

MWAQC Technical Advisory Committee
Meeting Summary
January 10, 2023, 10 AM to 11:25 AM

Present:

Tom Ballou, Virginia Department of Environmental Quality
Anna Marshall, Baltimore Metropolitan Council
Amy Posner, City of Alexandria
Bill Eger, City of Alexandria
Catherine Salarano, Maryland Department of the Environment
Chris Voigt, Virginia Department of Transportation
Doris McLeod, Virginia Department of Environmental Quality
Jim Ponticello, Virginia Department of Transportation
John Kinsman, Edison Electric Institute
Joseph Jakuta, District Department of Energy & Environment
Malcolm Watson, Fairfax County Department of Transportation
Marcia Ways, Maryland Department of the Environment
Richard Dooley, Arlington County
Roger Thunell, Maryland Department of the Environment
Sonya Lewis-Cheatham, Virginia Department of Environmental Quality
Sophia Cortazzo, Maryland Department of Transportation
Thatch Gerike, District Department of Energy & Environment
Virginia Burke, Maryland Department of Transportation
Greg Becoat, EPA Region 3
Raymond Mui, Alexandria Transit Company (DASH)

Staff:

Sunil Kumar, COG/DEP
Dusan Vuksan, COG/DTP
Erin Morrow, COG/DTP
Jane Posey, COG/DTP
Jeff King, COG/DEP
Jen Desimone, COG/DEP
Jinchul Park, COG/DTP
Leah Boggs, COG/DEP
Tim Masters, COGDEP
Wanda Owens, COG/DTP

1. Call to Order and Review of Meeting Summary

Chair Tom Ballou called the meeting to order at 10 am. The December 6th meeting summary was approved without changes.

2. Potential Items for MWAQC-TAC Meetings In 2023

Sunil Kumar discussed potential items for MWAQC-TAC meetings in 2023. Tom Ballou suggested adding EV infrastructure and fine particle standards to the list. Joseph Jakuta suggested adding an item on the impact of heavy-duty vehicle NO_x standards in our area and

to assess the differences between adopting ACT versus just going with the federal standards for our region. He also suggested adding discussions on the regional environmental justice issues during the course of the year.

3. A. EPA response to proposed methodology for updating the 2008 ozone NAAQS maintenance plan

Sunil Kumar briefed members on the response received from EPA on the Washington region's proposal for updating the 2008 ozone NAAQS maintenance plan and a draft write-up he developed to address EPA's response. Sunil suggested adding some text to the write-up on point source inventory to elaborate on the justification for not updating that inventory. Tom said that Virginia's point source inventory is likely going to be lower now compared to the one in the plan. Joseph said that the District's point source inventory should be around the same. Roger said that Maryland's point source inventory should be around the same too. Tom said that Virginia will send the point source write-up soon and Maryland and the District can also send their write-ups if they wish so.

Sunil asked members if the latest write-up should be sent to EPA to get their feedback now or should that be sent as part of the draft plan document when that document has been developed for EPA's initial review. Doris suggested doing it now so that any additional comments provided by EPA could be addressed in the document early on. Greg Becoat suggested including justification for updating or not updating any particular source inventory in the write-up based on an approved plan update document (e.g., Pennsylvania's 1997 ozone NAAQS maintenance plan update) and sending that to EPA R3 early on. He said that he would pass on the latest write-up to OAQPS for their review and comments and send EPA R3's response as soon as he receives OAQPS's response. He mentioned that the latest write-up presented in the meeting today includes tables an additional discussion that were not there in the previous write-up that was sent to EPA.

B. Schedule for the 2008 Ozone NAAQS Maintenance Plan Update

Sunil Kumar presented the schedule, which did not change since it was presented to MWAQC-TAC in December 2022. He said that the schedule is not being changed as of now even though there were some delays in the QA/QC process and due to the fact that an additional input relate to EVs are being included in this analysis. Roger asked about the timing of MVEBs development. Sunil said that MVEB and conformity buffer discussion will start in late March or early April once TPB has developed MVEBs by February.

C. Status of Emissions Inventory Update

Sunil Kumar briefed members on the status of the emission inventory schedule. He informed that MOVES3 oroad and nonroad inputs were received from states and QA/QC process was being undertaken. The inclusion of EVs necessitated additional effort and time this around as these inputs were being included for the first time in onroad emission analysis. Dusan said that TPB staff try their best to stick to the schedule but there could be some delay due to reasons mention ed above.

D. Medium & Heavy-Duty Vehicle Rule

Sunil Kumar briefed members on the EPA's final Medium & Heavy-Duty Vehicle rule. EPA announced the final rule for new heavy-duty engine and vehicle standards called "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards" on December 20, 2022. This rule will further reduce air pollution, including ozone and particulate matter (PM), from heavy-duty engines and vehicles by reducing nitrogen oxide

(NOx) emissions starting in MY 2027. The rule includes new, more stringent emissions standards that cover a wider range of heavy-duty engine operating conditions compared to today's standards. It also requires these more stringent emissions standards to be met for a larger portion of the time these engines operate on the road. Additionally, this rule ensures that the new, much more stringent emissions standards are met during more of the operating life of these vehicles by including provisions for longer useful life for engines and longer emission-related warranty periods for pollution control equipment. The rule requires manufacturers to design their engines to prevent operators from reprogramming the engine to bypass or disable emission controls (i.e., tamper). This will ensure that the new, emissions standards continue to be met during in-use operations. This rule does not include updates to HD GHG Phase 2 standards, which will be taken up later as part of the Phase 3 GHG rulemaking. The rule will result in health-related benefits for the years 2027 through 2045 of \$200 billion. EPA estimates that in 2045, the final standards will result in public health benefits by preventing the following annually:

- Between 860 and 2,900 fewer premature deaths
- 6,700 fewer hospital admissions and emergency department visits
- 18,000 fewer cases of asthma onset in children
- 3.1 million fewer cases of asthma symptoms and allergic rhinitis symptoms
- 78,000 fewer lost days of work
 - million fewer lost school days for children

The benefits of the rule would exceed its costs by as much as \$29 billion.

4. Electric Transit Bus Program

Raymond Mui (Alexandria Transit Company (DASH)) briefed members on Alexandria's electric transit bus program. Alexandria has a total fleet of 115+ heavy duty buses, has a plan to purchase only zero emissions buses by 2027 for new bus orders, and to have a full zero emissions fleet by 2037. Assuming today's technology and tomorrow's service requirement at a minimum 40 charge points are required.

Current facility layout

- Capacity of 96 Buses
- 6 Depot Chargers/12 Dispensers – Max Charging Available
- 3 Proterra, 3 New Flyer

Current facility & chargers

- ABB
- (3) 150 KW Chargers
- 6 Dispensers Total
- Sequential Charging
- Proterra (Rhombus)
- (3) 125 KW Chargers
- 6 Dispensers Total
- Sequential Charging

Economies of battery electric buses

- One depot charger costs roughly \$150,000 per unit. (Assumes drop-in conditions)
- A Typical Battery Electric Bus costs \$1.2 million compared to \$600,000 for a diesel equivalent
- On average, the energy cost per mile is \$0.42/mile on a Battery Electric Bus vs. \$0.92/mile

on a comparable Diesel bus

- DASH pays on average \$0.14 per kWh of electricity
- Total Cost of Ownership needs to consider battery degradation, midlife overhauls, infrastructure

5. Announcement Of MWAQC-TAC Stakeholder Appointment

Tom Ballou announced names of MWAQC-TAC stakeholders for 2023.

6. State/Local Updates

Tom Ballou said that the General Assembly session started on January 10th. The Clean Car regulation could be repealed. REGI repeal bill could also be undertaken. Roger said that the Baltimore 2015 ozone NAAQS nonattainment area attainment plan is up for comments. MDE is now working on Cecil County nonattainment area plan. Thatch said that the comment period for Advanced Clean Car rule ended on January 9th and there was a public hearing held for the ACC 2 rule on the same day.

The meeting ended at 11:25 am.