

Metropolitan Washington Air Quality Committee

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TECHNICAL ADVISORY COMMITTEE

Date: June 9, 2006

Time: 10 am to 12 pm

Place: Conference Call (or COG Room 2, 1st Floor)

Call-In Number: 888-898-8635 Passcode: 774715

Lunch will be provided to members attending in person at noon

DRAFT Agenda

- 10:00 1. Call to Order and Review of Meeting Summary (May 12, 2006)**
Chairman Jim Sydnor, Virginia Department of Environmental Quality
- 10:10 2. Update on 2002 Emissions Inventory Submission**
Sunil Kumar, COG/DEP, will discuss the status of the 2002 Emission Inventory Submission to EPA.
- 10:20 3. Airport Emission Inventory Report**
Charley Baummer, Metropolitan Washington Airports Authority, will discuss the airports emission inventory report.
- 10:30 4. Ozone Transport Commission: Annual Meeting**
Joan Rohlfs, COG/DEP, will provide a summary of the OTC annual meeting held on June 6-7, 2006.
- 10:45 5. Control Measures: Update**
Jeff King, COG/DEP, will discuss selection of control measures for attainment modeling. Identification of contingency measures will also be discussed.
- 11:00 6. Attainment Modeling Subcommittee: Update**
Mike Kiss, VDEQ, will report on attainment modeling.
- 11:10 7. State RACT Update**
Doris McLeod, VADEQ, and Brian Hug, MDE, will discuss the state RACT recertification process in Virginia and Maryland.
- 11:20 8. Local Government Initiatives Subcommittee: Update**
Jeff King, COG/DEP, will provide an update on the activities of the Local Government Initiatives Subcommittee.
- 11:30 9. Ozone Season Summary: Report**
Jen Desimone, COG/DEP, will report on the ozone season to date.
- 11:45 10. State and Local Air Agency Reports**
- 11:55 11. Set Date for Next Meeting, Future Agenda Items, Adjourn:**
Next TAC Meeting: July 11, 2006

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**MWAQC Technical Advisory Committee
Meeting Summary
May 12, 2006 10am to 12pm
COG Board Room**

Present:

Tom Biesiadny, Fairfax County Department of Transportation
Randy Carroll, Maryland Department of Environment
Bhesh Dhamala, Fairfax County Department of Environmental Services
Deirdre Elvis-Peterson, District of Columbia Department of Environment
Diane Franks, Maryland Department of Environment
Barbara Hardy, Fairfax County Department of Environmental Services
Brian Hug, Maryland Department of Environment
Maurice Keys, District of Columbia Department of Transportation
Mike Kiss, Virginia Department of Environmental Quality (by teleconference)
Sonya Lewis-Cheatham, Virginia Department of Environmental Quality
Doris McLeod, Virginia Department of Environmental Quality
Chris Meoli, Virginia Department of Environmental Quality
Jim Ponticello, Virginia Department of Transportation
Mary Richmond, Montgomery County Department of Environmental Protection
Kanti Srikanth, Virginia Department of Transportation
Jim Sydnor, Virginia Department of Environmental Quality
Ram Tangirala, District of Columbia Department of Health
Julie Thomas, National Park Service
Stanley Tracey, District of Columbia Department of Environment
Flint Webb, Fairfax County Federation of Citizens Associations
Carl Winstead, Fairfax County Department of Transportation
Mike Zamore, Maryland National Capital Parks and Planning Commission

Staff:

Jeff King, COG/DEP
Sunil Kumar, COG/DEP
Eulalie Lucas, COG/DTP
Joan Rohlf, COG/DEP
Daivamani Sivasailam, COG/DTP

Observers/Participants:

Charley Baummer, Metropolitan Washington Airports Authority
Julie Crenshaw Van Fleet, AQPAC
Debra Jacobson, George Washington University
Austan Librach, Austin Energy (by teleconference)

1. Call to Order and Review of Meeting Summary (April 14, 2006). Mr. Sydnor called the meeting to order at 10:15. The minutes of the April 14, 2006 meeting were approved with one change. Flint Webb said that when he expressed concern about developing an attainment strategy and SIP that will rely on actions taken by other jurisdictions across the OTR, he meant that his concern is that such a SIP may not be approvable by EPA.

2. Emissions Inventory: Update

Brian Hug reported on the status of the SIP emission inventories. He said that the draft 2002, 2008, and 2009 inventories for the point, area, and non-road sources are complete. The mobile inventories can be completed once documentation issues with the vehicle registration data provided by the District are resolved. The annual mobile inventory for the June 2006 inventory submittal is also nearly complete. The District has given conditional approval to the seasonal approach, pending a review of VOC emission factors to be provided by DTP staff in tabular form.

Sunil Kumar explained why the area source estimates changed. He said that a gas sales growth rate was applied instead of VMT growth to estimate emissions from tank truck unloading. Airport GSE emission values provided by MWAA were also used instead of estimates from the EPA non-road model. Brian Hug commended Sunil Kumar for his efforts over the last 3 months to develop the emission inventories.

Jim Sydnor asked whether the emission inventory would be subject to further review and what adjustments may need to be made to the modeling inventory. Joan Rohlf said that the Emission Inventory Subcommittee will be meeting next week. Brian Hug said that there should be only minor changes to the 2002 base case inventory and that the 2009 inventory will be revised. Brian Hug said that he would provide any changes to the 2009 inventory to Mike Kiss.

3. Attainment Modeling Subcommittee: Update

Mike Kiss reported on attainment modeling. He said that limited modeling efforts have been undertaken since the base case modeling was completed in March. One of the main reasons is that the selected control strategy will require input from the IAQC and the OTC. Virginia DEQ did perform a new modeling run, specifically focused on updating the emissions for the Potomac River Power Plant and Possum Point to reflect the Virginia CAIR rule. The result was a 0.4 ppb reduction in the design value. Doris McLeod said that the NO_x emissions for the two plants were approximately 14-15 tpd lower than was used for the March base case modeling, reflecting the trading prohibition in the rule. Mike Kiss said that revisions to EGU emissions expected as a result of the Maryland Clean Power Rule have not yet been incorporated into the modeling.

Doris McLeod suggested that local measures be considered for weight-of-evidence. Jim Sydnor asked that weight-of-evidence be added as an agenda item to the next Attainment Subcommittee call.

4. Preliminary Reasonable Further Progress (RFP) Calculations

Sunil Kumar presented preliminary RFP calculations for 2008. He said that the region will be required to demonstrate a 15 percent reduction in either VOC or NO_x emissions, or some combination, between 2002 and 2008. For the analysis, he assumed an even split between VOC and NO_x (7.5% each). The preliminary calculations indicate that the region should be able to demonstrate that emission reductions since 2002 will exceed the required 15 percent by 2008.

5. Local Government Initiatives Subcommittee: Update

Mary Richmond provided an update on the activities of the Local Government Initiatives Subcommittee. She said that recent efforts have focused on obtaining annual reports for progress in meeting the commitments in the innovative bundle for the 1-hour ozone SIP. Members have also been working to complete an assessment of potential programs for inclusion in the 8-hour ozone SIP. She said that Montgomery, Fairfax, and Prince George's counties are the only jurisdictions currently participating in the subcommittee and that participation from other jurisdictions is needed.

She said that the subcommittee heard a report from Debra Jacobson about the status of NO_x allowance set-asides. Montgomery County is interested in this issue because the county is considering increasing its wind energy purchase commitment from 5 to 10 percent. Montgomery County plans to meet with MDE to discuss the NO_x allowance set aside regulations in Maryland. Mary Richmond said that Tim Shepherd of MDE provided a briefing on diesel retrofit initiatives in Maryland. She announced two topics for discussion at the next subcommittee meeting: tree canopy and plug-in hybrid initiatives in the DC region.

Howard Simons asked about credits for LED street light retrofits. Debra Jacobson said that her contacts could assist with quantification of benefits and that NO_x allowance retirement would be required for such a measure to provide SIP credit. She also said that she could provide a report prepared for New Jersey which could be useful to consider in estimating benefits of EERE measures. Bill Skrabak said that he is not convinced that there is a real benefit to LED street lights because net benefits are negative due to development growth. Continued growth results in new street lights, roads, and need for mowing. Such growth isn't reflected in the budget. Mary Richmond agreed but said that the real benefit is the retirement of NO_x allowances.

Barbara Hardy announced that Virginia SEP funds were recently used to purchase NO_x emission credits to capture the benefits of the Arlington and Fairfax County wind energy purchases.

6. Control Workgroup: Update

Jeff King provided an update on the activities of the control measures workgroup. He provided a table showing a revised list of measures to advance for attainment modeling. He said that several measures on the list will be the subject of actions by the Ozone Transport Commission, which will be meeting in June to select measures for broad region adoption. He said that information is still needed on the potential design of the OTC multipollutant strategy and the state RACT recertification process.

Brian Hug agreed and said that the region is waiting for decisions at the OTC level before making final decisions about the attainment strategy. Several model rules are being considered, but there are many unresolved issues with each. He said Maryland has committed to adopting whatever model rules are agreed to by the OTC commissioners. He said that the OTC multipollutant work group is still developing strategies but there is no decision yet.

Jim Sydnor said that the IAQC will also be considering potential new measures. He said that states currently appear to support the ICI boiler standards, but there are questions about which threshold levels to apply. Doris McLeod said that the model rule may place the threshold at 5 mmBtu/hour. Brian Hug said that for this region, a threshold of >100 mmBtu/hour may be more appropriate. Brian Hug said that the mandatory chip reflash initiative may not be supported due to potential legal issues. He said that there is some interest in an industrial adhesives rule.

Flint Webb said that the next attainment modeling run should reflect a large list of measures, possibly more than are needed to attain, especially given the schedule for completing the attainment strategy. He expressed concern that the process is already behind schedule. He also said it is important that the upwind states take action. Brian Hug said that there are significant and important new measures being considered, including the ICI boiler standards, the multipollutant strategy, the new state collaborative, and pressuring the EPA for more national controls. He said that the states need Commissioner-level approval of which rules to model.

Howard Simons asked if any additional measures had been considered since MWAQC was last briefed. Kanti Srikanth said that a model run was conducted that reflected lower emission levels at the Potomac River Power Plant and Possum Point. The emission reductions of approximately 13-14 tpd lowered the modeled design value by about 0.4 ppb.

Jim Sydnor and Brian Hug said that reductions in the mid-west could provide air quality benefits in this region. The mid-west states may be interested in having more time to meet the air quality standards and in return may be willing to provide more emission reductions.

Jim Sydnor said that the potential for reductions from airports in the region is limited, especially considering the anticipated growth at Dulles. Flint Webb expressed concern that the emission inventory submitted by the MWAA assumed a mixing height that is too low. Jim Sydnor asked that the MWAA provide a briefing at the next TAC meeting. Jim Sydnor also asked that work begin on considering the need for contingency measures.

7. State and Local Air Agency Report

Diane Franks said that most of the recent efforts in Maryland involved consideration of implementation options related to the Healthy Air Act and Clean Power Rule.

Deidre Elvis-Peterson said that District has nothing to report.

Jim Sydnor said that the Air Pollution Control Board will meet in June to adopt new regulations. Possible actions include NSR, designations, and CAIR. He said that the Board will not take action on mercury in June.

Howard Simons said that he was asked by the Northeast Association of Transportation Officials to develop information on safety margins and SIP trading mechanisms. He is currently circulating a document for review with other DOT representatives. He said that EPA may also be releasing new guidance on trading mechanisms.

Bill Skrabak asked that a draft comment letter be prepared to address the issue of trading of mercury allowances in Virginia. He said that the MWAQC asked for such a letter at the last meeting. He requested that a draft letter be presented to the MWAQC Executive Committee. Jim Sydnor said that both the Virginia legislation as well as the previous draft rule contain provisions that restrict trading. Staff agreed to develop a draft letter.

8. Plug-In Hybrids: Video

Joan Rohlf's introduced Austan Librach from Austin Energy who participated in the meeting via conference call. Austan Librach provided information on the National Plug-in Hybrid

Campaign. He said that the goal of the campaign is to demonstrate to auto manufacturers that there is demand for plug-in hybrid vehicles. He said that he hopes more local governments will consider making "soft" purchase orders. To date, more than 1000 soft orders have been received by the campaign. Plug-in hybrids may be commercially available within 2-3 years. Jeff King showed a video on plug-in hybrid technology provided by the National Plug-in Hybrid Campaign.

Austan Librach said that there are three reasons to endorse a nationwide plug-in hybrid campaign. One reason is to reduce dependence on foreign oil and thereby improve national security. Another is for the environmental benefits of reduced pollution. The third reason is that oil supply may soon begin to decline and plug-in hybrids would provide a means to reduce demand for oil.

Julie Crenshaw asked if the emissions are just being shifted from vehicles to power plants and whether there was a solid-waste disposal issue associated with battery disposal. Austan Librach said yes, but the emissions from power plants are often located outside dense urban transportation corridors and emissions occur at night when power plants are already operating with excess capacity. Batteries will need to be disposed of properly.

Flint Webb asked if it is possible to retrofit conventional hybrid-gasoline-electric vehicles so that they are plug-in. Austan Librach said that kits are being sold to enable retrofits but that this voids the manufacturer warranty. In response to questions, Austan Librach said that plug-in hybrids operate on gasoline as well as electricity. He said that the plug-in hybrid would include more battery capacity so that the vehicle can operate on electric-only mode. Prototype vehicles are achieving 150-200 miles per gallon.

Julie Thomas asked about battery size. Austan Librach said that battery technology is evolving rapidly. He said the trend is to replace nickel-hydrate with lithium. The resultant battery is lighter but more expensive. Lead acid batteries are too heavy. One major engineering challenge is to design new batteries that can sustain deep discharges.

Jim Sydnor asked about the cost for a plug-in hybrid. Austan Librach said that hybrids are currently \$3,000-\$4,000 more expensive than conventional vehicles and that plug-in hybrids may be \$3,000-\$4,000 more expensive than traditional hybrid vehicles. He said that some sort of rebate program may be needed during the initial stages of market commercialization.

The group discussed a sample calculation of air quality benefits from adoption of plug-in vehicles. Howard Simon questioned the benefits calculation saying that the estimates assume the vehicle is operating only on electric-only mode.

9. Set Date for Next Meeting, Future Agenda Items, Adjourn: Next TAC Meeting: June 9, 2006.