

MWAQC Technical Advisory Committee
Meeting Summary
July 8, 10 AM to 11:05 AM

Present:

Allyson Frantz, Virginia Department of Environmental Quality
Catherine Salarano, Maryland Department of the Environment
Chris Voigt, Virginia Department of Transportation
Danielle Simms, Virginia Department of Environmental Quality
Doris McLeod, Virginia Department of Environmental Quality
Jim Ponticello, Virginia Department of Transportation
Marcia Ways, Maryland Department of the Environment
Melissa Atwood, City of Alexandria
Sonya Lewis-Cheatham, Virginia Department of Environmental Quality
Thatch Gerike, District Department of Energy & Environment
Thomas Foster, Virginia Department of Environmental Quality
Tom Ballou, Virginia Department of Environmental Quality
Virginia Burke, Maryland Department of Transportation

Staff:

Sunil Kumar, COG/DEP
Alissa Boggs, 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
Mark Moran, COG/DTP
Robert d'Abadie, COG/DTP
Wanda Owens, COG/DTP

1. Call to Order & Review of Meeting Summary

Tom Ballou chaired the meeting in absence of Joseph Jakuta. Tom called the meeting to order at 10 AM. The June 7th meeting summary was approved without any changes.

2. Ozone Season Summary

Sunil Kumar briefed members on the 2025 ozone season air quality data. There were three ozone and two PM2.5 exceedances until June 30 this year. He discussed a number of other charts showing essentially the same trend in air quality data. This shows a continuation of the trend of declining ozone and PM2.5 exceedances. He attributed two code red days observed on July 4/5 to fireworks. Sunil pointed out that certain ozone monitors need to be watched closely for potential ozone standard violations.

3. 2015 Ozone NAAQS RR/MP Inventory

Sunil Kumar briefed members on the status of emissions inventories for all sources for the redesignation request/maintenance plan. Tom

Point: Maryland is developing its own point source data. Virginia will use ERTAC data. For NEGU, Virginia may use permit data. The District is fine with ERTAC.

Nonpoint & MAR: Roger pointed out a few missing SCCs such as roofing repair, bakeries, traffic paints, industrial surface coating, vehicle fires, etc. in the EMP 2022v1 database. Those sources

were included in Maryland's inventories for the 2020 NEI. Thomas Foster also mentioned missing a few sources such as structural fires that EPA plans to include as part of their wagon-wheel tool. Roger raised the question of developing documentation for the missing sources. Thomas mentioned a message from EPA that they are planning to remove a few nonpoint sources that are currently not available via wagon wheel tool or sparsely reported SLC such as structural and vehicle fires, domestic and wild animal waste, cigarette smoke, and human perspiration. EPA plans to develop updated emissions for the above sources as they were developed more than 20 years ago based on EIIP approved methods and activities.

Members asked MWAQC staff to finalize a date/time for the Emissions Inventory Subcommittee call to specifically discuss nonpoint inventory issues.

Nonroad & Onroad:

MWAQC staff was quality assuring MOVES5 inputs for both onroad and nonroad runs in coordination with states. Once that is complete, TPB staff will also review those inputs and develop onroad inventories. MWAQC staff will develop nonroad inventories after review and QA/QC steps are complete.

Tom Ballou informed members that DEQ was working on developing a letter requesting EPA to provide finalized and documented EMP 2022v1 inventories for future years (2032 and 2038) or provide details of the approach to use for developing those inventories and related documentation in case EPA can't publish above future year inventories. The letter will be shared with members once it is complete.

4. MOVES4 VS MOVES5

Dusan discussed a comparison of emissions outputs from both model versions. Preliminary tests indicate MOVES5 aligns with EPA's national trends, showing potential declines in emissions over time. MOVES5 accounts for new and changed emission rules after the publication of MOVES4.

- Incorporates new data on light-duty and heavy-duty brake wear emissions
- Incorporates a new feature: Expanding vehicle age up to 40 years instead of 30.
- Includes updates to emission rates: Updating fuel properties for calendar year 2021 and later
- Includes updates to historical and forecast default travel activity, vehicle population, age distributions, and fuel distributions

TPB staff ran sensitivity tests for MOVES5 using draft MOVES4 inputs from the Visualize 2050 and FY 2026-2029 Transportation Improvement Program (TIP) air quality conformity analysis with default Alternate Vehicle and Fuel Technology (AVFT) data. MOVES5 and MOVES4 runs contained the same underlying data used in input development.

- At the regional level, TPB staff's MOVES5 sensitivity testing results are in line with those reported by the EPA at the national level
- MOVES5 NOx emissions are higher than MOVES4 NOx emissions until about 2040 due to the changes in the fleet mix and the modeling of older vehicles; after 2040, MOVES5 NOx emissions are lower due to more stringent light-duty (LD) standards and a greater fraction of EVs
- VOC emissions follow a similar trend to NOx emissions; however, light-duty vehicles are the highest contributors to VOC emissions in both models
- Light-duty vehicles account for the majority of GHG decreases in MOVES5, especially in later years
- Of all analyzed pollutants, implementation of MOVES5 has the greatest impact on estimated GHG emissions, especially in later years

5. State and Local Updates

There were no updates.