Metropolitan Washington Air Quality Committee

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TECHNICAL ADVISORY COMMITTEE

Date: September 11, 2007 Time: 10 am to 12 pm Place: Teleconference Phone Number 1-888-898-8635 Passcode: 774715

DRAFT Agenda

10:00 1. Call to Order and Review of Meeting Summary (July 9, 2007)

Chairman Cecily Beall, District Department of the Environment

10:10 2. Proposed Ozone NAAQS

Jeff King, COG DEP, will discuss a draft comment letter on EPA's proposal to lower the NAAOS for ground level ozone.

10:25 3. **PM2.5 SIP Schedule**

Joan Rohlfs, COG DEP, will briefly discuss the PM SIP Schedule.

10:35 4. PM2.5 Emission Inventory Development

Sunil Kumar, COG DEP, will discuss the status of emission inventories for the PM2.5 SIP.

10:50 5. PM2.5 Control Measures

Jeff King, COG DEP, will discuss development of control measures for inclusion in the PM2.5 SIP.

11:00 6. PM2.5 Town Hall Meeting

Joan Rohlfs, COG DEP, will discuss plans for a Town Hall meeting in the Fall to discuss the PM SIP.

11:10 7. COG Climate Change Steering Committee and Greenhouse Gas Emissions Workgroup

Joan Rohlfs, COG DEP, will discuss the recent meeting of the Greenhouse Gas Emissions Workgroup.

11:20 8. Ozone Season Summary

Sunil Kumar, COG DEP, will provide a summary of the ozone season to-date.

11:35 9. Other Business

11:45 10. State and Local Air Agency Report

11:50 11. Set Date for Next Meeting, Future Agenda Items, Adjourn Next TAC Meeting: October 9, 2007



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MWAQC Technical Advisory Committee Meeting Summary July 9, 2007 10am to 12pm COG Board Room, 3rd Floor

Present:

Olivia Achuko, District Department of Environment

Cecily Beall, District Department of the Environment

Randy Carroll, Maryland Department of Environment

Diane Franks, Maryland Department of Environment

Barbara Hardy, Fairfax County Department of Health

Brian Hug, Maryland Department of Environment

Maurice Keys, District Department of Transportation

John Kinsman, Edison Electric Institute

Mike Kiss, Virginia Department of Environmental Quality

Sonya Lewis-Cheatham, Virginia Department of Environmental Quality

Doris McLeod, Virginia Department of Environmental Quality

John Nwoke, District Department of Environment

Pam Parker, Montgomery County Department of Environmental Protection

Mark Rawlings, District Department of Transportation

Jim Ponticello, Virginia Department of Transportation

Bill Skrabak, City of Alexandria

Ken von Schaumberg, Greater Washington Board of Trade

Howard Simons, Maryland Department of Transportation (by teleconference)

Kanti Srikanth, Virginia Department of Transportation

Khoa Tran, City of Alexandria

Chris Voigt, Virginia Department of Transportation

Flint Webb, Fairfax County Federation of Citizens Associations

Staff:

Jeff King, COG/DEP Nabeel Keblawi, COG/DEP Sunil Kumar, COG/DEP Joan Rohlfs, COG/DEP Daivamani Sivasailam, COG/DTP

Observers/Participants:

Debra Jacobson, GWU Law School

1. Call to Order and Review of Meeting Summary (June 8, 2007). Ms. Beall called the meeting to order at 10:10. The minutes of the June 8, 2007 meeting were approved with minor editorial changes to the local update by Bill Skrabak. He said that the City of Alexandria supported the permit option for the Mirant Potomac River Power Plant.

2. PM2.5 OTB/OTW Modeling Results

Mike Kiss presented the modeling results for the OTB/OTW modeling scenario for PM2.5. EPA has released new guidance for modeling attainment of ozone, PM_{2.5}, and regional haze. The guidance includes a conceptual description and modeling protocol, and provides direction on selecting a model(s), choosing days/episodes, selecting domain & spatial resolution, developing meteorological inputs, developing emissions inputs, and evaluating model performance. The guidance does not address dispersion modeling for NSR/PSD, or for local hot-spot analysis. Unmonitored area analysis and local area analysis are established as supplemental and weight-of-evidence analyses. The base design value is the 5 year average from 2000 to 2004. Relative response factors are used to predict future design values. Preliminary modeling results indicate that all of the monitors in the region are predicted to be in attainment of the annual PM2.5 NAAQS in 2009 with OTB/OTW controls. The region is also predicted by ASIP modeling results to be near attainment of the new daily PM_{2.5} NAAQS by 2009. Mike Kiss asked that the states confirm the base design values and composition fractions used in the model. The PM2.5 modeling protocol for the SIP should be developed in Fall 2007.

In response to a question from Bill Skrabak, Mike Kiss said that the local area analysis specified in the guidance is not applicable to the Mirant power plant situation in Alexandria. EPA plans to release NSR modeling guidance that will be the modeling guidance used for such permitting situations.

3. PM2.5 Precursors

Sunil Kumar discussed PM_{2.5} precursor significance determinations. EPA's PM_{2.5} implementation rule requires that state air agencies make a determination of the significance of PM_{2.5} pollutants/precursors for SIP planning purposes, including requirements for motor vehicle emission budgets for use in conformity. The known PM pollutants include PM_{2.5} direct as well as the precursors NOx, SO₂, VOC, and ammonia (NH₃). He proposed that a two step process be used to determine significance. Step 1 would involve determining whether PM pollutants/precursors are considered significant for SIP planning purposes. Step 2 would involve determining whether PM pollutants/precursors identified as significant in Step 1 require Motor Vehicle Emission Budgets (MVEBs) for conformity.

Members discussed issues related to significance determinations for VOC, NH₃ and SO₂. Mike Kiss said that Virginia DEQ will need to start work soon if local modeling runs will be required to help finalize decisions on precursor significance. Brian Hug recommended evaluating the percent contribution from mobile sources for SO₂. Doris McLeod recommended that VISTAS modeling results be considered to support the significance determination for VOCs. Mike Kiss said the VISTAS modeling zeroed out VOC from point sources and results showed very little impact on PM concentrations. Sunil Kumar said that there is significant uncertainty about the role of VOCs in the formation of secondary PM, therefore it may not be appropriate at this time to establish an MVEB for VOC. Flint Webb suggested that an annual VOC MVEB be established because there is already an ozone season budget. Doris McLeod and Jim Ponticello said that new MVEBs should not be required because monitoring data is indicating that the

region is already in attainment with the NAAQS. Kanti Srikanth suggested that more work be done to define significance and to document uncertainties.

For ammonia, Diane Franks expressed concern about making a significance determination based on lack of available control technologies. Doris McLeod and Kanti Srikanth said that based on the Conformity Rule, establishing an MVEB requires that there is technology available to reduce emission to meet the budget.

Bill Skrabak asked for additional information on how proximity to roadways correlates with observed PM concentrations. Sunil Kumar and Doris McLeod suggested that ambient speciated concentrations do not vary greatly between urban and rural monitoring sites. Typically more ammonia is detected at rural sites due to agricultural sources.

Members agreed that while SO₂ is a significant precursor for SIP planning purposes, a new mobile motor vehicle emission budget for SO₂ should not required for the following reasons. First, based on 2002 base year and 2009 projected year inventories modeled by VISTAS/MANE-VU, SO₂ emissions from on-road sources represent less than 2 percent of the total overall SO₂ emission inventory for the region and are not a significant source of total overall SO₂ precursor emissions in the region. Secondly, federal requirements for sale of low-sulfur fuel are expected to substantially reduce SO₂ emissions from on-road sources by 2009.

4. PM2.5 SIP Planning

Joan Rohlfs discussed options for submitting a PM2.5 attainment redesignation request to EPA. Monitoring data indicate that the Design Value for the region is currently below the 1997 PM_{2.5} annual NAAQS. The region has the option of requesting redesignation to attainment, which would involve preparing a maintenance plan instead of an attainment SIP. She reviewed the SIP elements that would be required for both attainment and maintenance plans.

Bill Skrabak said that the region has not yet performed any analysis of local hotspots. The City of Alexandria understood that local area analysis would be performed as part of the attainment SIP. He requested that a more detailed analysis of the pros and cons of requesting redesignation be prepared before a decision is made. He expressed concerns that NSR offsets wouldn't be required if the region is redesignated to attainment. He also said that the contingency requirement would be much less stringent. Howard Simons requested more information on which milestone years would be set as part of a maintenance plan approach. Joan Rohlfs agreed to arrange a special TAC call for July 16 to discuss the pros and cons of PM_{2.5} SIP planning options.

Joan Rohlfs also discussed the timeline and process for nonattainment designations for the new 24-hour PM NAAQS. EPA will make final designations for the new daily standard in 2009. SIPs will be due in 2013. The attainment deadline will be April 2015.

5. COG Climate Change Steering Committee and Greenhouse Gas Emissions Workgroup Joan Rohlfs discussed the recent meetings of the Greenhouse Gas Emissions Workgroup (June 15) and the Climate Change Steering Committee (June 27). The workgroup is comprised of a combination of local and state air quality, energy, and transportation staff, as well as emission inventory specialists. She provided a chart showing the variability in what different jurisdictions are doing with respect to emission inventory methodologies and emission reduction targets. She

said that Andrea Denny of EPA will present information on EPA's State Inventory Tool at the next workgroup meeting scheduled for July 19.

The Climate Change Steering Committee (CCSC) heard an update on federal climate legislative initiatives and is considering commenting on various issues/proposals under consideration. The work program and budget were approved. TPB staff presented information on CO₂ emissions from motor vehicles. Projections indicate that emissions from mobile sources in the region will rise in the future by 48 percent. Sensitivity analysis results show that the CAL LEV program could reduce the projected growth from 48 to 28 percent. CAFE standards could reduce the growth to 22 percent. TPB sent a letter to Congress with information on the staff analysis and stressing the importance of tighter CAFE standards for meeting greenhouse gas reduction targets. The next CCSC meeting will be held on September 26.

6. Proposed Ozone NAAQS

Jeff King discussed EPA's proposal for lowering the NAAQS for ground level ozone. On June 20, 2007, EPA proposed to strengthen the national ambient air quality standards for ground-level ozone, the primary component of smog. EPA proposes to set the primary (health) standard to a level within the range of 0.070-0.075 ppm (70 -75 ppb). The Agency also requests comments on alternative levels of the 8-hour primary ozone standard, within a range from 0.060 ppm up to and including retention of the current standard (0.084 ppm). EPA is proposing two options for the secondary standard: one option would establish a new form of standard designed specifically to protect sensitive plants from damage caused by repeated ozone exposure throughout the growing season. This cumulative standard would add daily ozone concentrations across a three-month period. EPA is proposing to set the level of the cumulative standard within the range of 7 to 21 ppm-hours. EPA will take public comment for 90 days following publication of the proposal in the Federal Register. The agency also will hold four public hearings on the proposal in Los Angeles and Philadelphia on Aug. 30, and Chicago and Houston on Sept. 5. EPA will issue final standards by March 12, 2008.

EPA estimates the following implementation schedule. By June 2009, states will make recommendations for areas to be designated attainment and nonattainment. By June 2010, EPA will make final designations of attainment and nonattainment areas. Those designations would become effective 60 days after publication in the Federal Register. In State Implementation Plans, outlining how states will reduce pollution to meet the standards, are due to EPA by 2013. States are required to meet the standard, with deadlines depending on the severity of the problem, between 2013 and 2030.

Members discussed several issues related to a proposed lower ozone NAAQS. Diane Franks said that there are a lot of unmonitored areas which could pose challenges in making designations. If additional monitors are added there could be implications for air quality program funding. Kanti Srikanth asked if EPA expects new federal programs to drive compliance with a lower standard. John Kinsman said that EPA's current actions may cause confusion as the new standards are implemented and the number of nonattainment areas increases.

Members did not strongly support recommending that an MWAQC comment letter be prepared. If a letter is needed, members recommended that the OTC comment letter be used as a template.

7. Ozone Season Summary

Sunil Kumar provided a summary of the ozone season to-date. He said there have been 5 code orange days, three in May and two in June. The day with the greatest number of monitors (11) in the orange range and the highest concentrations was June 18. The highest concentration was 100 ppb at the Southern Maryland monitor. The back trajectories for June 18 were from the Ohio River valley.

Flint Webb asked staff to prepare a rolling average assessment of the annual PM concentrations. Sunil Kumar and Mike Kiss said that such a calculation can only be done using data from the continuous monitors which will require correction factors to make the results more consistent with the FRM monitors. Kanti Srikanth said that members should be cautioned when receiving the results of the analysis.

8. Other Business

Joan Rohlfs said that COG staff are preparing a grant proposal with the Virginia DMME that would fund a project to further integrate air quality and energy efficiency/renewable energy programs.

9. State and Local Air Agency Report

Diane Franks reported for Maryland. The Climate Change Commission has formed three workgroups -- Mitigation, Adaptation, and Science. MDE is still working on the adhesives and sealants rule, a cement kiln regulation, and the RGGI implementing regulation.

Doris McLeod reported for Virginia. Virginia DEQ has been addressing some contentious issues related to permitting of a circulating fluidized bed plant in southwest Virginia. DEQ is also dealing with issues related to the Virginia CAIR regulation. The OTC phase II rules are still pending. Completing the PFC rule by January 1, 2008 may be challenging.

John Nwoke reported for the District. DC DOE is working on a regional haze rule. CAIR allocations for 2009 will not be in-place. The plan is to have allocations established for 2010. There are public hearings being scheduled for the OTC VOC rules.

10. Set Date for Next Meeting, Future Agenda Items, Adjourn:

The next TAC Meeting will be held on September 11, 2007. The meeting was adjourned at 1:30.

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September 07 9/10/07