

Metropolitan Washington Air Quality Committee

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TECHNICAL ADVISORY COMMITTEE

Date: November 18, 2005

Time: **Noon to 2pm**

Lunch will be served to members at noon.

Place: **COG Rooms 4&5, 1st Floor**

MWCOG, 777 North Capitol St., NE, #300

Washington, D.C. 20002

Agenda

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- 12:00 1. Call to Order and Review of Meeting Summary (October 14, 2005)**
Chairman Tad Aburn, Maryland Department of the Environment
- 12:05 2. Conformity Assessment for PM_{2.5}**
Mike Clifford, COG DTP, will provide the draft results of the conformity analysis for PM_{2.5}.
- 12:25 3. SCC Top Ten Sources**
Sunil Kumar, COG DEP, will present summary tables with emission source rankings.
- 12:55 4. Control Measures Report/Workshop Summary**
Jeff King, COG DEP, will provide updates on the control measures workshop and the RACM process for the 8-hour ozone SIP.
- 1:10 5. SIP Planning: Update**
Jeff King, COG DEP, will summarize the recent proposed PM_{2.5} implementation rule.
- 1:25 6. Air Quality Action Day Cutpoints: Update**
Joan Rohlfs, COG DEP, will provide an update on discussions concerning the threshold for calling an Air Quality Action Day in the Washington, DC region.
- 1:40 7. State and Local Air Agency Report**
- 1:55 8. Set Date for Next Meeting, Future Agenda Items, Adjourn:**
Next TAC Meeting: December 9, 2005

DRAFT

MWAQC Technical Advisory Committee Meeting Summary October 14, 2005 10am to Noon. COG Board Room

Present:

Tad Aburn, Maryland Department of Environment
Tom Ballou, Virginia Department of Environmental Quality
Tom Biesiadny, Fairfax County Department of Transportation
Rick Canizales, Prince William County Department of Public Works
Randy Carroll, Maryland Department of Environment
Diane Franks, Maryland Department of Environment
Maurice Keys, District of Columbia Department of Transportation
Barbara Hardy, Fairfax County Department of Environmental Services
Alex Hekimian, Maryland National Capital Parks and Planning Commission
Doris McLeod, Virginia Department of Environmental Quality
Chris Meoli, Virginia Department of Environmental Quality
Deidre Elvis-Peterson, District of Columbia Department of Health
Jim Ponticello, Virginia Department of Transportation
Howard Simons, Maryland Department of Transportation
Bill Skrabak, Alexandria Department of Environment Quality
Kanti Srikanth, Virginia Department of Transportation
Ram Tangirala, District of Columbia Department of Health
Julie Thomas, National Park Service
Stan Tracey, District of Columbia Department of Health
Flint Webb, Fairfax County Federation of Citizens Associations

Staff:

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

Observers:

Charley Baummer, Metropolitan Washington Airports Authority
Gary Koerber, U.S. Department of the Navy Regional Environmental Coordinator Region III
Liz Qually, George Washington University Law School

1. Call to Order

Mr. Aburn called the meeting to order at 12:10. The minutes of the September 16, 2005 meeting were approved with one change from Julie Crenshaw.

2. Attainment Modeling: Overview and Schedule

Tom Ballou, Virginia DEQ, provided an overview of the attainment modeling process for the Washington, DC region. The Attainment Modeling Subcommittee has completed a draft protocol and is still awaiting EPA guidance. In the modeling platform being used by both Virginia DEQ as well as the Ozone Transport Commission (OTC), attainment modeling for the 8-hour standard will be based on a larger domain than previously used. There is also an effort to improve the models to better reflect transport. Virginia DEQ is upgrading its computer capacity to handle the runs. Virginia DEQ is doing base-case modeling and model verification. Future base case and control strategy sensitivity runs are needed. Episodes have been selected for the Washington region that are currently different than the episodes being selected by OTC. For the Washington region, the model will evaluate 54 days in 3 episodes to reflect a full range of conditions. OTC plans to model the entire 5 month ozone season.

The model is being evaluated by comparing the results of various runs, including 12 vs 4 km grid resolution and OTC versus VISTAS inputs. Currently it appears that the 12 km grid provides better results. The OTC platform also performs better for the I95 corridor, primarily because of the efforts made by OTC and the University of Maryland to improve the meteorological inputs so that they better reflect transport.

Howard Simons asked why the 12 km grid resolution provided better results. Tom Ballou said that the model results are dependent on the resolution of the model inputs. Since the inputs are not developed for the 4-km approach, the model does not show improvement at that grid resolution. Flint Webb asked why the OTC inputs provide better results. Ram Tangirala and Tad Aburn said that this result reflects significant work over the past four years to improve wind-fields and boundary layer conditions.

Ram Tangirala asked about CMAQ's tendency to underpredict concentrations. Tom Ballou and Tad Aburn said that EPA is aware of this issue and is working on guidance which will address use of relative reduction factors and weight of evidence.

In terms of next steps, Tom Ballou said that the 2009 controlled inventories are needed, and decisions are needed on what control scenarios to evaluate. The region will also need to decide what factors to consider in developing weight of evidence.

In response to a question from Kanti Srikanth, Tad Aburn said that the modeling may reflect the first phase of CAIR, but that CAIR doesn't provide a lot of summertime NO_x reductions. In response to a question from Howard Simons, Tad Aburn said that the OTC will not "vote-in" regional measures, the process will be iterative and based on modeling sensitivity. Doris McLeod asked how the region will select which control strategies to evaluate. Tad Aburn said that the process may be to look generically at what level of VOC and/or NO_x reductions will generate the air quality results needed for attainment. Then the region can refer to the lists of possible measures to determine what options are there to achieve the necessary reductions. Sunil Kumar asked if the 12 km grid modeling will be able to show the impact of very small reductions. Tom Ballou said that small local reductions may not have a large and noticeable impact on the modeling results, but there may be some responsiveness.

3. Control Measure Development: Update

Jeff King, COG DEP, provided an overview of recent activities related to the development of control measures for the 8-hour ozone and PM_{2.5} SIPs. He discussed regional measures being considered by the Ozone Transport Commission. OTC has established workgroups to develop new control strategies. The workgroups are focused on stationary/area source RACT, EGU multipollutant controls, and clean corridors.

The workgroups have developed long master lists of potential options. From the master lists, the OTC is developing a set of proposed measures for regional action. The process will be to brief the Commissioners at the Nov 2/3 Fall OTC meeting and receive direction on which measures to pursue for regional implementation or model rule development. Then, there will be a special meeting of the Commissioners in February to provide an introduction to the model rules. Model rules and MOUs would be finalized for the June 2006 OTC meeting. Currently the OTC priority measures are: RACTs for ICI boilers, MSW Combustion, Refineries; Distributed Generation Controls; Peaking Unit Controls; Clean Corridors; Regional Fuels Program; Home Heating Oil Sulfur Standards; AIMS Rule Phase II; Consumer Products Rule Phase II; Open Burning Restrictions; Residential Wood Burning Program; and the Multi-Pollutant Program. State air agency staff working with the OTC plan to perform screening runs of various combinations of measures using CALGRID.

Ram Tangirala proposed that a mobile source sector offset requirement be considered. He said that the mobile sector is anticipating growth in vehicle miles traveled (VMT). He would like to see a measure that requires that emissions from increased VMT be offset. Doris McLeod expressed concern about separating out a particular sector. She said that by requiring potentially costly reductions in one sector because it is required, more cost effective strategies in other sectors may be overlooked. Kanti Srikanth said the VMT growth is already being offset. Flint Webb proposed that the region institute a fee for vehicles traveling inside the beltway. Tad Aburn said he would like to see enhanced telecommuting as a measure, particularly during episodes.

Joan Rohlfs provided a proposed agenda for a control measures workshop to be held in October and said that volunteers are needed to moderate one of four discussion sessions. Bill Skrabak recommended the session on mobile sources be expanded to include Transportation Strategies, not just vehicle and technology options. The group discussed the audience and purpose of the meeting. Tad Aburn said that the IAQC would like public meetings in the winter; this workshop is not a formal public meeting.

4. Emission Inventory: Update

Ram Tangirala, DC DOH, provided an update on emission inventory issues. The emissions subcommittee held a call yesterday to discuss remaining data issues. Maryland and Virginia approved the inputs for the mobile analysis. The states need to finalize estimates of controlled point source emissions. Integrated Planning Model (IPM) results provided to states are being reviewed. For PM emissions inventory, the states will add VOC and ammonia. Jim Ponticello asked if there were any 2009 results available. Ram said that some information is coming from MANE-VU. In terms of direct PM, Ram said that there are large uncertainties with re-entrained road dust as an area source. The model must apply a deep discount to match with observed data. Ram Tangirala said that ammonia in the region is likely from mobile sources. In response to a question from Howard Simons, Ram Tangirala said that mobile sources also contribute to direct PM emissions.

5. PM Conformity: Update

Jeff King, COG DEP, provided an update on the conformity analysis for PM_{2.5}. Daivamani Sivasailam said that a joint workgroup is trying to finalize the meteorological and fuel parameter inputs for the SIP and conformity analyses for PM. The plan in the long term is to harmonize the approach for the SIP and for conformity. For this year's PM conformity determination, the TPB is proposing to use a simplified approach. Draft results need to be ready for the November 4 TPB Technical Committee meeting. In

November, the TPB would then release the results for public comment. If approved at TPB's December meeting, the results would then be forwarded to the Federal government for review and approval. The determination must be approved by April to avoid a lapse.

At the last meeting in October, the TAC had supported an approach of using monthly min/max temperature, humidity, and fuel parameter values for the interim PM2.5 conformity analysis. After work had begun to develop the required emissions estimates, staff realized that due to issues with format and availability of data, as well as resource and time constraints, a simplified seasonal approach may be required. Ram Tangirala agreed to support a simplified approach and draft a letter of support to the TAC chair. He stressed that the seasonal approach should only be used for this year's interim determination. He also urged the group to realize that although the difference in the emission factor between a monthly and a seasonal approach is quite small based on data provided by staff, the impact on overall emissions can be significant given the number of vehicle miles traveled in the region.

8. State and Local Air Agency Report

There were no reports from state or local air agency staff.

Joan Rohlfis introduced a draft letter that is being prepared in response to a Congressional bill targeting enhancing refinery capacity that may also contain provisions that limit state's rights to regulate fuel. There are also provisions that would extend attainment dates for areas that are impacted by transport. She said that the letter has been approved in principle by the MWAQC Executive Committee.

9. Set Date for Next Meeting, Future Agenda Items, Adjourn: November 18, 2005

The TAC will meet next on November 18, 2005 from Noon to 2pm. There being no further business, the meeting was adjourned at 12:30 p.m.