Air Quality Control Advisory Council Meeting Minutes March 16, 2020 @ 9:00 am Webinar held by MDE

AQCAC MEMBERS PRESENT

John Quinn– Chairman John Kumm, P.E., BCEE – Vice Chairman Todd Chason, Esq. Ben Hobbs Julian Levy Hon. Leta Mach Ross Salawitch, PhD Lawrence (Larry) Schoen, P.E. Sara Tomlinson Robert Wright Weston Young, P.E. Tom Killeen Stephen Bunker Sania Amr

AQCAC MEMBERS ABSENT

Jonathan Kays

MDE-ARA

George (Tad) Aburn Peggy Courtright Randy Mosier Megan Ulrich, Esq. Joshua Shodeinde Carolyn Jones, P.E. Eddie Durant Kathleen Wehnes Roland Gorschboth David Emer Erick Thunell Marcia Ways Karl Munder Kathleen Field Daniel Newell

VISITORS

Duane King Marc Petrequin Melissa Wilson - Washington Gas Megan Roberts-Satinsky– Washington Gas Ryan Miller - Washington Gas Rasto Brezny - MECA Jeffrey Dannis – Howard County Paul Fiore - AutoCare Association Stephen Holcomb - NiSource Theresa King - BGE Ed Much – Talen Energy Ed Pierce – NiSource Michael Rooney – Washington Gas Dominic Imburgia - Exelon Andrew Kays -NMWDA Kirk McCauley – WMDA SSA

This is a summary of the March 16, 2020, Air Quality Control Advisory Council Meeting and serves as a record of the Council's vote on regulatory action items. The meeting is recorded and the digital file is maintained by MDE/ARA. This digital file is considered public information and may be reviewed in its entirety by anyone who is interested in the details of the discussions.

MDE website: http://mde.maryland.gov/programs/workwithmde/Pages/AQCACmeetingminutes.aspx

Mr. Tad Aburn, MDE Air Director opened the meeting by welcoming everyone to the Air Quality Control Advisory Council (AQCAC or the Council) meeting at approximately 9:05 a.m. A roundtable introduction proceeded. Mr. John Quinn served as the Chair for the webinar meeting.

MEETING MINUTES

Mr. Quinn (Council Chair) requested approval of the December 2019 meeting minutes. Mr. Larry Schoen (Council) requested that the Department review the December 2019 webinar audio to ensure that his comments following the Secretary's briefing were accurately reflected in the minutes. In the interest of time, Mr. Quinn suggested moving the vote of the December 2019 minutes until the next AQCAC meeting.

BRIEFINGS

Aftermarket Catalysts Update

Mr. Karl Munder presented a briefing on "Tampering with Emission Controls on Motor Vehicles" to prepare the Council for a proposed regulation to require effective replacement of (aftermarket) catalytic converters to be presented at an upcoming AQCAC meeting. Mr. Munder provided a background of the EPA process pertaining to aftermarket catalysts and why it has failed to keep up with technology to properly control vehicle emissions thus far. Mr. Munder mentioned that several states have adopted an aftermarket catalyst rule (that follows California's rule) and Maryland is working on adopting a rule. Maryland is very close to meeting the 2015 ozone standard, and adoption of this regulation will help with additional NOx reductions. Mr. Munder noted during the presentation that the proposed regulation (based on the OTC Model rule) for aftermarket catalysts would provide vehicle owners with a guarantee that vehicles would function properly after a converter replacement and owners would receive a warranty upon converter replacement.

Mr. Robert Wright (Council) asked who is responsible for the proper installation, the vehicle owner, the installer or the manufacturer? Mr. Munder and Mr. Aburn explained that, while the owner is responsible to get the repair completed, the manufacturer and the installer are responsible for selling only compliant catalysts.

Mr. John Kumm (Vice Chair, Council) asked whether a proposed regulation will have any effect on enforcement against the illegal removal of, or tampering with, control devices. Mr. Aburn responded that Maryland already has tampering enforcement authority. At the federal level, tampering enforcement is currently an EPA priority and will continue at the current high rate. (Note: additional information on anti-tampering actions can be found at https://www.epa.gov/enforcement/clean-air-act-vehicle-and-engine-enforcement-case-resolutions)

Mr. Julian Levy (Council) asked about the timeframe for implementing the rule (2024). The Department responded that it is necessary to provide lead time for suppliers, allow for stock turnover, provide public education, and other preparation. Also, the State could consider a trigger provision, such as the rule would take effect if neighboring states implement the program.

Ms. Leta Mach (Council) inquired if the provision to sunset the program upon adoption by EPA of an equivalent program would be automatic or require Council approval, and what would happen if the EPA rule is not strong enough. The Department responded that the sunset is a normal way to approach rulemaking. The Department further notes that the sunset provision specifies that EPA must adopt a

regulation or enforcement policy that is able to reduce motor vehicle emissions at the same or greater level as any CARB aftermarket catalytic converter.

Mr. Ross Salawitch (Council) and Mr. Wright asked about how enforcement will handle situations where motorists travel to other states without a similar rule to get non-CARB catalytic converters installed. Mr. Munder responded that bordering states' shops should honor the Maryland rule, and noted that factors such as this will contribute to the overall difficulty of implementing the program on a state-by-state basis – a national program overseen by EPA is the best route to achieve air quality goals. Mr. Aburn added that the problem is that currently, nothing is illegal regarding the installation of poorly performing catalysts, so the clarity that the regulation will provide is needed. The goal of rule is to make it clear that an effective catalyst must be installed.

Mr. John Kumm (Council) asked in addition to NOx reductions, how would the AMCC program reduce air toxics emissions from diesels. Mr. Munder responded that at this time Maryland does not test diesels as part of the emissions control program but has regulations to prohibit tampering and limit visible smoke emissions. Mr. Munder noted the state safety inspection at time of resale can identify these issues.

Mr. Larry Schoen (Council) commented about misinformation and confusion among vehicle owners regarding necessary modifications recommended by vehicle manufacturers vs. non-sanctioned modifications (similar to those done to diesel vehicles to "roll coal"), and asked about potential concerns of the trucking industry and the role of heavy duty vehicle inspections. The Department indicated that addressing tampering of diesel vehicles is a high priority with EPA, which is currently operating under a National Compliance Initiative to address gross violators and blatant advertisers. The Department supports EPA's tampering approach as being the most appropriate for diesel vehicles. The AMCC rule addresses the separate issue of ineffective third-party aftermarket devices.

Dr. Sania Amr (Council) inquired about the difference in price between the effective converters and the inferior ones. Ms. Marcia Ways responded that the increment is approximately \$200, a differential which has been holding level for the last few years.

Two industry representatives attending the webinar, Mr. Paul Fiore (Auto Care Association) and Dr. Rasto Brezny (Manufacturers of Emission Controls Association), stated their positions on the role of visual inspections, possible during emissions testing, in ensuring compliance. Dr. Brezny also advised that there are federally certified vehicles that are not certified by CARB. While these vehicles comprise a small percentage of vehicles overall, they do exist and would need to be addressed under Maryland's AMCC program since they do not have a CARB converter assigned to them. Dr. Brezny added that figuring out what to do with these vehicles will be an important part of the policy. Dr. Brenzy commented that Colorado is currently working to address this issue, both MECA and the Auto Care Association are assisting Colorado and will provide important implementation information for Maryland and other states.

Dr. Brezny also commented that MECA and other organizations are continuing to encourage EPA to strengthen the federal AMCC program, and suggested that Maryland may wish to send a letter to the EPA Administrator, as had OTC.

Methane, HFC and Other Short-Lived Climate Pollutants

Mr. Tad Aburn, Ms. Carolyn Jones and Mr. Eddie DuRant presented a three-part briefing on "Methane, HFC and Other Short-Lived Climate Pollutants (SLCP)". Mr. Aburn presented the introduction, which detailed Maryland's efforts on climate change and focused on four key areas: Greenhouse Gas Reduction

Act (GGRA); regional partnerships and collaborations; federal programs; and, the Maryland Commission on Climate Change (MCCC).

Ms. Carolyn Jones presented the portion of the briefing on short-lived climate pollutants. This briefing covered what constitutes a short-lived climate pollutant and why reducing these pollutants are important to protect the environment. Ms. Jones updated the Council on recent SLCP actions, which include HFC and methane control from natural gas compressor stations that were approved during the December 16, 2019 AQCAC meeting. Ms. Jones also discussed next steps, which includes improving and updating the methane emissions inventory, and examining additional sectors, such as the natural gas distribution sectors. Ms. Jones explained about several data centers and programs that are tracking methane emissions and mitigation practices from the natural gas distribution sector.

Mr. Eddie DuRant presented the portion of the briefing on municipal solid waste (MSW) landfills. This included a background on current state and federal requirements for the control of methane emissions from MSW landfills. Mr. DuRant updated the Council on the Department's efforts to look at tougher requirements for methane emissions at MSW landfills, which has been slowed and delayed by the EPA process. Mr. DuRant discussed next steps, that includes restarting the stakeholder process, bringing forth a proposed regulation being brought before a future AQCAC meeting for approval which incorporates both new federal emission guidelines (EG) and new source performance standards (NSPS) for MSW landfills, and exploring additional requirements to control methane emissions from MSW landfills.

Mr. Ryan Miller (Washington Gas) commented that the presentation does not address the things that private industry is doing to reduce methane emissions, such as blowdowns and pipe replacement. Director Tad Aburn acknowledged there are activities in the private sector to help reduce emissions.

Mr. Jeff Daniels (Howard County) asked where he could get more information on the heathy soils program. Mr. Randy Mosier replied that we will direct him to more information regarding the program online. Director Tad Aburn noted that the program was coordinated by the Maryland Department of Health.

Mr. Robert Wright (Council) asked who does the modeling for future greenhouse gas emissions. Director Tad Aburn commented that the Department has staff that develop the emission inventories. The Department also utilizes a private contractor (E3) that uses state of the art modeling and captures the synergies and program overlap.

Mr. Julian Levy (Council) commented that the Baltimore City water systems (potable, sewer, storm) leak tremendously and asked how good the natural gas distribution system is in Baltimore City. Mr. John Quinn (Council Chairman) responded by noting that Baltimore Gas and Electric (BGE) is the first utility in the country. Over 200 years ago BGE put the first gas lines in, so there are a lot of old gas lines still in place, but the oldest gas lines have been replaced. Mr. Quinn noted that it's not always the pipes, but where the pipes turn and connect to more pipes, is where the leaks were often found. He stated that connections with cast iron pipes seem to be the most problematic. Mr. Quinn finished his response by saying improvements continue and BGE is aggressively addressing things to make sure it gets better.

Mr. Robert Wright (Council) inquired if the natural gas storage at Rockville is under-ground or aboveground tanks. A spokesperson for Washington Gas stated that the facility is primarily underground and stores propane. Mr. Wright also inquired if the Department had an estimate of the type and total length of piping from the natural gas service line to the end user. Mr. Randy Mosier responded by stating that the Department has an estimate and is continuously gathering more information from the utilities to ensure accurate information. Mr. Mosier added that the topic is evolving, and future plans were to gather more information on the number of service lines and the number that have been updated along with associated emission reductions.

Mr. Larry Schoen (Council) inquired about the modeling of system leaks and relative magnitude of leaks along system and asked were ratepayers getting benefit of leak reduction. Mr. Randy Mosier responded that benefit was going to be an environmental benefit. Mr. Schoen clarified that his comments were regarding pass-thru charges that's allowed for the ratepayer but there's a benefit to the company from less loss of product and wanted to make sure there's some sharing of that.

Mr. Larry Schoen (Council) commented that (based on the presentation) about 2 percent of our total greenhouse gases is attributable to the natural gas industry. Mr. Schoen inquired within that 2 percent, do we have any modeling of where the leaks are happening and does self-reported company information corroborate with independent modeling. In addition, Mr. Schoen also asked are we focused on the big parts of that 2 percent which may not be related to piping but the location of connections. Ms. Carolyn Jones responded by noting that research is still ongoing and that numbers in the presentation are the industry reported numbers from PHMSA. These numbers are still undergoing refinement to link to the MDE GHG data and MDE will be working with stakeholders to verify emissions data. Ms. Jones also noted in response to the second question that emissions are currently reflected in miles of piping, which capture leaks at joints, and connections, using emission factors. Emission factors are also established by pipe material. The Department will keep researching new technologies and inspection equipment to identify contribution sources of emissions.

Mr. John Kumm (Vice Chair, Council) inquired is it possible that new EGs for landfills from EPA will be stringent enough that further MDE regulation of methane from landfills will not be required. Mr. Randy Mosier responded that all Maryland sources are currently meeting the requirements in the EG, and some have gas collection systems or other measures in place to reduce methane emissions. But there may be potential areas for emission reductions like best practices and monitoring. This process will include discussions with stakeholders, including MSW landfills (many of which are operated by the counties). The first step is to incorporate the EG into our regulations to have a state plan and second, is to explore potentially additional measures.

Dr. Ross Salawitch (Council) inquired as to whether utility data exist regarding methane loss along the pipe (i.e. comparing what goes in versus what goes out) and, if so, can this be shared with MDE. Mr. Randy Mosier responded that this is an issue that the Department is still actively researching.

The meeting was adjourned at 11.11 a.m.