

AIR CURRENTS

Metropolitan Washington Air Quality Committee Newsletter (March 2005)

Kauffman Begins Chairmanship

Fairfax County Supervisor Dana Kauffman assumed the chairmanship of the Metropolitan Washington Air Quality Committee (MWAQC) in February. He has served as a Fairfax County Supervisor for ten years and represents the Lee District.

Kauffman has been a member of MWAQC for five years, and he chaired the Technical Advisory Committee in 2004.

Education and outreach to the media about air quality will be one of his challenges this year. Kauffman said he plans to improve the reporting of the region's progress towards meeting the air quality goals.

Kauffman recognized outgoing Chair Tom Dernoga, a Prince George's County Council Member, with a plaque at the February 23 meeting. As chair of MWAQC, Dernoga participated in the process with the States to revise MWAQC's bylaws and make the committee's structure more effective for meeting new air quality standards.

Three Vice-Chairs will join Kauffman as 2005 MWAQC officers: Montgomery County Council Member Nancy Floreen; D.C. Council Member Phil Mendelson; and Falls Church City Council Member David Snyder. The officers were elected in December 2004.



Current Chair Kauffman with outgoing Chair Dernoga.

For more information on Kauffman, click on the photo.

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This is the first electronic newsletter for MWAQC and COG's air quality program. It is designed to inform MWAQC members about air quality planning and progress in the months between regular MWAQC meetings. We anticipate publishing the newsletter twice in 2005.

The newsletter contains information about MWAQC's Technical Advisory Ctte (TAC), the Air Quality Public Advisory Committee (AQPAC), Clean Air Partners, air quality regulations, rules, progress, and related developments that affect air quality planning in the Washington, DC-MD-VA region.

- ◆ MWAQC, the Metropolitan Washington Air Quality Com-

mittee, ([see Map](#)) is the entity certified by the mayor of the District of Columbia and the governors of Maryland and Virginia to prepare an air quality plan for the DC-MD-VA Metropolitan Statistical Area under Section 174 of the federal Clean Air Act Amendments of 1990.

In executing its responsibilities, MWAQC coordinates air quality planning activities with the states and the Interstate Air Quality Council (IAQC), COG member local governments, other external committees, and the Transportation Planning Board; reviews policies; resolves policy differences; and adopts an air quality plan for transmittal to the IAQC and the District, Maryland, and Virginia for submittal to EPA.



New EPA Emissions Rules

CAIR Rule affects interstate emissions

This March, the U.S. Environmental Protection Agency (EPA) announced the Clean Air Interstate Rule (CAIR).

The rule affects emissions from power plants in 28 Eastern states and the District of Columbia.

CAIR is expected to improve air quality and provide health benefits by helping states reduce emissions of pollutants that contribute to ground-level ozone and particulate matter (fine soot). It will also help to reduce pollution transported across state borders.

CAIR will be implemented through an emissions trading program. EPA will allocate nitrogen oxides (NOx) and sulfur dioxide (SO₂) allowances to the states, and states will assign emission allowances to power plants. Plants can then trade allowances.

Reductions will occur in two phases. For NOx reductions, the first phase will occur in 2009 and the second phase in 2015. Reductions for SO₂ will begin in 2010. The attainment date for meeting the 8-hour ozone standard in the Washington, DC-MD-VA nonattainment area is 2009.

The Clear Skies Legislation has stalled in Congress, partly due to disagreement over whether the law should address carbon dioxide (CO₂). Clear Skies contains provisions similar to CAIR, but would alter the New Source Review and Section 126 petition provisions.

For more information, please visit <http://www.epa.gov/interstateairquality/>

Mercury Rule Released

On March 15, 2005, the U.S. EPA announced a new rule to regulate emissions of mercury from electric utilities.

Mercury is a toxic, persistent pollutant that accumulates in the food chain. Fossil fuel-fired power plants are the largest remaining source of human-generated mercury emissions in the United States.

The Clean Air Mercury Rule will build on EPA's Clean Air Interstate Rule (CAIR) to significantly reduce emissions from coal-fired power plants. EPA proposes to control mercury through a national emissions trading program.



IAQC Formed to Enhance Regional Coordination

The Interstate Air Quality Council (IAQC) is a new player in the MWAOC air quality planning world.

Formed in 2004 by the Mayor of the District of Columbia and the Governors of Maryland and Virginia to improve regional air quality planning in the Metropolitan Washington region, IAQC includes the secretaries of transportation and environment for the three



Each state will be assigned an emissions budget for mercury. State plans are required to demonstrate how budgets for reducing mercury from coal-fired power plants will be met.

The success of EPA's mercury emissions trading control strategy will depend on the number of states that decide to participate in the trading program. Some states (CT, MA, WI, NJ) have passed rules more stringent than those required by EPA's proposed rule. These states have expressed concern about using emissions trading to control mercury.

For more information, please visit www.epa.gov/mercury.

states. IAQC is particularly interested in addressing the issues of interstate transport of air pollutants and to ensure that the costs and benefits of air quality improvements are shared equitably among the three jurisdictions.

IAQC will provide general oversight and policy guidance to the regional air quality planning process in collaboration with MWAOC.

The first chair of IAQC is Ken Philbrick, Secretary, Maryland Dept. of the Environment. The IAQC will meet twice a year, but will have monthly calls to coordinate its efforts.

Harriet West, PRR Join Clean Air Partners

Clean Air Partners is excited to announce that Harriet West will be its new Managing Director.

West is a senior manager with Clifton Gunderson's Public Management Consulting Practice and has more than 20 years of experience managing diverse programs for public, private and nonprofit organizations. She brings with her a wealth of knowledge about nonprofit organizations gained from her experience as project manager of the Fairfax County Nonprofit Organization Development Initiative.

West also managed COG's Telework Center for 5 years where she worked to create and implement specific telework strategies, develop education materials, and conduct outreach and training in the metropolitan Washington area.

West may be reached at (877) 515-4593 or harriet.west@cliftoncpa.com.

Clean Air Partners is also pleased to announce that PRR was selected as its marketing consultant.

PRR is a leader in social marketing and has expertise in developing advertising and communication campaigns that lead to behavior change.

Their marketing campaigns have focused around multiple environmental issues such as air quality, recycling, natural yard care, and the global ultra violet index.

Air Quality Action Days Conference Scheduled!

Mark your calendar now for the Clean Air Partners 7th Annual Air Quality Action Days Conference, May 12, 2005, at the Hilton Old Town Alexandria.

This year's conference will provide an exciting opportunity for health care professionals, air quality experts, day care providers, teachers, and Air Quality Action Days Coordinators to exchange ideas and information on how to keep informed about air pollution levels and manage outdoor activities to limit exposure.

For further information and updates, please visit the Clean Air Partners website and look for an invitation in your mailbox as the conference draws near.

www.cleanairpartners.net



Clean Air Partners is a volunteer, nonprofit, public-private consortium that was chartered by COG and the Baltimore Metropolitan Council.

It is the air quality, public education campaign that serves the Washington and Baltimore metropolitan regions.

Clean Air Partners seeks to improve health and the quality of life in the region by educating the public to take voluntary action to reduce air pollution and to reduce exposure to air pollutants.

Low Level Jets

Researchers at the University of Maryland are learning more about contributions to air pollution in the MidAtlantic region.

Charles Piety, University of Maryland Dept. of Meteorology, and Mike Woodman, MDE, reported to the TAC recently about evidence of low level jets, or fast moving currents of air that carry pollution from the south to the north east.

Low level jets (LLJ) are fast moving night-time winds (~ 22-45 mph) traveling long distances from Georgia up the coast to the northeast. The currents form between the Appalachian Mountains and the Atlantic. Air over the mountains cools more than the air at the same elevation near the coast. This temperature gradient induces a southerly wind a few hundred meters above the ground. It carries significant pollutant concentrations of both ozone and ozone precursors with it.

Pollutants in Low level jets generally come from ground level sources such as vehicles and small businesses. Low level jets routinely occur during high ozone episodes.

Expansion of control programs in use in attainment areas such as the Baltimore Washington region to nonattainment areas would reduce ozone loads in the Washington region.

The presentation "Why is the Low Level Jet Important to the Baltimore/DC Region," is available on the TAC archived documents for January 21, 2005 meeting.

Advisory Committee Sets Goals for 2005

The Air Quality Public Advisory Committee (AQPAC) is preparing recommendations for MWAQC in several areas.

First, AQPAC is discussing the need for the Federal Aviation Administration to determine what steps can be taken to address airline emissions in ozone nonattainment areas. Local jurisdictions and the Metropolitan Washington Airport Authority are limited to only airport ground equipment emissions and have no control over airlines' aircraft emissions.

Second, AQPAC is closely tracking ozone modeling and related activities, which are critical for the development of plans to meet the ozone standard for the metropolitan Washington area. As in the past, AQPAC will work on how to effectively communicate key modeling issues.

Third, AQPAC is reviewing factors that appear to discourage the use of mass transportation in the area. Vehicle emissions, a significant contributor to the region's ozone problem, would be reduced with greater use of mass transit.

Finally, AQPAC is looking at a range of control measures up for consideration focusing on those that best reduce area emissions in a cost-effective manner.

New Public Participation on TAC

MWAQC's Technical Advisory Committee (TAC) has a new chair, Tad Aburn, MDE, and four new "stakeholder" members as a result of changes to MWAQC's bylaws.

Tad Aburn, the new TAC Chair, is Program Manager for the Maryland Department of the Environment's Air Quality Planning and Monitoring Program.

Aburn is responsible for implementing State Implementation Plan (SIP) development, regulation adoption, conformity, urban airshed modeling, inventory development and air quality education and outreach. He has been a member of MWAQC since its inception in 1992.

Under the revised MWAQC bylaws, the TAC chair will be drawn from the state environmental agencies from jurisdictions other than that of the MWAQC Chair.

Four new "Stakeholder" members have been appointed to the Technical Advisory Committee (TAC) in March. The four new, nonvoting positions on TAC were created in October with the MWAQC bylaws revision.

The new members are *Kipp Coddington*, Greater Washington Board of Trade; *Arnold Solomon*, Mirant MidAtlantic; *Julie Thomas*, National Park Service; and *Flint Webb*, Fairfax County Federation of Citizens Association. Tad Aburn, TAC Chair, appointed the new members on March 11.

TAC Notes from Last Meeting March 11, 2005

- Master control measures list grows to 250; suggestions are welcome
- 2005 Ozone Season, Forecast says 50-50 chance of being hotter than normal (update in May)
- Emissions Inventory Group projects emissions to 2009
- Comment letter sent to FAA on Environmental Impact Statement for Dulles airport runway expansion
- Attainment Modeling Group discusses parameters of modeling Washington region emissions for 2009 8-hour ozone attainment date
- TAC discusses 8-hour ozone planning schedule without EPA's second phase guidance

The four new nonvoting positions were created to expand public participation in the regional air quality planning process.

MWAQC approved the positions in October 2004 when it voted to approve the new bylaws revisions.

The appointments expire in December 2005, but may be renewed.

TAC meets on the second Friday of the month, 10 a.m. – 12 p.m. at COG. All meetings are open to the public.

Ozone and Fine Particles, Defined

The metropolitan Washington region does not meet EPA's standards for ozone or for fine particles ("soot" or PM2.5). The Washington region was designated as a nonattainment area for fine particles in January 2005.

Ozone:

Ozone is a colorless gas that is created on the hottest days of summer. Volatile organic compounds and nitrogen oxides combine photochemically under certain conditions to form ozone, which affects the respiratory system. High concentrations of ground-level ozone may cause inflammation and irritation of the respiratory tract.

There are two EPA standards for ozone, the 1-hour standard and the 8-hour standard. The time refers to the method of measuring the pollution. For the 1-hour, the hour of peak ozone concentration is the critical point. For the 8-hour standard, the highest 8-hour average for the day is the measure.

The chart shows the number of ozone exceedances of both the 1-hour and 8-hour standards since 1993. The number of exceedances has declined in the past five years, with the exception of 2002.

Monitor exceedances for the 1-hour standard occur whenever a monitor's 1-hour concentration is greater than or equal to 0.12 ppm.

The 8-hour exceedances occur whenever a monitor indicates an average for eight hours above 0.08 ppm. Eight hour exceedances occur more frequently than 1-hour because they are triggered by a lower level of ozone averaged over a longer period. It will be challenging for the region to meet the 8-hour standard.

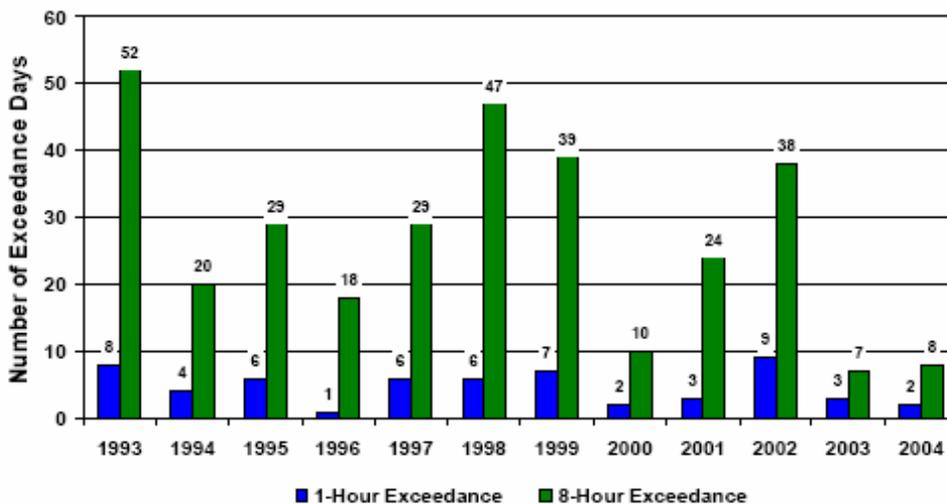
Fine Particles (Soot):

Fine particles or soot is a mixture of solid particles and liquid droplets in the air. Fine particles are smaller than or equal to 2.5 micrometers in diameter, which is 1/30th the size of a human hair. They are dangerous because when breathed into the lungs, fine particles cause respiratory and heart problems.

Fine particles are especially dangerous for children, the elderly, people with asthma, and those with heart or lung disease. High levels of fine particles may occur at times throughout the year.

Forecasts of ozone and fine particles can be seen on EPA's AIRNOW website for the U.S. Real-time air data and forecasts are available on www.air-watch.net for the Baltimore-Washington area.

**8-Hour Ozone vs. 1-Hour Ozone Exceedances
(1993-2004 Washington Region Data)**



Air Quality Web Cam

The National Park Service operates digital cameras at many parks to help educate the public on air quality issues. These cameras often show the effects of air pollution such as visibility impairment. Because these cameras are typically located near air quality monitoring sites, the camera web pages display other information along with the photo such as current levels of ozone, particulate matter, or sulfur dioxide air pollutants, visual range, and weather conditions.



The air quality data on the National Park Service site for Washington, D.C. is provided by the District Dept. of Health Air Quality Division, and is from the McMillian monitor site.

Click on the photograph for a link to the NPS web cam site for Washington, DC.

Next Month's Preliminary MWAQC Agenda

April 27, 2005

12 p.m.— 2 p.m., COG Board Room, 3rd Floor

- Airports
- FY 06 Budget & Work Program
- CAIR
- Early Action Control Measures Report
- Preview of Summer Ozone Season

Air Quality Links

<http://www.mwcog.org/environment/air>

<http://www.air-watch.net>

<http://www.cleanairpartners.net>

<http://www.epa.gov>

<http://www.airnow.gov>

<http://www.airquality.dc.gov>

<http://www.mde.state.md.us/air>

<http://www.deq.state.va.us/ozone>

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