholders meetings, websites, print advertising and radio. Public education programs will raise the awareness regarding air quality issues, opportunities for involvement in the planning process, implementation of emission reduction strategies, and any other issue important to Washington County.

The primary local organization responsible for the EAC activities is the Washington County Department of Planning and Community Development with assistance from MDE and Maryland Department of Transportation (MDOT). The lead contact is Mr. Stephen Goodrich, Acting Planning Director with the County Planning Department.

The EAC public hearings and background material will be linked to the Washington County and MDE websites.

Public Participation Effort to Date

Early Action Compact Public Process

Washington County together with MDE and MDOT are working hard developing a stakeholder process for the EAP through invitations, open public meetings and other on-going committees and groups. The EAP is discussed regularly at Hagerstown / Eastern Panhandle MPO meetings and the Attainment Plan Task Force Meetings.

On April 22, 2003, MDE presented the early action process to the county commissioners, along with a history of air pollution in Maryland, Washington County data, new EPA air quality standards and the stakeholders and public process involved with the EAC.

For the first EAP open public meeting, Washington County invited potential stakeholders to develop the initial list of potential control measures for the EAP. The objective is to include persons representing local businesses, economic development, environmental interests and local government. Other interested parties will be added as they are identified. Table 3 provides the list of invited stakeholders.

On December 16, 2003, staff members from MDE, MDOT, Baker, and Washington County government briefed the Washington County commissioners on the progress of the EAC and on the proposed local control measures. Minutes from this meeting and the accompanying presentation may be found in Appendix A.

Table 3: Invited stakeholders for Washington County EAC

Name	Municipal / Organization - Address
Gregory I. Snook – President • William J. Wivell, VP • John C. Munson • James F. Kerchebal • Doris J. Nippf	Washington County Board of County Commissioners County Administration Bldg 100 West Washington Street Hagerstown, MD 21740
Fred Teeter	Chamber of Commerce 111 W. Washington St. Hagerstown, MD 21704
Art Callaham	Greater Hagerstown Committee Inc. 5 Public Square Hagerstown, MD 21740
Tim Troxell – Director	Economic Development Commission County Administration Bldg 100 West Washington Street Hagerstown, MD 21740
Jim Laird	Citizens for the Protection of Washington Co. 1903 Maplewood Dr. Hagerstown, MD 21740
Charles "Skip" Kauffman – Mayor • Howard Long • Richard Hawkins • Gene Smith • Richard Gross • Ray Grove • Kevin Chambers	Boonsboro Town Hall 21 North Main St. Boonsboro, MD 21713
Paul D. Hose, Jr. – Mayor • Julianna Albowicz • Gary L. Grove • Terry Baker • Mason B. Mundey	Clear Spring Town Hall P.O. Box 104 Clear Spring, MD 21722
Robert L. Kline – Mayor • Paul N. Crampton • Sharon Chirgott • Kim Ramer • Robert Rodgers, Jr. • Richard Nigh • John Phillips	Funkstown Town Hall P.O. Box 235 Funkstown, MD 21734
William M. Breichner – Mayor • Kristin B. Aleshire • N. Linn Hendershot • Lewis C. Metzner • Carol N. Moller • Penny May Nigh	Hagerstown City Hall One East Franklin St. Hagerstown, MD 21740
Daniel Murphy – Mayor • Randy Pittman • David B. Smith • W. Gregory Yost • Darwin Mills	Hancock Town Hall 126 West High St. Hancock, MD 21750
Lee Brandenburg – Mayor • Matt Hull • Jackie Stranathan • Richard Walton	Keedysville Town Hall P.O. Box 359 Keedysville, MD 21756

• Barry Levey	
Sidney Gale – Mayor • Hal Spielman • J.W. Eichelberger • Russell Weaver • Patti Hammond • Ralph Hammond • Marjorie Jamison	Sharpsburg Town Hall P.O. Box 368 Sharpsburg, MD 21782
Mildred "Mickey" Myers – Mayor • Ralph Regan • James LaFemina • Elizabeth "Peachy" Mann • Jerome Martin • Jake Johnson	Smithsburg Town Hall P.O. Box 237 Smithsburg, MD 21783
John W. Slayman – Mayor • Timothy Ammons • Walter W. Tracy • James McCleaf • Gloria Bitner • James C. Kalbfleisch • Roxanne Long	Williamsport Town Hall P.O. Box 307 Williamsport, MD 21795

Maryland APTF

The other effort lead by MDE is the Attainment Plan Task Force (APTF). The APTF organized in 1995 to develop strategies to meet the 15% rate of progress requirements. At the request of the Maryland General Assembly's Environmental Matters Committee, MDE established a task force consisting of representatives of the Maryland General Assembly, trade associations, chambers of commerce, health and environmental groups, local air quality planning associations and state executive agencies.

The Attainment Plan Task Force reconvened on several occasions during the spring of 2000 to provide input and guidance on the development of the Governor's recommendation for the 8-hour ozone boundary designations. Several court actions and additional EPA guidance required an update to the Governor's original recommendation by July 15, 2003. The Attainment Plan Task Force again met during February and May 2003 to provide guidance and comments for this process. Multiple comments (several specific to the EAC process) from stakeholders were incorporated into the Governor's recommendation letter for the designation of 8-hour ozone nonattainment areas. Presentations for both meetings are available on Maryland Department of the Environment Web at http://www.mde.state.md.us/Programs/AirPrograms/air_planning/index.asp

Most recently, the Attainment Plan Task Force met on December 9, 2003 to review data, technical reports, and EPA guidance to help in determining the recommendations for nonattainment boundaries for the fine particulate standards. During this meeting, stakeholders were once again briefed on Maryland's EAC efforts and encouraged to participate in the development of local control measures and the Early Action Plans to be submitted. Stakeholders were also appraised of EPA's December 3, 2003 response letter to the Governor's 8-hour ozone boundary recommendations.

Public Meetings

The first public meeting for the EAC was held on May 8, 2003 at 6:00 pm at the Washington County Administrative Annex at 80 Baltimore Street in Hagerstown. Advertisements were published in The Herald-Mail on April 4 and May 5, 2003. The meeting was held to discuss EPA's air quality standards and the Washington County EAC program.

A number of conference calls have been held between state and local agencies, EPA and with adjacent states within the modeling domain. Local strategy meetings/calls between Washington County, MDE and MDOT were held on Feb. 19 and 28, Aug. 28, Oct. 14 and December 4, 2003. Modeling calls between MD, VA and WVA were held on Feb. 10, Mar. 24 and 26, Apr. 11, May 16, June 24, July 18, and Dec. 12, 2003. EPA led conference calls for the EAP were held on Mar. 17 and Apr. 16, July 10, July 15, Aug. 14, Sep. 23, Sep. 25, Sep. 26, Nov. 4 and Dec. 17, 2003. The EAC was also discussed at the MPO meetings in Dec., 2002 and October 15, November 18, 2003.

Washington County Government staff are planning several stakeholder meetings to be held on January 14, 2004 and early February 2004 to receive input on proposed local control strategies. Details of the tentative meeting schedule, advertisements, news articles and meeting attendees are located in Appendix A. MDE, MDOT, and Washington County staff will then again meet with the Washington County Commissioners on February 3, 2004. Public Hearings will be held in Washington County on February 18, 2004. Information pertaining to the EAC will be posted on the Washington County Government and MDE web sites during this time. The Washington County Commissioners will then meet on March 16, 2004 to finalize the local control measures to be included in the EAP.

Future meetings dates will be determined on a quarterly basis, unless the stakeholders request more frequent meetings.

VI. Control Measures under Consideration

Washington County has been actively developing a list of local emission reduction control measures that are designed to achieve attainment by the year 2007. The selection of the proposed control measures were based on a consensus that included the Board of County Commissioners of Washington County, the Washington County Department of Planning and Community Development, Maryland Department of the Environment, Maryland Department of Transportation, and local stakeholders. The process of encouraging public participation to develop the local control measures is a continuous effort and has been detailed above. Detailed descriptions, emission benefits, and current status for the following proposed control measures may be found in Appendix B of this document. Appendix C contains a comprehensive analysis of the transportation emissions reduction measures.

Table 4: List of Possible Control Measures

SOURCE CATEGORY Control Measure/ Description
HIGHWAY
VMT and Trip Reduction Measures
Busing/rail/transit incentive programs offered to employees by employers. (Use in combine with public transit/ infrastructure measure).
Transit Service Expansions (geographic, service frequency, other). Public transit infrastructure
Flextime / Alternative Work Schedules (hours, days, or weeks). (Employer voluntary adjustment of work schedules and/or credit for employer plans to adjust work schedules to reduce peak travel.)
1. Voluntary Clean Air Programs 2. Public Education Efforts-(Institute ozone awareness and energy/ resource conservation programs for public, employers, school students, community groups, etc)
E-government / E-commerce Enhancements
New Jobs Tax Credit
Smart Growth Management
State Control Measures (OTR Programs)
Mandate low RVP Expansion of Reformulated Gasoline to Washington County
Stage II Controls
Fleet Operations
Diesel Outreach Programs: -Vehicle Idling Policies/Restrictions- (HDDV) -Restrictions on fleet and location of idling. -Delivery Times Outside Peak Travel Time Periods -Refueling in Evening Hours
Vehicle Acquisitions
ULEV and SULEV Vehicles as Replacements for Existing Standard Vehicles or Fleet Expansions
Accelerated Fleet Replacement Cycles
OTHER MOBILE SOURCE (Off-Road)
Limits on Use of Construction Activities- Restrictions on days, hours, OAP, etc.
Fuels- Programs to promote the use of lower polluting fuels for off road mobile equipment. These programs can be voluntary, mandatory, or incentive-based.
Engine Retrofits- Replacement or reworking of older higher emitting engines with newer lower emitting parts.
Vehicle Replacement-

Replacement of older higher emitting vehicles with newer lower emitting vehicles.
Locomotive Engine Replacement
AREA SOURCES
Lawn and Garden Equipment Scrappage / Replacement Programs-Encouraging accelerated turnover/replacement of older higher emitting devices with newer lower emitting models
Landside Conditioned Air / Idling Restrictions- Use of on-bard auxiliary power units or ground power units in lieu of running aircraft engines.
STATIONARY SOURCES
NOx and/or VOC Reductions by Specific Permitted and Un-permitted Sources Voluntary or mandatory reduction programs to achieve emissions reductions greater than existing emissions reduction requirements.
New Source Review

VII. Demonstration of Progress

The EAC protocol requires areas to assess and report progress every 6 months. The December 31, 2003 Progress Report of the EAC for Washington County requires documented progress on the following:

- Developing the stakeholder process, including roles and responsibilities
- Evaluating and selecting emission reduction measures for local control strategies
- Public outreach activities
- Modeling and technical planning activities.

The data collection effort to evaluate the potential control measures is under way. Using the tables in Appendix B to track the progress, updates will be recorded based on the data availability, tools, stakeholders and public progress. The process will lead to the final evaluation and selection of control measures needed to reach attainment for Washington County.

VIII. Geographic Area

The geographic coverage for the EAP includes Washington County, Maryland. For potential control measures, the coverage includes Washington County, but also upwind sources in adjacent EAP areas (Virginia and West Virginia).

IX. Resource Constraints

Resource constraints are under discussion. Any constraints identified will be included in future EAP progress reports.