

MWAQC Technical Advisory Committee
Meeting Summary
January 13, 10:00 AM - 11:10 AM

Present:

Roger Thunell, Maryland Department of the Environment
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
Emily Bull, Maryland Department of the Environment
Hawi Kitila, Maryland Department of the Environment
Jennifer Roelke, Maryland Department of the Environment
Jim Ponticello, Virginia Department of Transportation
Joseph Jakuta, District Department of Environment
Melissa Atwood, City of Alexandria
Randy Mosier, Maryland Department of the Environment
Regina Moore, Virginia Department of Transportation
Sonya Lewis-Cheatham, Virginia Department of Environmental Quality
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
Jeff King, COG/DEP
Jen Desimone, COG/DEP
Jinchul Park, COG/DTP
Leah Boggs, COG/DEP
Robert d'Abadie, COG/DTP
Robert Christopher, COG/DEP

1. Call to Order & Review of Meeting Summary

Roger Thunell called to order it at 10 AM. The November 12th meeting summary was approved without any changes.

2. 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.

Nonroad Model:

Sunil Kumar discussed nonroad inventories for 2017, 2022, 2032, and 2038 that were developed using MOVES5 model. These inventories included railway maintenance and ground support equipment emissions for all jurisdictions. Roger asked COG staff to share MOVES5 nonroad model outputs with states to help them identify contingency measures. He also mentioned that the GSE emissions in MOVES5 are much lower compared to EMP data developed using AEDT. Doris said that EMP future year GSE data was not final, so she thought using MOVES5 was a better option. Thomas Foster said that MOVES5 does not account for the electrification undertaken in Virginia airports, so its GSE emissions are conservative.

Nonpoint/MAR:

2022 ozone season day emissions are available for most SCCs along with annual emissions from MARAMA. Using 2022 OSD/annual ratio for each SCC and annual emissions from EPA EMP 2022v1 for 2032 and 2038, projected 2032 and 2038 emissions are being developed. A few SCCs are missing in MARAMA database that are present in EMP database and vice versa. Those will be reconciled next. EMP database had most of the airport and yard locomotive (railroad) emissions assigned to point sources. They were reassigned to airport and railroad categories. Line haul in EMP database was assigned to nonpoint. This was reassigned to railroad. CMV emissions were included in nonpoint. They were reassigned to marine category. Biogenic was included in the nonpoint category. This was reassigned to its own category.

Point:

2022 - MD and VA ozone season day inventories are available. DC inventory is needed.
2032/38 - MD inventories will be developed next. DC inventories are needed.
Roger mentioned that he needs to add an additional tab in Maryland's point source file for facilities that shutdown before 2022 and are not in 2022 inventory that have emission reduction credits. Those will get added into the future years but not in the base year.

Doris wanted to know if emissions from point and nonpoint source will also be available in the February meeting. Sunil said that he will try to do so. He needs to get point source data from the District and Maryland to do so.

Onroad:

Dusan Vuksan presented results of an additional AVFT data sensitivity study involving passenger cars, passenger trucks, light commercial trucks, and combination short-haul trucks. This included the use of the fixed 2025 AVFT data. The 2025 AVFT shares of vehicles from MOVES5 defaults are "fixed" and applied in the future years (e.g., in 2038). MOVES5 defaults are applied to each corresponding year prior to 2025. This would account for the more recent vehicle fleet electrification between 2022 and 2025. TPB staff estimated emissions in 2038 using the following sets of assumptions for AVFT data in November 2025:

- Local AVFT: Inputs provided by the state air agencies, developed using MOVES5 tools and guidance for both historic and future data
- MOVES5 defaults
- Fixed 2022 AVFT: Assuming today's shares of vehicles by fuel/vehicle technology in the future; 2022 AVFT inputs (or shares), used to represent the today's conditions for the test, supplied by the states are "fixed" and applied in the future years (e.g., in 2038).

Results:

- Using MOVES5 AVFT defaults resulted in increases in estimated Nox emissions by 4% and VOC emissions by 3% percent relative to the local AVFT inputs in 2038.
 - However, using "Fixed 2025 AVFT" inputs that maintain the current distribution of various vehicle categories resulted in greater estimated increases in NOx emissions (20%) and VOC emissions by (17%) relative to the local AVFT inputs in 2038.
- TPB staff tests showed that local data and MOVES default data produced similar results for 2017 and 2022 - within 1% for NOx and VOC. This approach and results seem reasonable.
- Using Heavy-duty vehicles account for approximately 60% of nitrogen oxides emissions in the region.
 - Using Future regulations may affect vehicle electrification assumptions and emission budgets, necessitating updates.

Members agreed with the new approach of using the fixed 2025 AVFT data for onroad modeling with MOVES5.

3. Potential MWAQC-TAC Agenda Items for 2026

Sunil Kumar discussed a number of potential items that could be discussed this year in the

MWAQC-TAC meetings. Doris suggested getting in touch with the NACAA staff to learn about their clearing house for federal regulations.

4. MWAQC-TAC Stakeholder Announcement for 2026

Antoine Thompson will continue as an MWAQC-TAC stakeholder for 2026.

5. State and Local Updates

Virginia didn't have any updates. Roger said that the state's legislative session has started. There are uncertainties due to budget issues. Joseph said that the District has started installing clarity nodes.