

December 20, 2005

Ms. Judith M. Katz, Director  
Air Protection Division (3AP00)  
U.S. Environmental Protection Agency  
1650 Arch Street  
Philadelphia, Pennsylvania 17108-1086

RE: Washington County, Maryland - Early Action Plan Progress Report

Dear Ms. Katz:

Please find attached the required December 2005 Progress Report for the Early Action Plan for Washington County, Maryland. This submittal documents progress being made to implement the County's Early Action Plan submitted to the U.S. Environmental Protection Agency (EPA) on March 25, 2004.

This submittal continues to report the joint effort between Washington County, the Maryland Department of the Environment (MDE), and the Maryland Department of Transportation (MDOT) in achieving the goal of early attainment of the 8-hour ozone standard in Washington County.

**- Summary of EAP Progress Report for December 31, 2005:**

The December 2005 Progress report, consistent with EPA guidelines, documents progress being made regarding implementation of local control measures (including any changes or deletions to the measures since the March, 2004 submittal), inclusion of a summary of the control measures per EPA's recommendation in their October 17, 2005 guidance, any additional modeling or other analyses, and possible foreseen obstacles in completing any future milestones.

**- Anticipated Developments - Post December 31, 2005:**

The following is the additional anticipated developments and information included within the report.

**Stakeholder Process**

- The Washington County Department of Planning and Community Development, the lead County Department for the EAP effort will continue to make available to each stakeholder all EAC documents and solicit input on the documents, along with encouraging their participation in future events.
- The County, in consultation with MDE and MDOT, will continue to develop a schedule of stakeholder activities, including public meetings, conference calls, and anticipated availability of technical and other information. If and as needed, stakeholders will be divided into sub-committees to address such issues as: public participation and information, inventory and modeling, review of named and potential emissions control measures by source, evaluation of emission control measures by source category or other sub-committees subsequently identified.

### Public Outreach and Information

- Washington County will continue to develop appropriate pages on its web-site at <http://www.washco-md.net>, with links or references to other relevant sites (County, state and federal). Relevant information from stakeholder meetings, technical efforts and County decisions will also be posted on the web-site.

The web-site is an excellent source of information regarding all aspects of county government and services. This includes information relevant to the EAP to solicit input on, including, but not limited to, transportation options, community development, economic development and County Commissioner meetings (agendas, summaries, minutes, and e-mail notification service).

### Status of Modeling and Related Technical Planning Activities

- The modeling results included in the EAP Final Report shows that Washington County will be in attainment of the 8-hour ozone standard by December 31,2007.

### Action Plan Control Measures

- The EAP Control Measures as reported in the March 2004 submittal appear to be on schedule and Washington County has not experienced any problems or changes since March 2004. Progress of the individual control measures are outlined in the text of this progress report.

In accordance with EPA Regulations and Guidance information, please accept the enclosed document as Washington County's December 31, 2005 progress report, for continuation of the implementation of an Early Action Compact.

If you have any questions or need additional information, please contact the Washington County Planning Department at 240-313-2430.

Sincerely,

Michael C. Thompson  
Director, Planning and Community Development

MCT/jlb

Attachment: Washington County Early Action Plan, December 2005 progress report

cc: Tad Aburn, MDE  
Howard Simons, MDOT  
Jim Frazier, Michael Baker Jr., Inc.  
file

# Washington County, Early Action Plan

December, 2005 Progress Report



## Submitted to:

United States Environmental Protection Agency  
Region 3, Air Protection Division  
1650 Arch Street  
Philadelphia, Pennsylvania 17108-1086

## Prepared by:



Board of County Commissioners of Washington County, Maryland  
100 W. Washington St.  
Hagerstown, Maryland 21740



Maryland Department of the Environment  
1800 Washington Boulevard  
Baltimore, Maryland 21230



Maryland Department of Transportation  
7201 Corporate Center Drive, PO Box 548  
Hanover, MD 21076

**Baker**

Michael Baker Jr., Inc.  
801 Cromwell Park Drive, Suite 110  
Glen Burnie, Maryland 21061

December 30, 2005

## Early Action Plan Progress Demonstration

The Early Action Compact/Plan (EAC) Final Report to the EPA, due on March 31, 2004, and submitted on March 25, 2004, contained a final list of control measures that were chosen for the Action Plan. This correspondence is the required progress report, due on December 30, 2005, and includes any changes made to the above referenced list of final Action Plan Control Measures. It also provides status or updates for these control measures. Based on EPA guidelines, this progress report will:

- Describe any stakeholder meetings and other actions or activities that have occurred since June 30, 2005.
- Provide any updates or revisions to modeling, technical analyses, or planning activities.
- Document progress that Washington County has made towards adoption and implementation of local measures, including schedule, any changes in the schedule and any additions or deletions of measures since the Final Report submittal. Appendix – A contains a summary of the control measures and follows EPA’s recommendations issued in their October 17, 2005 guidance.
- Identify the government agency or department that currently has the authority and responsibility for implementation of each measure.

The EAC is a joint effort of Washington County (the County), the Maryland Department of the Environment (MDE) and the Maryland Department of Transportation (MDOT). On April 15, 2004, the EPA officially declared Washington County as an EAC area and deferred the 8-hour ozone nonattainment designation provided that EAC milestones are met and attainment is reached before December 31, 2007.

Based on EPA guidance for the Early Action Compacts dated, April 4, 2003, Washington County has met all milestones of the EAP. The table below provides a summary of the milestones that have been completed and are required in the future.

### Early Action Plan Milestones

Date	Description	Complete?
December 31, 2002	Initial EAP	<input checked="" type="checkbox"/>
June 16, 2003	Potential local emission reduction strategies identified and described.	<input checked="" type="checkbox"/>
June 30, 2003	Six-month progress report submitted.	<input checked="" type="checkbox"/>
December 31, 2003	Detailed discussion of local emission reductions strategies submitted.	<input checked="" type="checkbox"/>
March 31, 2004	Washington County will complete proposed Ozone Action Plan and submit to AQCC for review.	<input checked="" type="checkbox"/>
June 30, 2004	Progress report for updates to the March 31 <sup>st</sup> submittal	<input checked="" type="checkbox"/>
December 31, 2004	Semi-annual EAC progress report identifying progress, schedules, and changes to EAP	<input checked="" type="checkbox"/>
December 31, 2004	MDE in cooperation with Washington County will incorporate EAP into SIP and submit to EPA.	<input checked="" type="checkbox"/>
February 28, 2005	Washington County EAC SIP Addendum submitted to EPA	<input checked="" type="checkbox"/>
May 3, 2005	EPA's Approval and Promulgation of Air Quality Implementation Plans; Maryland; Attainment Demonstration for the Washington County Early Action Compact Area.	<input checked="" type="checkbox"/>
May 17, 2005	Notice of Proposed Rulemaking was published in the Federal Register, officially starting the 30-day public comment period.	<input checked="" type="checkbox"/>
June 16, 2005	Public comment period ends and pending comments, EPA expected to approve EAC in July 2005.	<input checked="" type="checkbox"/>
June 30, 2005	Submit the semi-annual progress report.	<input checked="" type="checkbox"/>
December 31, 2005	Washington County implements the local control measures that have been incorporated into the SIP. Submit the semi-annual progress report	<input checked="" type="checkbox"/>
June 30, 2006	Washington County certifies progress toward attainment since previous milestone, e.g., continued implementation and progress toward improvement in air quality and emissions reductions.	<input type="checkbox"/>
December 31, 2007	Washington County attains the 8-hour ozone NAAQS.	<input type="checkbox"/>

## Summary of Progress Report for December 31, 2005

The December 31, 2005 progress report is an update on the status of the efforts that were planned for in the Final EAP submitted on March 31, 2004.

### Stakeholder Process

The Washington County Department of Planning and Community Development, the lead County Department for the EAP effort continues to make available to each stakeholder all EAC documents including the Final EAP Report and solicits input on all documents, along with encouraging stakeholder participation in future events.

The County, in consultation with MDE and MDOT, will continue to develop a schedule of stakeholder activities, including public meetings, conference calls, and anticipated availability of technical and other information. As needed, stakeholders will be divided into sub-committees to address such issues as: public participation and information, inventory and modeling, review of named and potential emissions control measures by source, evaluation of emission control measures by source category or other sub-committees subsequently identified.

### Meetings

A number of meetings regarding the Washington County EAC were conducted since the June 30, 2005 submittal. Below is a summary of the meetings.

<i>Date</i>	<i>Meetings/Actions</i>
July 7, 2005	Washington County's virtual meeting with EPA regarding transit cooperation
July 14, 2005	Washington County's Outreach/Stakeholders meeting with MDE and Clean Air Partners
October 21, 2005	Meeting with Washington County agencies to discuss actions and strategies for AQAD Plan.
October 31, 2005	Interagency meeting to discuss control measures implementation status.
November 22, 2005	Fuel & Vehicle Task Group meeting
December 6, 2005	County Commissioners meeting – Approval of the AQAD plan.
December 13, 2005	Fuel & Vehicle Task Group meeting.
December 13, 2005	Interagency consulting meeting for progress report.

### Updates to Action Plan Control Measures

The EAP Control Measures included in the Final EAP report submitted to the EPA in March 2004 and approved by the Board of Commissioners, are on schedule to be

implemented by the end 2005 in Washington County. The action plan provides a detailed list, description and analysis of all of the control measures selected by the County.

This progress report includes, in Appendix-A, a summary table of the control measures as per EPA’s recommendations. Any updates or changes to the control measures have been documented in this report. Most of the measures have been either implemented or are on schedule for implementation without any changes. However, for the ones that did change, the previous analysis was updated based on the new data collected. Below is a brief summary of the control measures for which new information was available:

Based on the new data collected, the previous emissions analysis has been updated for the following three control measures:

- Ride-matching – the region has seen a dramatic increase in the number of commuters ridesharing. This can be attributed to the commuter connections program and its websites maintained by MWCOG and other clean air outreach efforts in the region. The participation for the ride-matching program has gone up from 30 to 134 commuters since the last review done in March 2004. As a result there has been an increase in the emission reduction due to the control measure as given in the table below.
- Park-and-ride – the emission reduction estimates for park-and-ride have also increased. Based on State Highway Administration’s 2005 utilization data, 8 lots with 717 total parking spaces had an increase in utilization from 56% to 91%. This means on an average 652 parking spaces are being utilized compared to the 401 parking spaces being utilized when last reviewed. The park and ride lots are surveyed two times a year once in spring and once in fall by the SHA.
- Enterprise zone jobs tax credit – this emission estimate was removed from the action plan. After careful reevaluation of the program, the emission reduction credit taken for this measure was deemed improbable.

Control Measures	Change in Emission Reduction Estimate			
	VOC (kg/day)		NOx (kg/day)	
	Old	New	Old	New
Ride-matching	0.33	1.52	0.31	1.44
Park and ride	1.77	2.92	1.80	3.04
Enterprise zone jobs tax credit	1.59	0	0.31	0

New information was available for the following control measures, though the emission estimates did not change:

- Telework Center – Since it was founded in 1993, the Telework Center facility located in Hagerstown has served more than 300 public and private-sector workers. Marketing efforts such as promotions on government channel TV, local radio stations, flyers, newspaper ads and classifieds, open houses, etc., have resulted in a 10% increase in utilization since the last review. There has also been a surge in outreach activity from the federal agencies in the region to promote Teleworking. In the previous review 19 of the available 32 workspaces were utilized per day at the facility resulting in a 60% utilization rate. The latest report

shows that on an average 22 workspaces per day were utilized this year. Since the emissions reduction due to this increase is negligible, credit has not been taken for the 10% increase. Though, it is to be noted that future years will likely see an increase in employees participating in Telecommuting and Teleworking.

- Air Quality Action Days (AQAD) – Washington County adopted the AQAD program on December 6, 2005 following the county commissioners approval. The Washington County website now contains AQAD information ([http://www.washco-md.net/air\\_qual.shtm](http://www.washco-md.net/air_qual.shtm)) as shown in Figure 1. It also contains a link to the website maintained by MDE, where Air Quality forecast information is available. The Washington County website contains a forecast icon for the Air Quality Index for the day and it also contains detailed information on AQAD where people can get tips for bad air quality days. Appendix – B includes the AQAD action plan for Washington County. Approximately 100 brochures containing AQAD information have been distributed so far in the County. The majority of brochures were disseminated through public displays in the lobbies of government offices. Specific businesses that were sent information include the County's top employers such as: Citicorp Credit Service, First Data Merchant Services, Mack Truck, Staples Distribution Center, Phoenix Color Corp., Horizon Goodwill Industries, and Roadway Express. Other governmental and public service agencies that received information include: Washington County's Incorporated Municipalities of Clear Spring, Hancock, Williamsport, Hagerstown, Funkstown, Keedysville, Sharpsburg, Boonsboro, and Smithsburg, Washington County Chamber of Commerce, Hagerstown Community College, Washington County Board of Education, Washington County Health Department, and the Washington County Hospital Association.



**Figure 1: Washington County Website for AQAD**

- Clean Air Partners/Public Education Outreach – In order to facilitate information sharing and public outreach, Washington County will conduct annual air quality training sessions for its employees in late February and early March. The Human Resources Department and the Planning and Community Development department will coordinate several mandatory training sessions throughout the County for all employees. The training will be given to all full-time, part-time,

and seasonal employees. There are approximately 650 full time employees and between 150 and 300 part-time, temporary and seasonal employees depending on the season. The County anticipates that at least 500 employees will be educated by the start of the peak air quality season. These training sessions will be educational programs exposing employees to the health effects of air pollution, causes of air pollution, and voluntary actions that can be taken to help improve air quality. It will also introduce employees to the Air Quality Action Days program in place in the County and will assist them in understanding the notification process in place. In addition to training opportunities, information will be distributed to County Employees via attachments to paychecks and periodic articles in the County Employee newsletter.

- Transit Programs – the three transit programs serving the county include the County Commuter Bus Service, the Turning Point Transit Service and the Commuter Bus Service from Hagerstown to Shady Grove Metro Station. The County Commuter Bus Service runs 9 different routes with an average daily boarding of 936 passengers. The Turning Point Transit Service runs 7 minibus/vans to provide specialized curb to curb transportation for eligible persons with disabilities who are not able to access regular fixed route transit service. The Commuter Bus Service operates around 4 trips in the am and 6 trips in the pm from Hagerstown to Shady Grove Metro Station.
- E-government/E-commerce Enhancements – Washington County has implemented various E-government/E-Commerce solutions to reduce trips and to improve and enhance its administration. County permit inspectors can now file paperwork using wireless technology in the field rather than returning to the office. Inspectors average about 15-25 inspections per day depending on the season, type of inspection, and how many inspectors may be available that day. All 11 county inspectors are currently using wireless technology thereby avoiding trips to the office. County inspectors are responsible for permits applied for within County jurisdiction as well as 5 out of the 9 incorporated municipalities in Washington County. This accounts for approximately 450 square miles. Using Accela Wireless while in the field allows the inspectors to remain in constant contact with the office. Inspections can be updated, scheduled, rescheduled, cancelled and permit data can be updated in the field by the inspectors in real time. By March 2006, the department will be expanding its services to the County's website (Velocity Hall), which is a cost effective way to provide its customers with even greater services. Customers can access services and carry out entire processes on-line from looking up information to applying for electrical, plumbing and mechanical permits (which do not require plans), saving them time, money, and vehicle trips to the office
- Fuel & Vehicle Task Group – A new control measure, the Fuel & Vehicle Task Group, was added to the list of action plan measures. The Washington County government established this task group, which is staffed by eight representatives of County departments. The group has the following primary aims: develop a plan to reduce fuel consumption, investigate alternative fuel products and explore other fuel and vehicle related options that could help reduce County costs. Several of the group's preliminary recommendations include measures that will produce air

quality benefits. No credit has been taken for the measures developed by this group since they are only recommendations and will not necessarily be implemented. Some of the measures suggested include use of alternative fuels, establishment of a fuel efficiency goal, reevaluate use of large vehicles instead of smaller and more fuel efficient vehicles, replacement of fleet vehicles with hybrid vehicles, etc.

- Signal System Enhancements – The State Highway Administration’s traffic signal synchronization projects on US 40 and MD 65 were completed last year as per schedule. No new projects are proposed by SHA but the City of Hagerstown synchronized the signals on Eastern Blvd. at the following locations:
  - Eastern Blvd. at US 40
  - Eastern Blvd. at Conrad Court
  - Eastern Blvd. at Professional Court
  - Eastern Blvd. at MD 64

Credit has not been taken for these new locations, as the benefits were deemed negligible.

- Incident Management/Intelligent Transportation Systems – The incident management programs for installing Highway Advisory Radio at 3 locations in the County have been implemented. No new ITS activities are proposed. Previous plans to install cameras at the I-70/I-81 interchange have been placed on hold indefinitely because of technical problems.

No new information is available for all other control measures and they continue to be on schedule for implementation at this time. Washington County has not experienced any problems or changes other than the ones mentioned above since June 2005.

Following is the list of the Action Plan Control Measures. The measures are divided into two main categories: State and Local control measures and Federal control measures. The emission reduction credit taken for each measure is also listed in the tables below.

### **1. State and Local Measures:**

All control measures falling under the State and Local control measures category are either already in place or scheduled to be implemented by the end of 2005. The table below summarizes these measures and credits taken.

## State and Local Control Measures – Summary Table

Control Measures	Emissions Reductions	
	VOC (Kg/day)	NO <sub>x</sub> (Kg/day)
Ride-Matching/Commuter Connections	1.52	1.44
Park & Ride Lots	2.92	3.04
1. Telework Center	0.19	0.22
2. Telecommuting	2.87	3.12
Air Quality Action Days	Voluntary Program - No credit taken	
Clean Air Partners/Public Education Outreach	Voluntary Program - No credit taken	
Transit Programs in Washington County		
1. County Commuter Bus Services (9 routes)	5.30	4.19
2. Turning Point Transit Services	0.43	0.41
3. Commuter Bus Service from Hagerstown to Shady Grove Metro Station	1.65	1.75
E-government/E-commerce Enhancements	1.59	0.31
Fuel & Vehicle Task Group	Credit not taken, as it is not quantifiable	
Growth Management Program	13.24	15.42
Signal System Enhancements		
1. US-40: Cleveland Av. to Edgewood Rd	6.00	1.81
2. MD-65 Doub Way to Henry Douglas Dr	4.22	1.27
Incident Management/Intelligent Transportation Systems (ITS)		
1. Highway Advisory Radio (3 locations)	17.59	7.99
On-Road Vehicle Acquisitions		
1. Fleet Replacement (SHA - 2 vehicles)	0.01	0.01
2. Transit Fleet Replacement	- 0.02	13.6
3. Transit Engine Re-build	1.49	0.00
4. Fleet Replacement (MTA - 1 vehicle)	0.00	0.00
Vehicle Emissions Inspection Program (VEIP)	480.81	562.46
OTC Programs		
1. Consumer Products	108.86	0.00
2. Architectural and Industrial Maintenance	92.18	0.00
3. Portable Fuel Containers	54.43	0.00
Low Emissions Paint	26.28	0.00
Off-Road Vehicle Replacement	Credit not taken, as it is not quantifiable	
RACT Controls	0.00	1,312.31

*Note: Positive numbers imply reduction in emissions and negative numbers imply increase in emissions.*

## 2. Federal Control Measures

This section identifies the control measures implemented and regulated at the federal level. They include engine standards, fuel requirements, and stationary source controls that will be implemented by 2005 or phased-in implementation schedule completed by

2007. The federal control measures will apply to Washington County and the entire state of Maryland. Below is a summary table followed by a brief description of each measure with estimated emission benefits.

**Federal Control Measures – Summary Table**

Measure	Emissions Reductions	
	VOC (Kg/day)	NOx (Kg/day)
NLEV	81.65	99.79
Tier II	780.18	2,821.35
HDE Standard	0.00	172.37
Phase I & II Engine Standards	Credit not taken. Expected VOC benefit = 30% reduction by 2005.	
Engine Standards for Diesel Powered Engines	Credit not taken. Expected NOx benefit = 25% reduction in new engines by 2005.	
Engine Standards for Gasoline Powered Marine Engines	Credit not taken. Expected VOC benefit = 25% reduction in new engines by 2005.	
Engine Standards for Large Gasoline Powered Engines	Credit not taken. Expected VOC benefit = 20% reduction by 2005. Expected NOx benefit = 20% reduction by 2005.	
Engine Standards for Locomotive Engines	Credit not taken. Expected VOC benefit = 30% reduction by 2005. Expected NOx benefit = 30% reduction by 2005.	
NOx SIP Call	Credit not taken. Expected NOx benefit = 53% reduction from 2003 levels by 2009.	

## Acronyms :

1. AQAD - Air Quality Action Days
2. BMC - Baltimore Metropolitan Council
3. CAP - Clean Air Partners
4. CCTV - Closed Circuit Television
5. CHART - Coordinated Highways Action Response Team
6. DMS - Dynamic Message Signs
7. EAC - Early Action Compact
8. EAP - Early Action Plan
9. EPA - Environmental Protection Agency
10. FHWA - Federal Highway Administration
11. HAR - Highway Advisory Radio
12. HDE - Heavy Duty Engines
13. ITS - Intelligent Transportation Systems
14. IVR - Interactive Voice Response
15. MDE - Maryland Department of Environment
16. MDOT - Maryland Department of Transportation
17. MTA - Maryland Transit Administration
18. MVA - Motor Vehicle Administration (Maryland)
19. MWCOG - Metropolitan Washington Council of Governments
20. NAAQS - National Ambient Air Quality Standards
21. NLEV - National Low Emissions Vehicle
22. NO<sub>x</sub> - Oxides of Nitrogen
23. OTR - Ozone Transport Region
24. RACM - Reasonably Available Control Measures
25. RACT - Reasonably Available Control Technologies
26. SHA - State Highway Administration (Maryland)
27. SIP - State Implementation Plan
28. VDOT - Virginia Department of Transportation
29. VEIP - Vehicle Emissions Inspection Program
30. VMT - Vehicle Miles Traveled
31. VOC - Volatile Organic Compounds

**APPENDIX :**

- A. Control Measures Summary Table
- B. AQAD plan draft document

**APPENDIX - A**

### Early Action Compacts December Progress Summary Table

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
<b>31 Washington Co., MD (Effective date of nonattainment designation deferred)</b>							
<b>State &amp; Local Measures:</b>							
Ride-Matching / Commuter Connections	Incentives and support for Car & Vanpool Programs. There are approximately 134 commuters participating in these programs in Washington County. Responsible agency: MWGOG & MTA.	Implemented. Participation up to 134 commuters from 30 commuters since previous review.	Implemented June, 2005	1.52 kg/day	1.44 kg/day		<a href="http://www.mwco.org/commuter/ccindex.html">http://www.mwco.org/commuter/ccindex.html</a> <a href="http://www.mtaryland.com/resources/transitlinks/mrdridesharing/">http://www.mtaryland.com/resources/transitlinks/mrdridesharing/</a>
Park and Ride lots	Existing Park & Ride Lots in the county (8 PNR Lots with 717 total parking spaces. Utilization rates as per SHA's 2005 Park Ride Inventory). Responsible agency: MDO1	Implemented. Average utilization of PNR Lots up from 56% to 91% as per SHA 2005 data.	Implemented June, 2005	2.92 kg/d	3.04 kg/d		Based on SHA's 2005 Park & Ride Inventory data.
Telecommuting	1. Telework center in Hagerstown (32 workspaces at 60% utilization) Responsible agency: State/Federal Government. 2. Telecommuting Outreach Program (home-based teleworkers) Responsible agency: MWCOG.	Implemented. Utilization rate for telework center increased by 10% from 19 workspaces to 22. Increase in outreach efforts by federal agencies. Additional credit not taken.	Implemented June, 2005	3.1 kg/d	3.3 kg/d		
Air Quality Action Days	The Air Quality Action Days program and air quality forecasting efforts currently in place in Baltimore and Washington DC has been expanded to Washington County. The Air Quality Action Days program is a voluntary initiative by government, environmental groups, and business leaders working with the general public to take extra action to prevent air pollution when unhealthy air pollution levels are predicted. When the air quality is predicted to be unhealthy in both the Baltimore and Washington areas, MDE issues Air Quality Action Day notices to media outlets, government agencies, and Air Quality Action Day participants. Daily forecasts for the Baltimore/Washington area and Washington County are also available on MDE's website and on the Air Quality Hotline. Washington County will create a web page that will contain information and links for air quality.	Implemented. Adopted on December 6, 2005 Washington County's website now contains AQAD forecasts and information.	Implemented December, 2005	NQ	NQ		<a href="http://www.washco-md.net/air_qual.shtm">http://www.washco-md.net/air_qual.shtm</a>
Clean Air Partners/Public education outreach	Clean Air Partners is a volunteer, nonprofit, public-private partnership chartered by the Metropolitan Washington Council of Governments (MWCOG) and the Baltimore Metropolitan Council (BMC) and has been expanded to include Washington County. The Partnership seeks to improve health and the quality of life in the region by educating the public to take voluntary action to reduce ground-level ozone and to reduce exposure to ozone. It will build and broaden awareness of how individuals contribute to air pollution while informing them about the adverse effects of ground level ozone. Transportation grants from the District of Columbia, MDOT, VDOT, and grants from private sector partners and MWCOG fund the operation. BMC, MDE and private sector partners contribute large amounts of in kind services.	Implemented. Washington County will conduct air quality training sessions for its employees twice per year. In addition to this, information will be distributed to county employees via attachments to paychecks and periodic articles in the County Employee newsletter.	Implemented June, 2005	NQ	NQ		
Transit programs in Washington County	County commuter bus service (9 routes), turning point transit services and commuter bus service from Hagerstown to Shady Grove Metro Station.	On-going.	Implemented June, 2005	7.4 kg/d	6.4 kg/d		
E-gov/e-commerce enhancement	Use of advanced technology to enhance government permits, administration and information distribution. Responsible agency: IVR/Permits Plus. Trips reduced or eliminated by using on-line and telecommunication services from MVA and Washington County's website. Washington County to implement services to assist permits and inspections.	Implemented. County permit inspectors can now file paperwork and receive information using wireless technology in the field.	Implemented December, 2005	1.6 kg/d	0.3 kg/d		
Fuel and Vehicle Task Group	The Washington County government has established a new task group called the 'Fuel and Vehicle Task Group', staffed by eight representatives of County departments with a primary aim to develop a plan to reduce fuel consumption, look into alternative fuel products and other things that could help reduce costs to the County. Responsible Agency: Washington County.	Implemented	Implemented December, 2005	NQ	NQ		
Growth management program	Hopewell Valley Promotion - policies that integrate transportation and land use decisions. Responsible agency: Washington County	Implemented	Implemented June, 2005	13.2 kg/d	15.4 kg/d		
Signal system enhancements	State Highway Administration upgraded the signal systems on 2 corridors in Washington county which will improve traffic flow and reduce idling delay at intersections: 1. US-40: Cleveland Avenue to Edgewood Road. 2. MD-65: Doub Way to Henry Douglas Drive	Implemented. Signal improvements done for additional locations in the city of Hagerstown. Credit not taken for these.	Implemented June, 2005	10.2 kg/d	3 kg/d		
Incident mgt/Intell trans. System	On-going and planned Incident Management programs by CHART in Washington County. Highway advisory radio in 3 location.	Implemented	Implemented June, 2005	17.6 kg/d	8 kg/d		
On-road vehicle acquisitions	The following on-road vehicle replacements are scheduled in Washington County 1. Fleet Replacement (SHA - 2 vehicles) 2. Transit fleet replacement (Bus replacement) a) Turning Point: one replacement. b) County Commuter: 5 scheduled replacement. 3. Transit engine re-built (Installation of Emissions Reduction Devices on Engine Re-build). County Commuter: 9 engine re-builds. (The state highway fleet replacement will be implemented at no cost to the county.) 4. Fleet Replacement (MTA - 1 vehicle)	Implemented	Implemented December, 2005	1.5 kg/d	13.7 kg/d		

### Early Action Compacts December Progress Summary Table

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Vehicle Emissions Inspection Program (VEIP)	The Vehicle Emissions Inspection Program, mandated in Maryland and enforced by MDOT and MDE, includes an OBD II and IM240 program.	Implemented	Implemented June, 2005	480.8 kg/d	562.5 kg/d		
OTC- consumer products	Consumer Products (CP): Beginning in January 2005, this rule will establish limits, expressed as a percent VOC by weight, upon the concentration of VOCs contained in approximately 80 categories and subcategories of consumer products	Implemented	Implemented June, 2005	109 kg/d	0		
OTC-architectural and ind main	Architectural and Industrial Maintenance (AIM): This rule sets specific VOC content limits (in grams/liter) for 46 AIM coating categories. It requires compliance with the limits by January 1, 2005. In most cases, these limits are more stringent than existing Federal AIM rules.	Implemented	Implemented June, 2005	92 kg/d	0		
OTC-portable fuel containers	Portable Fuel Containers (PFC): The regulation applies to new gas cans and spouts sold in Maryland starting January 1, 2004. The rule applies to any person or entity that sells, supplies, offers for sale, or manufactures for sale gas cans and/or spouts; and is intended to reduce VOC emissions from storage, transport, and refueling activities.	Implemented	Implemented June, 2005	54 kg/d	0		
OTC-low emissions paint	Use low emissions yellow and white paint for markings on roadways in county.	Implemented	Implemented June, 2005	26 kg/d	0		
Off-road vehicle replacements	Landfill vehicle replacements in Washington County include a Dozer and a Compactor in 2002 and a Tractor Mower in 2004.	Implemented	Implemented June, 2005	NQ	NQ		
RACT Controls -- Post 1999 inventory RACT	The entire state of Maryland is located in the Northeast Ozone Transport Region (OTR) and is subject to RACT controls for major stationary sources. The sources located in Washington County that are subject to RACT can be found in the table below along with their tons per year emissions benefits.	Implemented	Implemented June, 2005	0	1312 kg/d		
<b>Federal Control Measures:</b>							
NLEV	Under the National Low Emission Vehicle program auto manufacturers have agreed to comply with tailpipe standards that are more stringent than EPA can mandate prior to model year 2004. The NLEV program was instituted by the OTC states in 2001. Maryland opted into the program in 1999, two years prior to the OTC adoption	Implemented.	Implemented 1999	81.65 kg/day	99.79 kg/day		
TIER II	Tailpipe standards are set at an average standard of .07 grams per mile for NOx for all classes of passenger vehicles beginning in 2004. Vehicles weighing less than 6,000 pounds will be phased in to this standard between 2004 and 2007. Beginning in 2004, the nation's refiners and importers of gasoline will have the flexibility to manufacture gasoline with a range of sulfur levels as long as all of their production is capped at 300 ppm. By 2006, refiners will meet a 30 ppm average sulfur level with a maximum cap of 80 ppm.	Implemented	Implemented 2004	780.18 kg/day	2821.35 kg/day		
HDE Stanadard	A PM emissions standard of .01 grams per brake-horsepower-hour for new heavy-duty engines scheduled to take full effect in the 2007 model year. In addition, refiners will be required to start producing diesel fuel for use in highway vehicles with a sulfur content of no more than 15 ppm, beginning on June 1, 2006	On-schedule.	Implementation by 2007	0 kg/day	172.37 kg/day		
Phase I & II Engine Standards	Phase I emission standards for non-road, handheld and non-handheld engines operating at or below 19 kW took effect in model year 1997. Phase II standards for non-road, non-handheld Class I and II engines operating at or below 19 kW will be phased in beginning in model year 2002 and will be complete by 2007	On-schedule.	Implementation years 1997 & 2002	NQ	NQ		Credit not taken. Expected VOC benefit = 30% Reduction by 2005
Engine Standards for Diesel Powered Engines	A three-tiered process, beginning in 1996 and continuing through 2008, will increase emission standards for non-road diesel powered engines used for a variety of purposes such as construction & agriculture.	On-schedule.	Implementation years 1996, 2001 & 2006	NQ	NQ		Credit not taken. Expected NOx benefit = 25% Reduction in new engines by 2005
Engine Standards for Gasoline Powered Marine Engines	Outboard engine standards began in 1998 and will be phased in through 2006. Inboard standard were set in 2000. Auxiliary Marine engines that operate at less than 25hp were subject to emission standards beginning in 1997. A second phase of emission standards for these engines will be phased in between 2001 and 2005. Auxiliary engines that operate above 25hp will need to meet the requirements for the same size land-based non-road spark-ignition engines.	On-schedule.	Implementation years 1997, 1998, 2000 & 2001	NQ	NQ		Credit not taken. Expected VOC benefit =25% reduction in new engines by 2005
Engine Standards for Large Gasoline Powered Engines	A two-tiered standard with Tier 1 beginning in 2004 and Tier 2 beginning in 2007. These standards will regulate non-road gasoline powered engines rated over 19kW.	On-schedule.	Implementation years 2004 & 2007	NQ	NQ		Credit not taken. Expected VOC benefit = 20% Reduction by 2005. Expected NOx benefit = 20% Reduction by 2005
Engine Standards for Locomotive Engines	A three-tiered emission standard for new or remanufactured locomotive engines.	On-schedule.	Implementation years 1973, 2002 & 2005	NQ	NQ		Credit not taken. Expected VOC benefit = 30% Reduction by 2005. Expected NOx benefit = 30% Reduction by 2005
NOx SIP Call/Clean Air Interstate Rule	This federal rule and state regulation will be implemented to further reduce NOx emissions from major NOx sources. On March 10, 2005, the Environmental Protection Agency (EPA) announced the Clean Air Interstate Rule (CAIR), a rule that will achieve the largest reduction in air pollution in more than a decade. This action, offers steep and sustained reductions in air pollution as well as dramatic health benefits at more than 25 times greater than the cost by 2015.	On-schedule.	Implementation by 2005	NQ	NQ		Credit not taken. Expected NOx benefit = 53% Reduction from 2003 levels by 2009.
<b>Comments:</b>							

**APPENDIX - B**

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**AIR QUALITY ACTION DAY PLAN**  
**FOR WASHINGTON COUNTY GOVERNMENT**  
**2005**



PREPARED BY THE AIR QUALITY WORK GROUP  
Washington County Department of Planning & Community Development  
Maryland Department of the Environment  
Maryland Department of Transportation  
Michael Baker Jr., Inc.

Air Quality Action Days Plan  
Standard Operating Procedures

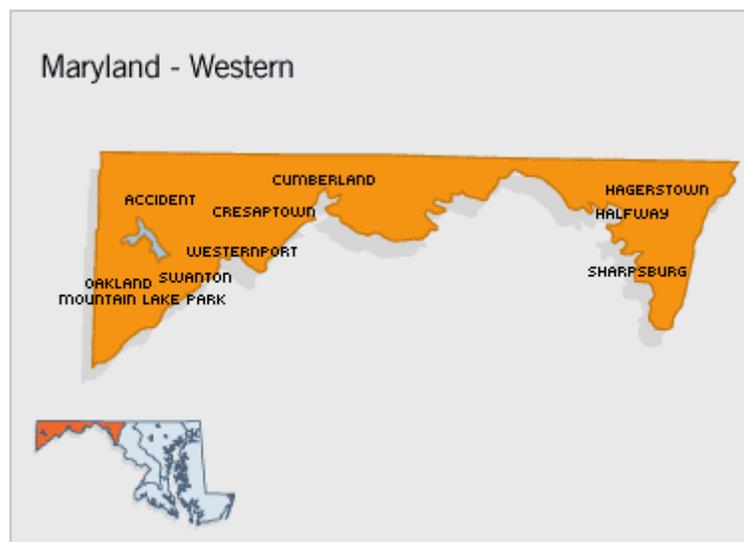
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	Clean Air Partners
	Washington County Employee Training Sessions

## 1.0 Introduction and Background

In an effort to reduce air pollution, the Washington County Early Action Compact (EAC) Area has established an Air Quality Action Day (AQAD) Plan to reduce emittance pollution when air quality is forecasted to be unhealthy. Air Quality Action Days for Western Maryland including Washington County are declared when ground level ozone or particle pollution is predicted to exceed health standards. On Air Quality Action Days, individuals and employers alike can take easy and effective actions to reduce production of and exposure to air pollution. These actions are intended to encourage employees, other county agencies, and businesses to voluntarily reduce emissions. Employees and residents who are most at risk from exposure to air pollution (asthmatics and people with other heart and lung conditions, children, pregnant women, outdoor workers and others engaged in strenuous activity, and the elderly) can then plan to take precautions to protect themselves such as limiting outdoor activity.

### 1.1 Forecasting Air Quality Action Days



**Figure 1 - Map of Western Maryland**

Weather forecasts and pollution monitors help experts predict future concentrations of air pollution. Daily air quality forecasts are provided for the Baltimore metropolitan area, Washington metropolitan area, and Western Maryland by a team of meteorologists from the Maryland Department of the Environment, the University of Maryland, and the Metropolitan Washington Council of Governments. Extended range forecasts provide a three-day forecast so people can better plan their week and opportunities to arrange car pools, take mass transit, or take other actions to limit pollution when air quality is predicted to be unhealthy.

Air pollution levels are continually observed through a monitoring network within Western Maryland and Northern Virginia. This information is made available to the public through e-mail services, Web sites, air quality hotlines, bulletin boards, and the

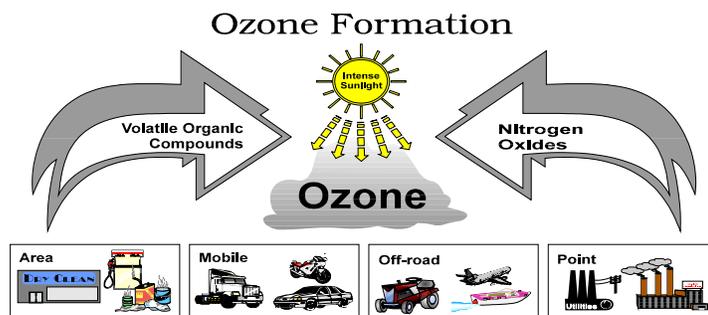
media.

Ozone is a seasonal pollutant with its highest concentrations observed during May through September. Unlike ozone, particle pollution is not a seasonal pollutant and can have high concentration anytime of the year. On Air Quality Action Days, air quality is expected to reach unhealthy levels, Code Orange or higher.

## 2.0 Ozone Formation

Ground-level ozone is formed when a mixture of common air pollutants react in heat and strong sunlight. The main ozone-causing pollutants are NO<sub>x</sub> (from fuel burning sources like utilities and automobiles) and VOCs (from sources such as gasoline, paints, inks and solvents). These two categories of pollutants are also referred to as ozone precursors. Motor vehicles account for about 30-40% of the ozone forming pollutants in the Washington and Baltimore areas. The formation of ozone is dependent on weather conditions such as temperature, the amount of sunlight, and wind direction and strength. Because sunlight and high temperatures function as catalysts to form ozone, the problem is seasonal, with the ozone season lasting from May through September in the Baltimore and Washington Region. Typically, ozone levels escalate rapidly around noontime, peak in the afternoon and taper off when the sun goes down.

**Figure 2: Ozone Formation**



It is important to distinguish ozone in the upper atmosphere from ground-level ozone. The former, known as the ozone layer, acts as a shield in the sky to protect us from the sun's harmful ultra-violet rays. The latter, when in the air we breathe in high concentrations, poses a threat to human health and to the natural environment. Ground-level ozone (O<sub>3</sub>) is not discharged directly but is formed through a complex series of chemical reactions when oxygen molecules and atoms (O<sub>2</sub> + O) are combined.

## 2.1 Ozone and Your Health

Ozone is an extremely reactive gas comprised of three atoms of oxygen. Ozone exists naturally in the earth's upper atmosphere, the stratosphere, where it shields the earth from the sun's harmful ultraviolet rays. However, ozone found close to the earth's surface, called ground-level ozone, is a component of smog and a harmful pollutant.

### *Nature and Sources of Ground-level Ozone*

Ground-level ozone is a colorless gas that can be found in the air we breathe. It is formed through a complex chemical reaction between volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>) in the presence of sunlight. Sources of manmade VOCs and NO<sub>x</sub> include: 1) automobiles, trucks and buses; 2) gasoline storage and transfer; 3) large combustion and industry sources such as utilities; 4) industrial use

of solvents and degreasing agents; 5) consumer products such as paints and cleaners; and 6) off-road engines such as aircraft, locomotives, boats, construction equipment and lawn and garden equipment. VOC's are also produced naturally by certain types of vegetation.

#### *Health Effects of Ground-level Ozone*

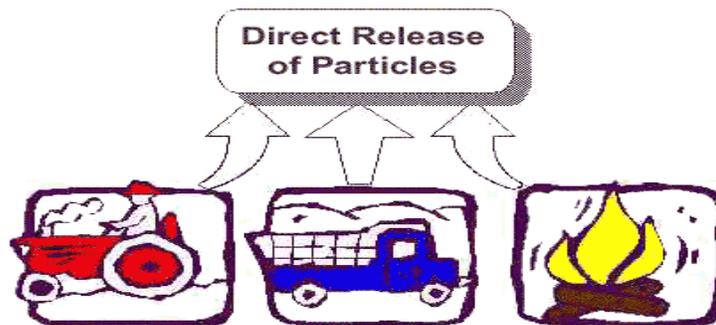
Too much ozone in the air we breathe can be harmful to people who work or exercise outdoors regularly, anyone with respiratory difficulties, and especially our children. The most common symptom that people have when exposed to ozone is pain when taking a deep breath. Long-term effects may include reduced lung function and scarring of lung tissue.

Children are at greater risk for ozone-related respiratory problems because their lungs are still developing, they breathe more rapidly, and they play outside during the afternoons when ozone is at its highest levels. They inhale more pollution per pound of body weight than adults do. Additionally, anyone suffering from lung disease has even more trouble breathing when air is polluted with high levels of ozone. Prolonged exposure, even to relatively lower levels of ozone, can reduce a healthy adult's lung function by 15 to 20%.

### **3.0 Particle Formation**

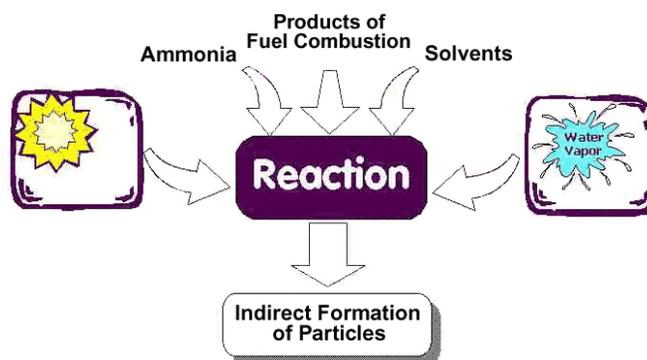
Particulate matter is formed when some fine particulates are directly emitted into the air. They come from a variety of sources such as cars, trucks, buses, power plants, factories, construction sites, tilled fields, unpaved roads, stone crushing, and burning of wood.

**Figure 3: Direct PM Formation**



While others are indirectly formed when gases from burning fuels react with sunlight and water vapor that are chemically transformed into particles.

**Figure 3a: Indirect PM Formation**



### 3.1 Particle Pollution and Your Health

Particles, also known as particulate matter, is a pollutant that includes both solid particles and liquid droplets found in the air. Particles are associated with serious health affects including increased hospital and emergency room visits for people with respiratory and heart disease. Particles also effect the natural environment in which we live. Particle pollution is the major source of haze that reduces visibility in many parts of the United States. When deposited on soil and water, it can harm the environment by changing the nutrient and chemical balance.

#### *Nature and Sources of Particulate Matter*

"Particulate matter" is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. These particles come in a wide range of sizes. Particles less than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter are termed "fine" particles. Some particles are directly emitted into the air and come from a variety of sources such as cars, trucks, buses, factories, construction sites, tilled fields, unpaved roads, stone crushing, and burning of wood. Other particles may be formed in the air from the chemical change of gases. These particles are indirectly formed when gases from burning fuels react with sunlight and water vapor. Sources of this type of particle pollution come from fuel combustion in motor vehicles, at power plants, and in other industrial processes.

#### *Health Effects of Particle Pollution*

Exposure to particle pollution is associated with numerous effects on human health, including respiratory problems, hospitalization for heart or lung diseases, and even premature death. Children are at greater risk because they are generally more active outdoors and their lungs are still developing. The elderly and people with heart or lung diseases are also more sensitive to some types of air pollution. Particles can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis, causing more use of medication and more doctor visits.

### 4.0 The Air Quality Index

The Air Quality Index (AQI) is an index for reporting daily air quality. It tells you how clean or polluted your outdoor air is, and what associated health effects might be a concern for you. The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air. The Environmental Protection Agency (EPA) calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, EPA has established national air quality standards to protect public health.

#### *How the Air Quality Index Works*

Think of the AQI as a yardstick that runs from 0 to 300\*. The higher the AQI value, the greater the level of air pollution and the greater the health concern. For example, an AQI value of 50 represents good air quality with little potential to affect public health, while an AQI value over 200 represents very unhealthy air quality.

An AQI value of 100 generally corresponds to the national air quality standard for the pollutant, which is the level EPA has set to protect public health. AQI values below 100 are generally thought of as satisfactory. When AQI values are above 100, air quality is considered to be unhealthy-at first for certain sensitive groups of people, then for everyone as AQI values get higher.

*Understanding the AQI*

The purpose of the AQI is to help you understand what local air quality means to your health. To make it easier to understand, the AQI is divided into five categories\*. Each category corresponds to a different level of health concern.

Air Quality Action Guide		AIR QUALITY	RECOMMENDED ACTION
CODE PURPLE	Very Unhealthy		<p><b>During Code Purple:</b></p> <ul style="list-style-type: none"> <li>▶ People with respiratory or heart ailments, children, and older adults should avoid outdoor physical activities.</li> <li>▶ Everyone else should avoid prolonged or heavy exertion outdoors.</li> </ul> <p><b>Residents are strongly urged to take all of the actions listed below.</b></p>
CODE RED	Unhealthy		<p><b>During Code Red:</b></p> <ul style="list-style-type: none"> <li>▶ Children should reduce outdoor activities.</li> <li>▶ Healthy individuals should limit strenuous or prolonged work or exercise.</li> <li>▶ Individuals with respiratory or heart ailments should limit their outdoor activities.</li> </ul> <p><b>Residents are strongly urged to take all of the actions below. In addition,</b></p> <ul style="list-style-type: none"> <li>▶ Avoid mowing lawns with gas-powered mowers.</li> <li>▶ Put off any painting until later.</li> </ul>
CODE ORANGE	Unhealthy for Sensitive Groups		<p><b>The following people should limit prolonged outdoor activities:</b></p> <ul style="list-style-type: none"> <li>▶ Children and adults who experience difficulty breathing outdoors.</li> <li>▶ Those with respiratory and heart ailments.</li> </ul> <p><b>All residents are urged to:</b></p> <ul style="list-style-type: none"> <li>▶ Limit driving and refuel cars after dusk.</li> <li>▶ Avoid using aerosol products.</li> <li>▶ Share a ride, telework from home, use transit, or drive only the best maintained, most fuel-efficient vehicles.</li> </ul>
CODE YELLOW	Moderate		<p><b>Residents should:</b></p> <ul style="list-style-type: none"> <li>▶ Consolidate trips and errands.</li> <li>▶ Limit car idling when possible.</li> <li>▶ Conserve electricity and set air conditioners to 78° F.</li> </ul>
CODE GREEN	Good		<p><b>Residents should try to:</b></p> <ul style="list-style-type: none"> <li>▶ Carpool, use public transit, bike or walk.</li> <li>▶ Keep cars and boats tuned.</li> <li>▶ Use environmentally friendly paints and cleaning products.</li> </ul>

**Figure 4 – Air Quality Action Guide**

**Good** - The AQI value for your community is between 0 and 50. Air quality is considered satisfactory, and air pollution poses little or no risk.

**Moderate** - The AQI for your community is between 51 and 100. Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.

**Unhealthy for Sensitive Groups** - When AQI values are between 101 and 150, members of sensitive groups may experience health effects. This means they are likely to be affected at lower levels than the general public. For example, people with lung disease are at greater risk from exposure to ozone, while people with either lung disease or heart disease are at greater risk from exposure to particle pollution. The general public is not likely to be affected when the AQI is in this range.

**Unhealthy** - Everyone may begin to experience health effects when AQI values are between 151 and 200. Members of sensitive groups may experience more serious health effects.

**Very Unhealthy** - AQI values between 201 and 300 trigger a health alert, meaning everyone may experience more serious health effects.

*\* Note that the Environmental Protection Agency uses a scale from 0-500 and incorporates an additional color code (Color Code Maroon) for Hazardous air quality. Our region does not monitor such extreme levels of air pollution and therefore does not include Code Maroon.*

## PROCEDURE #1

- SUBJECT:** Air Quality Action Days County Notification Procedures
- PURPOSE:** To notify County employees that an Air Quality Action Day has been declared by the Maryland Department of the Environment.
- RESPONSIBILITY:** Several Offices, including
- \* Department of Planning & Community Development
  - \* Public Information Office
  - \* Public Transportation Department
  - \* Division of Public Works

### PROCEDURE:

1. The Maryland Department of the Environment (MDE) will declare an Air Quality Action Day if they have determined that air pollution within Western Maryland will exceed either unhealthy for sensitive groups (Code Orange), unhealthy (Code Red), or very unhealthy (Code Purple) levels.

2. Once the AQAD is declared, MDE will email an appropriate notice to the following Washington County AQAD Coordinators:

- Department of Planning & Community Development, [jbaker@washco-md.net](mailto:jbaker@washco-md.net);
- Public Information Office, [nbassett@washco-md.net](mailto:nbassett@washco-md.net);
- Public Transportation Department, [kcerrone@washco-md.net](mailto:kcerrone@washco-md.net);
- Division of Public Works - Highways Department, [sbowders@washco-md.net](mailto:sbowders@washco-md.net);
- Department of Buildings, Grounds, and Parks, [jpennesi@washco-md.net](mailto:jpennesi@washco-md.net);
- Department of Emergency Services, [jkroboth@washco-md.net](mailto:jkroboth@washco-md.net);

3. After receiving the AQAD notification email, Washington County AQAD Coordinators will then forward the email to Washington County Government staff within each Department. In cases where email is not available, notices will be posted on community bulletin boards and through other forms of direct communication.

4. Washington County AQAD Coordinators will then enact their internal notification procedures (updating lobby displays, raising flags, etc.)

## PROCEDURE #2

**SUBJECT:** Language to be Used in Notifying Employees and the Public about Air Quality Action Days -- “Declared” and “Cancelled”

**PURPOSE:** Language used to notify County employees that:

- 1) The Maryland Department of the Environment has declared an Air Quality Action Day for Western Maryland.
- 2) Air quality has improved in the following day(s) forecast and normal procedures should resume.

**RESPONSIBILITY:** Several Offices, including

- \* Department of Planning & Community Development
- \* Public Information Office
- \* Information Technologies Department
- \* Public Transportation Department
- \* Department of Public Works and Transportation

### PROCEDURE:

1. The Maryland Department of the Environment (MDE) will declare an Air Quality Action Day if they have determined that air pollution within Western Maryland will exceed either unhealthy for sensitive groups (Code Orange), unhealthy (Code Red), or very unhealthy (Code Purple) levels.

2. In communicating the message for Air Quality Action Days, use the template in Attachment A or embed the following text into email messages:

The Maryland Department of the Environment (MDE) has issued an Air Quality Action Day indicating that air quality is expected to be unhealthy tomorrow. MDE asks area residents and businesses to implement Air Quality Action Day plans. These voluntary plans will help reduce emissions that contribute to the area’s air quality problems.

**Health Warning:** People with heart or lung disease, older adults, children, and even healthy adults may experience health effects when air pollution levels are high.

- Children and older adults should reduce outdoor activities.
- Healthy individuals should limit strenuous work or exercise, especially outdoors.
- Individuals with respiratory and heart ailments, emphysema, asthma, or chronic bronchitis should limit their activity level.

**Prevention Tips:** Much of the air pollution in our region is created from vehicles, lawnmowers, other garden equipment, and common household products. In order to prevent high levels of air pollution from forming, residents are strongly urged to:

- Limit driving and, when possible, combine errands.
- Use area bus and rail lines, or share a ride to work.

- Avoid mowing lawns with gasoline-powered mowers.
- Refuel vehicles after dusk.

For More Information: Call the Air Quality Hotline at (410) 537-3247 or visit <http://www.air-watch.net>.

3. When a change in the weather has occurred and Washington County no longer receives forecast notices from the Maryland Department of the Environment indicating an Air Quality Action Day has been called, an "All-Clear" must be issued so that Washington County Government may resume normal operations. Language to indicate this change is:

"The Maryland Department of the Environment has determined that the forecasted weather patterns no longer pose an air pollution risk therefore Air Quality Action Days procedures are no longer necessary. Please resume all normal activities."

### **PROCEDURE # 3**

**SUBJECT:** Air Quality Action Day -- Flags Procedure at County Buildings

**PURPOSE:** To display flags at various County facilities indicating the County has declared an Air Quality Action Day.

**RESPONSIBILITY:** Department of Planning & Community Development

**PROCEDURE:**

1. The Department of Planning & Community Development will ensure that whenever an Air Quality Action Day is forecasted by the Maryland Department of the Environment, the Air Quality Action Day flag is raised by 8 a.m. at the following County facilities:

- Washington County Courthouse
- Transit Operations and Equipment Maintenance Center
- Washington County Administration Building

Flags will remain flying until the event is concluded.

2. The Department of Planning & Community Development will be informed that an Air Quality Action Day has been called directly by email from the Maryland Department of the Environment.

3. Department of Planning & Community Development will notify the Building Superintendent for the County to raise the flags at the above-mentioned sites by 8 a.m. on forecasted Air Quality Action Days and will lower the flags once the air quality forecast improves and the Action Day has been lifted.

4. The Clean Air Partners will provide the flags to the Department of Planning & Community Development.

5. The Department of Planning & Community Development will store these flags when not in use.

**CONTACT:** Jill Baker; Department of Planning & Community Development; 240-313-2430

## **PROCEDURE # 4**

**SUBJECT:** Fueling procedures on Air Quality Action Days

**PURPOSE:** To limit refueling of all non-essential vehicles to late afternoon or early evening hours in order to reduce ozone precursors on days forecasted to be Air Quality Action Days.

**RESPONSIBILITY:** Designated fleet managers in various County Departments including,

- Highways Department
- Department of Buildings, Grounds, and Parks
- Engineering Department
- Department of Permits and Inspections
- Department of Planning and Community Development
- Department of Transportation

### **PROCEDURES:**

1. Fleet managers will be notified of Air Quality Action Days through procedures outlined in this document.

2. Fleet managers will then notify vehicle operators of the notification and advise personnel to refuel vehicles late in the day rather than in the morning hours.

## PROCEDURE # 5

**SUBJECT:** Episodic Ban on Certain Types of Painting and Use of No and Low-VOC Paints

**PURPOSE:** To ban certain types of painting that act as precursors to ozone creation on days forecasted to be Air Quality Action Days.

**RESPONSIBILITY:** Several agencies including,

- Highways Department
- Building, Grounds, and Parks Dept.

### PROCEDURES:

1. On days forecasted to be Air Quality Action Days, notification will be sent to responsible agencies as outlined in previous procedures.

2. Air Quality Coordinators for the responsible agencies will notify personnel that an Air Quality Action Day has been forecasted and that the Plan is to be implemented.

3. Painting of County vehicles will be suspended on Air Quality Action Days.

## **Other On-going Activities**

### **Washington County Fuel and Vehicle Task Group**

In light of the recent events of Hurricane Katrina, and resulting gasoline prices, the County Administrator and Board of County Commissioners recognized the need for the County to review its vehicle purchasing program as well as fueling procedures. A task group consisting of representatives of County departments with the largest number of fleet vehicles was appointed to the Group and was given the directive to report back to the County Administrator and County Commissioners with ideas and programs to help reduce fuel consumption, look into alternative fuel products and other things that could help reduce costs.

The task group includes representatives from the County Commuter Public Transportation System, Highways department, water quality department, sheriff's office, emergency services department, and several others. Topics of discussion include General guidelines for vehicle use, Size vs. use of vehicles, Establish a percentage goal program to reduce fuel consumption, Select 4 or 5 vehicles (each in different agencies) for replacement with hybrids for pilot program, Evaluate possible use of alternative fuels.

Results of the group are to be reported back to the County Administrator within 90 days.

### **Clean Air Partners**

Clean Air Partners is a public-private partnership chartered by the Metropolitan Washington Council of Governments (MWCOC) and the Baltimore Metropolitan Council (BMC) to build and broaden awareness of how individuals contribute to air pollution while informing them about the adverse effects of ground level ozone.

The primary focus of the partnership is to promote easy and effective voluntary actions that individuals and employers can take to reduce production of and exposure to air pollution.

Of particular interest to Clean Air Partners are the contributing factors that create ground level ozone and particle pollution: automobile emissions, gasoline-powered lawnmowers, garden equipment, solvent-based consumer products and oil based paints. These factors cause ozone and particle pollution to form what can lead to health problems such as lung and heart damage, eye irritation, breathing difficulties, chest pain and may worsen bronchitis and emphysema.

During unhealthy air days, Clean Air Partners encourages people to protect their health by restricting outdoor activity.

Due to the number of bad air days, the EPA has designated the Washington metropolitan region as having a serious health problem for ground level ozone and Baltimore as having a severe problem. To reduce unhealthy air days, Clean Air Partners has encouraged residents to limit driving, use public transportation, defer mowing lawns with gasoline-powered mowers, and refrain from using solvent based consumer products

and oil based paints.

Cooperation between Washington County and Clean Air Partners will continue as the County continues to develop outreach and education programs related to Air Quality Action Days.

### **Washington County Employee Training Sessions**

In Late February and Early March of each year, the County will provide opportunities for air quality training for all County employees. The Human Resources Department and the Planning and Community Development department will coordinate several mandatory training sessions throughout the County for all employees. This training session will be an educational program exposing employees to health effects of air pollution, causes of air pollution, and voluntary actions that can be done to help improve air quality. It will also introduce employees to the Air Quality Action Days for the County and will assist in understanding the notification process in place.

In addition to training opportunities, information will be distributed to County Employees via attachments to paychecks and periodic articles in the County Employee newsletter.

## ATTACHMENT A: MDE NOTIFICATION



MARYLAND DEPARTMENT OF THE ENVIRONMENT  
1800 Washington Boulevard • Baltimore MD 21230  
410-537-3000 • 1-800-633-6101

Robert L. Ehrlich, Jr.  
Governor

Kendl P. Philbrick  
Secretary

Michael S. Steele  
Lt. Governor

# AIR QUALITY ACTION DAY

URGENT NOTICE! PLEASE HAND DELIVER, TIME SENSITIVE!  
June 26, 2003 is an  
AIR QUALITY ACTION DAY!

### Unhealthy Air Quality Forecast for June 26, 2003

The Maryland Department of the Environment (MDE) has issued an Air Quality Action Day indicating that air quality is expected to be unhealthy tomorrow in the Baltimore and Washington metropolitan areas. MDE asks area residents and businesses to implement Air Quality Action Day plans. These voluntary plans will help reduce emissions that contribute to the area's air quality problems.

**Health Warning:** People with heart or lung disease, older adults, children, and even healthy adults may experience health effects when air pollution levels are high (Code Orange or worse). Should air quality exceed the federal health standard, an Air Quality Code Red Health Advisory will be issued advising the following precautions:

- Children and older adults should reduce outdoor activities.
- Healthy individuals should limit strenuous work or exercise, especially outdoors.
- Individuals with respiratory and heart ailments, emphysema, asthma, or chronic bronchitis should limit their activity level.

**Prevention Tips:** Much of the air pollution in our region is created from vehicles, lawnmowers, other garden equipment, and common household products. In order to prevent high levels of air pollution from forming, residents are strongly urged to:

- Limit driving and, when possible, combine errands.
- Use area bus and rail lines, or share a ride to work.
- Avoid mowing lawns with gasoline-powered mowers.
- Refuel vehicles after dusk.

For More Information: Call the Air Quality Hotline at (410) 537-3247 or visit  
<http://www.air-watch.net>.



MARYLAND DEPARTMENT OF THE ENVIRONMENT  
1800 Washington Boulevard • Baltimore MD 21230  
410-537-3000 • 1-800-633-6101

Robert L. Ehrlich, Jr.  
Governor

Kendall P. Philbrick  
Secretary

Michael S. Steele  
Lt. Governor

Air Quality Forecast for April 21, 2004  
For Immediate Release  
January 26, 2006  
1:19 PM, Baltimore, MD

Contact: Robert Maddox (410) 537-3265

Forecast Region	Primary Pollutant	AQI	Color Code	Air Quality Description
Baltimore Metropolitan Area	Particles	52	Yellow	Moderate
Washington Metropolitan Area	Particles	45	Green	Good
Western Maryland	Ozone	35	Green	Good

**Air Quality Reports:** Air quality reports use the Air Quality Index (AQI), which represents the pollutants – ground level ozone and particles. Ground level ozone values are based upon an 8-hour running average. Particles with a diameter less than 2.5 microns (PM<sub>2.5</sub>) are based upon a 24-hour daily average.

**Health Warning:** People with heart or lung disease, older adults, children, and even healthy adults may experience health effects when air pollution levels are high (Code Orange or worse). Should air quality exceed the federal health standard, an Air Quality Code Red Health Advisory will be issued advising the following precautions:

- Children and older adults should reduce outdoor activities.
- Healthy individuals should limit strenuous work or exercise, especially outdoors.
- Individuals with respiratory and heart ailments, emphysema, asthma, or chronic bronchitis should limit their activity level.

**Prevention Tips:** Much of the air pollution in our region is created from vehicles, lawnmowers, other garden equipment, and common household products. In order to prevent high levels of air pollution from forming, residents are strongly urged to:

- Limit driving and, when possible, combine errands.
- Use area bus and rail lines, or share a ride to work.
- Avoid mowing lawns with gasoline-powered mowers.
- Refuel vehicles after dusk.

For More Information: Call the Air Quality Hotline at (410) 537-3247 or visit <http://www.air-watch.net>.