

MWAQC Technical Advisory Committee
Meeting Summary
February 10, 2023, 10 AM to 11:30 AM

Present:

Tom Ballou, Virginia Department of Environmental Quality
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
Kari Snyder, Maryland Department of Transportation
Malcolm Watson, Fairfax County Department of Transportation
Marcia Ways, Maryland Department of the Environment
Mathew Gaskin, District Department of Transportation
Regina Moore, Virginia Department of Transportation
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
Thomas Foster, Virginia Department of Environmental Quality
Virginia Burke, Maryland Department of Transportation
Greg Becoat, EPA Region 3
Roman Steichen, Fredrick TranIT Services
Jaime McKay, Fredrick TranIT Services

Staff:

Sunil Kumar, COG/DEP
Dusan Vuksan, COG/DTP
Jane Posey, COG/DTP
Jeff King, COG/DEP
Jen Desimone, COG/DEP
Jinchul Park, COG/DTP
Leah Boggs, COG/DEP
Kanti Srikanth, COG/DTP
Mark Moran, COG/DTP
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 January 10th meeting summary was approved without changes.

2. 2008 Ozone NAAQS Maintenance Plan Update

A. Updated proposal to EPA to update the plan

Sunil Kumar discussed the revised proposal to EPA to update plan inventories. The revised write up included additional details on the reasons for not updating point and nonpoint sources. Greg Becoat said that he will review the revised document and forward it to

OAQPS for their review and response.

B. Status of emissions inventory and schedule

Sunil said that the MWAQC staff is trying to stick to the current schedule by finishing onroad runs for both 2025 and 2030 by the end of February. He said that committee members are starting discussions on mobile budgets and safety margins so that should help us stick to our current schedule of having that discussion complete by end of the March. Staff will also be trying to finish the plan document update by March and will take up that work once we are done with our inventory update in the next few weeks. Staff expects to complete the draft document for public comments and take that to MWAQC on May 24th meeting and the final document for MWAQC's approval on September 27th. He mentioned that staff had to spend a lot more time quality assuring the model inputs for this update as this is the first time EVs are being included in the onroad emissions analysis. Dusan said that TPB is trying to stick to the schedule despite the delay of about a month in quality assuring MOVES3 inputs. Jim asked if model runs will be using current or projected EV data for the two years. Sunil said that only current EV data can be used unless there are rules on the book that mandate future EV implementation. In this analysis, EV data were frozen at the last year for which those data were available.

C. Discussion on use of conformity buffers in developing MVEBs

Jane Posey discussed the use of conformity buffers in developing MVEBs in previous plans. She pointed to a preliminary study showing the difference in emissions due to the difference in model versions (MOVES2014 and MOVES3 and VIN data (2005 and 2011 VIN). She outlined the need for 20% safety margins due to several reasons. She referred to a memo addressed to MWAQC-TAC in this regard that are also being shared in this meeting.

3. Electric Transit Bus Program

Roman Steichen (Fredrick County TranIT Services) briefed members on Fredrick's county's initiative to move from gas to electric transit buses. Following are details on the initiative.

5 refurbished CCW electric buses received May 2016 are currently in use in peak hour service. \$583k purchase cost per bus for a total of \$2.9M.

4 BYD buses (2019-2020), \$542k purchase cost per bus for a total of \$2.2M, purchased with LONO grant, MD Smart Energy Grant, local match.

10 Charging Stations installed (conduit ready for another 10)

Cost of Infrastructure for 10 buses was \$175,000, funded by FTA, MTA, Frederick County and Maryland Energy Administration Smart Energy Grant

Plug/cord and boxes supplied by Complete Coach Works. The county is currently considering adding a generator to address power outages.

Frederick County Landfill Solar Array:

- Constructed by Tesla, 20-year agreement
- Covers 14 acres of landfill
- Generates 2 megawatts of power/day (under ideal conditions)
- Virtual net metering supplies nearly 20% of County government needs
- Will save the County \$250,000 to \$300,000
- Transit is one of 7 county beneficiaries

Annual Operating Costs Per Bus

Fuel, Maintenance

Diesel: \$23,000, \$8,600 (brand new; increases with age)

Electric: \$7,200, \$2,500

Savings: \$15,800, \$6,100

% Cost Reduction 69%, 71%

Savings expected to increase by \$14,000 per bus annually as diesel buses age out of the fleet

Annual and Lifetime Savings

Fuel:	\$15,800	per year
Preventive Maintenance:	\$20,100	after year 1 (incl \$14k per dzlbus retired)
TOTAL:	\$35,900	average approximate annual savings
	12 years of service	
\$430,800	savings over bus lifetime	
\$682,000	current cost of new electric bus (30')	
\$505,000	current cost of equivalent dzlbus (30')	
\$177,000	electric purchase premium	
~5-6	years to recuperate electric bus premium	

4. EPA'S Proposal for Revising PM NAAQS

Sunil Kumar briefed members on EPA's proposed PM NAAQS.

EPA is proposing to revise the primary annual standard for PM_{2.5} from 12 µg/m³ to within the range of 9 –10µg/m³. EPA is soliciting comment on revising the level as low as 8.0 µg/m³ and up to 11.0µg/m³.

EPA is proposing to retain all other PM standards:

EPA is also proposing to revise the Air Quality Index (AQI) to improve public communications about the risks from PM_{2.5} exposures and make changes to the monitoring network to enhance protection for at-risk communities overburdened by air pollution.

CASAC Recommendations

- Primary Annual PM_{2.5} Standard - Majority of CASAC members recommended 8-10 µg/m³ while a minority recommended 10-11µg/m³
- Primary 24-Hour PM_{2.5} Standard – No consensus on revising standard, with the majority of CASAC members recommending revising the level to 25-30 µg/m³ and the minority recommending retaining the standard
- Primary & Secondary PM₁₀ Standards - CASAC did not advise EPA to revise these standards

5. State/Local Updates

There were no updates.

The meeting ended at 11:30 am.