MWAQC Technical Advisory Committee Meeting Summary July 24, 2024, 10 AM to 11:50 AM

Present:

Chris Voigt, Virginia Department of Transportation Dan Goldberg, George Washington University Danielle Simms, Virginia Department of Environmental Quality Gwendoline McCrea, Virginia Department of Environmental Quality Jim Ponticello, Virginia Department of Transportation Joseph Jakuta, District Department of Energy & Environment Melissa Atwood, City of Alexandria Randy Mosier, Maryland Department of the Environment Regina Moore, Virginia Department of Transportation Richard Dooley, Arlington County Shanaya Herbert, Maryland Department of the Environment Sophia Cortazzo, Maryland Department of Transportation Tom Ballou, Virginia Department of Environmental Quality Virginia Burke, Maryland Department of Transportation Dan Scheurman, Montgomery County Michael Yambrach, Montgomery County

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
Leah Boggs, COG/DEP
Mark Moran, COG/DTP
Robert Christopher, COG/DEP
Wanda Owens, COG/DTP

1. Call to Order, Review of Meeting Summary, and Summary of Public Comments Received Joseph Jakuta chaired the meeting in absence of Roher Thunell. He called the meeting to order at 10 AM. The June 11th meeting summary was approved without any changes.

Joseph discussed comments and questions sent by a member of the public on July 22nd, 2024. There were specific comments on the agenda items for this meeting. The first was on the agenda item 4 (Air quality memo). The memo was made available to the public only on July 21st. COG staff assured us that it was available online before that. However, a lot of people were having computer problems during July 20-21, which may have caused this glitch. The commenter also wanted to know if the memo was going to address the concerns that MWAQC Vice Chair Mr. Tom Dernoga raised in the May meeting of MWAQC. Joseph said that the memo will be discussed in this meeting. The commentator also pointed to ACPAC recommendations on the urgency of the climate crisis and environmental justice and brought up several concerns around that. Joseph said that will be discussed as part of the memo in this meeting. As far as agenda item 6 is concerned, the commentator was concerned that MWAQC-TAC is not working on technical aspects of environmental justice as directed by MWAQC. Joseph didn't believe that is the case because MWAQC didn't meet since the Environmental Justice Subcommittee started its work. MWAQC met last in May and the main meetings for the EJ Subcommittee were two

weeks ago and are scheduled tomorrow (July 25th). MWAQC-TAC didn't get any direction from MWAQC because there just wasn't enough time. However, MWAQC-TAC will continue to follow up with MWAQC on this. The last comment was about the ozone season update. The commentator was concerned that it is not informative. MWAQC-TAC provides information to MWAQC to make sure MWAQC is aware of the air quality issues. If MWAQC provides a different direction to MWAQC-TAC, then the committee will take that into consideration.

2. Montgomery County EMTOC Depot Project

Michael Yambrach discussed Montgomery County's EMTOC Depot project. Montgomery County's Department of General Services, Office of Energy and Sustainability in conjunction with AlphaStruxure, a Schneider Electric/Carlyle company, will be jointly developing this microgrid project. David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC) is one of three transit fleet bus depots for MC's RideOn network. EMTOC facility was built in 2013 for 30', 40' and 60' CNG and clean diesel buses (156 total buses – with parking for 200). The County's RideOn Fleet Transition Plan includes both Battery Electric and Fuel-Cell Electric buses in the future – requiring both DC fast charging and hydrogen fueling infrastructure built in a phased approach. The EMTOC site is both strategic and critical to Montgomery County's efforts to reach 100% GHG reduction by 2035. EMTOC Microgrid Project Goals are:

- Under the County's Climate Action Plan, facility resilience is a priority to help keep government services operational during events where grid power is lost
- Support the County's mandates to achieve zero green house has (GHG) emissions by 2035
- Supports the County's move to zero emission RideOn bus fleet
- Will eliminate diesel and natural gas buses transitioning to battery electric buses (BEBs) and Hydrogen fuel cell electric (HFCE) buses.

Electric bus charging, incorporating clean energy production technologies will enable the County to provide sustainable, resilient, and reliable energy supply for zero emission RideOn bus charging and fueling, and site operations. The project will include the following: Solar PV: 5.5 MWDC (4.9 MWAC), BESS: 2 MW / 6.9 MWh, (10) 180 kW Chargers, (1) 360 kW Charger, and Mix of Plug-in and Pantograph Dispensers

3. Ozone Season Summary

Sunil discussed the 2023 ozone season data as of June 4th. There was only one exceedance day (code orange) for the 2015 ozone standard. There was no accident for the PM2.5 standard. The ozone design value was above the standard (71 ppb), but this is expected to come down below the standard once EPA approves the District's request to grant waiver for the 2023 data affected by wildfires. PM 2.5 best code yellow days are higher compared to last year as the standard was tightened recently. He informed members that the Washington DC forecast region has now been divided into four separate subregions to provide more accurate forecasts that reflect local conditions.

4. Air Quality Monitoring in Metropolitan Washington Region

Sunil Kumar discussed a memorandum that described various aspects of air quality monitoring in the metropolitan Washington region. This information was requested in the May 22, 2024 meeting of MWAQC. The committee members specifically requested that COG staff provide background information and address a few questions concerning air quality monitoring in the region. Those questions were related to different aspects of air quality monitoring, such as types of monitors (regulatory vs voluntary/community), entities responsible for the monitoring site selection, process for adding new monitoring sites for regulatory purposes, pollutants currently measured, differences in pollutants currently measured and those being requested through public comments, and the option for the region to measure additional pollutants or locate new monitors in areas, including those with hotspot concerns.

Sunil talked about different types of ambient air quality monitors, Stationary source emissions monitors, low-cost sensor monitors being operated by the general public, and research monitors.

He also discussed other information requested by MWAQC mentioned above.

5. ACPAC Memo On Air Quality and Climate Change

Jeff King provided introductory information on the ACPAC memo on air quality and climate change. Leah Boggs provided the details of the memo. Members subsequently discussed those recommendations and provided their comments.

The following are ACPAC recommendations to MWAQC on air quality action and MWAQC-TAC's thoughts on them.

A. MWAQC should account for potential impacts of climate change, including increases in smog promoting heat waves and exceptional air pollution sources such as wildfires, in its air quality planning and then lead the region's local governments in reducing pollutant emissions sufficiently to offset the impacts of those external factors.

Joseph – On wildfires and PM2.5, I think if we completely zeroed out all anthropogenic conditions, we would still have seen code maroon during those wildfires. I don't think there is any way we can reduce our levels. We are below PM2.5 NAAQS. Even if we were to completely eliminate all particular matter, there's nothing we can do to offset those wildfires so that's got to be a different approach than trying what was suggested in the memo. When it comes to ozone, I would like to see more of an explanation or understanding of why we're not seeing that ozone this year during these heat waves. In the past you'll see ozone developed through the day but then a thunderstorm cleaned it out and you don't have an exceedance, but we're not even seeing these increases in the early morning while we're watching the hourly values this year. I certainly would be more interested in understanding why we're not actually seeing that this year. In the long term, I know there's a concept of ozone probably going to increase by a few ppb due to climate change, but those planning horizons are like out to 2050 so they're kind of divorced from our planning.

Tom - There's really no way that we could really adequately adjust or do something in terms of additional reductions that would solve the wildfire situation. They continue to be properly described as exceptional events and the things that are out of our control. I don't really see anything where we can do anything. Historical data shows that heat is really not having much of an impact on ozone anymore. Heat hasn't really been effective in causing more unhealthy days. I don't see that changing in the near term. It may be something that has to be addressed further down the line when EPA again lowers the standard. Right now, I think that the data shows that that it has not become a big enough issue to compliance. Also, regarding trying to do something in the plan to address these things, we've already seen the experience of trying to develop buffers or safety margins for other purposes in attainment plan. It becomes a little easier in maintenance plans but for attainment plans, it's just these days the reductions are just harder to find. That would just make it more difficult for the planning process.

Joesph - California vehicle programs have a long-term benefit for reducing emissions because of fleet turnover so adopting programs like that will help in the long term.

Tom - Federal standards just recently published are going a long way in reducing emissions as well.

B. MWAQC should work harder to alleviate air pollution hotspots that harm the health of environmental justice communities. In support of this, MWAQC should do more to monitor air pollution in these communities and provide more effective alerts and early warning for them.

Joseph - DOEE has a community monitoring grant that it got under ARPA and also some local funds that it is using to expand its low-cost sensor network, and it also has a fair number of

monitors in EJ communities through FRM and FEM program. DOEE is trying to expand that and actually trying to look at the idea of issuing alerts and warnings using that low-cost sensor network and would love to share we learn more.

Jim P. - Do we know how they define a hotspot? From the transportation perspective, we looked at hotspots and never found a location where a violation of the national ambient air quality standards would occur, but their definition may be different.

Virginia Burke - The verb 'alleviate' in the memo feels like is ahead of us. we've looked at out at this this kind of language in our governor's transition report and we really came to the conclusion that there was not a shared definition or even a sense of what this is about so my request would be that the word 'alleviate' be changed to identify or define some sort of common terminology on what hotspots are.

Tom – We need to identify hotspots first before doing anything about it. However, in order to do that, we just don't have the resources to have monitors everywhere to do that kind of hyperlocal scale analysis. Also, even after you do that what do you do to alleviate the problem and to tackle the cause of the hotspot. First, there has not been a lot of discussion about that and second, what can be done realistically.

Joseph - DOEE is looking at permitting. Permits conditions are stronger in areas with higher particulate matter levels or where a large population is exposed compared to those areas with much lower particulate matter levels or population being exposed. We have taken a case-by-case approach so far. From the ACLIMA work, we didn't really see anything that was an obvious hotspot. Levels in EJ neighborhoods were not that different than we were seeing at the near-road monitor which is clearly one of our worst-case scenarios for particulate matter.

Jim - We do have a near-road monitor at the Springfield interchange which is considered to be one of the worst-case locations adjacent to roadway in the Commonwealth. We have never monitored the violation of the PM standards or any standard at that location until now.

Joseph - At this point, we are going to try and get some more details out of ACPAC and will keep discussing this.

C. Any new urban or industrial development will make it even more challenging to meet our region's clean energy demand and air quality standards (as well as our GHG emission reduction targets). Thus, regional land-use planning and permitting need to consider and firmly address the impacts of proposed projects on our ability to achieve climate, air quality, and justice and equity goals.

Joseph – This is not within MWAQC's purview, especially the land use planning. It just seems to be beyond what we have control over in the air pollution policy.

Regina – Since COG has a planning director who works with the localities on the land use planning, maybe we can just say that MWAQC coordinates with the planning directors on land use planning.

D. MWAQC needs to continuously track the impacts of wildfires and other external factors on regional air quality, and make adjustments in its work as necessary in order to better protect public health.

Joseph & Tom – Air quality forecasters from state air agencies and COG are already doing a good job issuing warnings and educating the public about wildfires and their impacts on air quality and human health.

6. Update on Environmental Justice Subcommittee

Robert Christopher briefed members on the EJ Subcommittee. The EJ Subcommittee kicked off its first meeting in May and has begun stakeholder engagement. It held engagement with MWAQC and ACPAC last week. The EJ stakeholder action plan is under development. Our contractor (AECOM) has presented that to the EJ Subcommittee and received their feedback, which is being incorporated. Next meeting of the subcommittee will be on July 25th. Jeff said that one of the requested from the public comment received was that the subcommittee should not start from scratch and instead learn from existing stakeholder groups. An introductory meeting was held last night with the team in the Cheverly area that has been working with MDE and DOEE. The EJ coalition in the District is particularly about lvy City. He coalition talked about how they started their engagement and what is important to them. They didn't know that it really all starts with health, and it is important to make sure residents understand the health impacts of some of the problems they are facing. Therefore, we want to continue those engagements and appreciate they taking the time to talk with us in depth about their work in those particular EJ communities.

7. State/Local Updates

Joseph said that EPA granted an Exceptional Events waiver to the District for June 29, 2024 air quality data. Tom said that Virginia's two CPRG grant requests were approved. Virginia Burke (MDOT) said that Maryland also got the CPRG grant for a multi-state coalition led by New Jersey along with Maryland, Connecticut, and Delaware to do a corridor freight implementation project (\$250 million. MDOT and MDE were part of that. Eight sites will be built in Maryland for vehicle charging.