

MWAQC Technical Advisory Committee
Meeting Summary
September 8, 2020, 10:00 AM to 12:10 PM

Present:

Tom Ballou, Virginia Department of Environmental Quality
Doris McLeod, Virginia Department of Environmental Quality
Sonya Lewis-Cheatham, Virginia Department of Environmental Quality
Lisa Nissley, Maryland Department of the Environment
Kathleen Field, Maryland Department of the Environment
Marcia Ways, Maryland Department of the Environment
Kelly Crawford, District Department of Energy & Environment,
Ram Tangirala District Department of Energy & Environment,
Joseph Jakuta, District Department of Energy & Environment
Jim Ponticello, Virginia Department of Transportation
Chris Voigt, Virginia Department of Transportation
Norman Whitaker, Virginia Department of Transportation
Colleen Turner, Maryland Department of Transportation
Virginia Burke, Maryland Department of Transportation
Kari Snyder, Maryland Department of Transportation
Mathew Gaskin, District Department of Transportation
John Kinsman, Edison Electric Institute
Malcolm Watson, Fairfax County
Scott Fincham, Loudoun county
Adam Birdsong, Dominion Energy

Staff:

Sunil Kumar, COG/DEP
Steve Walz, COG/DEP
Jen Desimone, COG/DEP
Tim Masters, COG/DEP
Leah Boggs, COG/DEP
Jane Posey, COG/DTP
Jinchul Park, COG/DTP
Mark Moran, COG/DTP
Erin Morrow, COG/DTP
Dusan Vuksan, COG/DTP
JC Park, COG/DTP
Kanti Srikanth, COG/DTP

1. Call to Order and Review of Meeting Summary

Tom Ballou called the meeting to order at 10 am. The July 14th meeting summary was approved without any changes.

2. Ozone Season Update

Sunil Kumar discussed the 2020 ozone season summary and impacts of COVID-19 related restrictions on air quality. He also discussed briefly the region's current attainment status for the 2015 ozone standard and possible next steps for the planning for this standard. As of

August 30th, there was only one Code Red day for PM2.5, 2 Code Orange days for ozone, and the rest of the days were either code green or code yellow. COVID-19 related restrictions reduced ozone and PM2.5 levels this year as emissions decreased due to a significant reduction in traffic and energy use as businesses and offices were closed and most people were teleworking. The number of light-duty vehicles, which had dropped to 53% at April end came back to about 10% of the normal traffic by August end. Energy use is still by 4% lower compared to the pre-COVID period. Weather also played some role in keeping pollutant levels low. Ram asked how the design value will be calculated if EPA invalidates the 2020 data. Sunil said he was not sure if EPA can do that given the data completeness requirement has been met at all existing monitors. Ram said that the exceptional events criteria cannot be applied in this case as low ozone values were caused due to human activities and not due to a factor beyond human control. Steve added that if EPA takes such an action, then the attainment will be based on 2017-19 design value. Doris brought another related issue of the base year selection for a SIP. Since the base year has to be a typical year, 2020 does not seem to fit very well into that criteria.

3. Dominion Electric School Bus Initiative

Adam Birdsong presented an overview of the electric school bus initiative being pursued Dominion Energy. Phase 1 of the initiative will involve

- 50 electric school buses
- 16 school districts
- 1 bus manufacturer
- 1 charger manufacturer
- 4-6 hours of predictable daily operations
- 180 days of operation per year

He talked about the Vehicle to Grid Technology. The buses are all electric and can be used as battery storage. When not in use, they can be tapped as an energy resource through vehicle-to-grid technology. If energy needs are high or if renewable resources are intermittent, the batteries can provide stability to the grid. During a power outage or emergency, the batteries could serve as mobile power stations. This technology will be employed after 2021. He mentioned that a handful of buses could make a difference in a particular circuit though not in the entire grid.

Benefits are:

- Cost to upgrade from a diesel to electric model covered by program, including infrastructure
- Reduce operation and maintenance costs for schools by 60%
- Schools keep O&M savings
- Equivalent of 17 MPG compared to 6 MPG for diesel
- Charging stations & infrastructure provided at no cost to schools
- Electric buses are quiet, allowing for better communication between drivers and students
- Every bus to be equipped with 3-point seatbelt for each student
- Air quality inside is 6x better than non-electric models
- One electric bus reduces CO2 emissions by 54,000 pounds each year

4. VDOT Sensitivity Results for Transportation Conformity Analysis

Jane Posey discussed the impact of the changes in the I-495 NEXT on the regional conformity analysis of the 2020 amendment to the Visualize 2045 plan. These changes did not affect the results of the above conformity analysis.

5. VIN Data for 2022 Quadrennial Update

Dusan Vuksan discussed a memorandum outlines options for selecting a vehicle registration dataset for use in the mobile emissions modeling for the air quality conformity analysis. This is in preparation for the quadrennial 2022 Long-Range Transportation Plan (LRTP) update. He said that given the recent global changes in behavior related to the COVID-19 pandemic, including lower levels of car purchases in 2020, TPB staff recommend using the 2019 vehicle registration data for the upcoming activities as calendar year 2019 appears to be less of an outlier year at this time.

Members asked if it is possible to develop and compare 2019 and 2020 VIN data. Ram said that 2020 would be valuable for NEI purposes. Dusan said that will take significant time and so may not be able to do so. Kanti said that the current schedule and funding allows for developing VIN data for only one year. If that changes then TPB could develop an additional year as it will also help in comparing a number of transportation parameters. Jim asked the date for providing VIN data. Dusan said it should be the end of the year data. For example, data should be provided as of December 31, 2020 for 2020. Sonya said she could provide the end of year data and December 31, 2020 data is available. Marcia said MDE would not be able to provide 2019 data as EPA insisted on 2020. Kanti said that TPB cannot use July 1 data for 2020 as that would not involve the entire impact of COVID-19. Steve asked Marcia if MDE could provide December 31, 2019 data. Marcia said she would check this with others at MDE and get back to members soon.

6. Proposed Ozone NAAQS

Sunil Kumar proposed to retain the current ozone standards on July 14, 2020 and sought public comments by October 1, 2020. Reasons for retaining the standards are:

- Information contained in the Integrated Science Assessment, quantitative exposure/risk analyses and policy evaluations presented in the Policy Analysis, advice from the Clean Air Science Advisory Committee (CASAC) and public input.
- The general approach and methodology for the exposure-based assessment used in this review is similar to that used in the last review with updates made to the air quality data, models, mode inputs, and underlying databases.
- Newly available information used in this proposal includes evidence of metabolic effects from short-term exposure to ozone. The proposal concludes that the existing standard also provides protection from metabolic effects.

CASAC's opinion:

- With regard to the primary standard, all seven CASAC members agreed that the currently available evidence was generally similar to that available in the last review when the standard was set. Based on this conclusion, six members of CASAC concluded that the primary standard should be retained. One member of CASAC expressed support for a lower standard expressing concerns about the safety margin provided by the current standard.
- With regard to the secondary standard, all seven members of CASAC agreed that the current evidence supported retaining the current standard without revision.

Ozone NAAQS review process:

- Previously CASAC received expertise from the CASAC Ozone Review Panel, composed of CASAC members, outside public health researchers, and experts on air quality welfare impacts (agriculture, forest, and vegetation), in setting the NAAQS.
- The current ozone NAAQS review process did not include such an expert panel.

John Kinsman mentioned that unlike PM2.5 there were no disagreements among EPA scientists on the ozone NAAQS.

Kelly informed the group that the District intends to send a comment letter and OTC is also working on a letter. She expressed her interest in MWAQC submitting a letter and suggested COG staff to use the content of above letters while developing the MWAQC letter. Tom said that the higher management needs to be informed on this issue. He suggested focusing on technical rather than procedural issues for the MWAQC letter. Steve said that COG staff will develop a letter and share with members before the MWAQC meeting in September.

7. Potential Regional Adoption of Maryland's After-Market Catalytic Converter Regulation

Karl Munder presented an overview of Maryland's After-Market Catalytic Converter regulation. An effective AMCC program can provide meaningful NOx reductions at a time when MWAQC members and other states are getting very close to meeting the 2015 ozone standard. The updated program will help jurisdictions to achieve the 2015 Ozone standard. This program is supported by the manufacturers so it's relatively easy to adopt. It is part of a broader regional strategy for the Ozone Transport Region so other states are working on this issue at the same time. It provides cost-effective reductions and provides consumer protections through enhanced warranty coverage.

Estimated NOx reductions are:

- MD – 2 tons/day
- DC/NoVA – 3-3.5 tons/day
- MD/VA/DC Nonattainment Area - About 4.5 tons/day
- OTC Region as a whole - 24 tons/day

MDE requested TAC members to recommend MWAQC that it make a recommendation for a regional adoption of the rule. Ram and Joseph said that the District is considering the adoption. Tom said it is very difficult to adopt any on-road measures in Virginia as it involves legislation. Steve asked Tom if he will be fine MWAQC recommending Virginia the adoption of this rule. Tom said he is fine with it though he reiterated that there will be significant hurdles in the adoption.

8. Air Quality Trends Report

There was not enough time left for the presentation of this report so members were requested to send their comments through an email.

9. State & Local Updates

There were no updates.

The conference call ended at 12:10 pm.