

**Air Quality Control Advisory Council Meeting Minutes  
December 16, 2019 @ 8:15 am**

**AQCAC MEMBERS PRESENT**

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

**MDE-ARA**

Ben Grumbles  
George (Tad) Aburn  
Chris Hoagland  
Randy Mosier  
Joshua Shodeinde  
Chris Beck  
Carolyn Jones, P.E.  
Eddie Durant  
Kathleen Wehnes  
Ryan Buckley  
John Artes – by webinar  
Bill Paul – by webinar  
Erick Thunell – by webinar  
Tyler Abbott

**VISITORS by Webinar**

Allen Karpman – Arkema  
George Ana – Dominion  
Lisa Beal – Dominion  
Maureen Beatty – National Refrigerants Inc.  
Abbey Brown – Washington State DOE  
Allan Chara – Danfoss  
Drew Cobbs – API  
Michael Colletti – Whalen Company  
Steve Combs – Everidge  
Pat Corbett – Virginia DEQ  
Paul Dickson – Dominion

**AQCAC MEMBERS ABSENT**

John Quinn - Chairman  
Sania Amr, M.D.  
Jonathan Kays

**VISITORS**

David Cramer - GenOn  
Michael Han – Williams  
Lisa Massaro – Dupont  
Caitlin McDonough – Harris, Jones & Malone  
Jessica Olson – Honeywell  
Randy Musselman – Eastern Shore Natural gas  
Mark Parker – Eastern Shore Natural Gas  
Allison Maginot – AHRI  
Jennifer Kane – AHRI  
Nicholas Georges – Household and commercial Products Association  
Duane King – ORISE  
Ruth White – HOCO Climate Action  
Jean Cornell – Daikin  
Ben Kunstman – Environmental Integrity Project  
Sunny Lee - Environmental Integrity Project  
Leah Kelly - Environmental Integrity Project  
Anne Havemann – CCAN  
Barry Goodrich – Enbridge  
David Smedick – Sierra Club  
Tom Ballentine – NAIOP  
Justin Weber – Geo-Technology Associates

Angela Beeson – Enbridge  
Andrew Bodnarik – OTC  
Mark Boncardo – Koura Global  
Ann Bristow – Community of Communities  
Beverly Campbell – Harford Machine  
Stephen Holcomb – NiSource  
Harshad Inamdar – Rheem  
Diane Jakobs – Rheem  
Justin Johnson – MMRVT  
Ryan Kiscaden  
Justin Koscher – PIMA

Samuel Gaber – Fairfax County Gov't  
Dean Groff – Danfoss  
Pamela Gupta – CARB  
Erica Hahn – Navy  
Linda Herdering - Community  
Thomas Morris – Honeywell  
Mili Patel – TC Energy  
Cindy Peil – Community  
Michael Pennington – Heatcrat  
Ed Pierce NiSource  
Joseph Pietro – Dominion  
Ajo Rabemiarisoa – Delaware NREC  
Mike Rooney – Washington Gas  
Melissa Sampson – Talen Energy  
Melissa Wilson – Washington Gas  
Robert Wolfer – Bradford White

Shelly Leibowitz – NGC  
Victor Marinich – Danfoss  
David McCabe – CATF  
Julie McDill  
Jo McLaughlin – Community  
Ryan Miller – Washington Gas  
Allen Schneeberger – Leer  
Ronald Shughart – HTPG  
Morgan Smith – NASRC  
Christina Starr – EIA  
Chris Stryker  
Helen Walter-Terrinoni – AHRI  
Mark Wenclawiak – Kemira  
Stephen Wieroniey – American Chemistry Council  
Sheireka Wood – Kemira  
Jeffrey Fort – Dentons

*This is a summary of the December 16, 2019, 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>

*For webinar participants, please note that there were technical difficulties during the presentation; thus, staff were unable to respond to comments and questions submitted via webinar. MDE was able to review after the meeting and consider before finalizing the proposed regulation.*

## **MEETING INTRODUCTIONS**

Mr. John Kumm (Vice Chairman) served as the Chair for the meeting. Mr. Tad Aburn, MDE's Air Director, opened the meeting by welcoming everyone to the Air Quality Control Advisory Council (AQCAC or the Council) meeting at approximately 8:25 a.m. A roundtable introduction proceeded.

Mr. Ben Grumbles, Secretary of the Maryland Department of the Environment, provided a message to underscore the importance of today's AQCAC meeting in light of global and state-specific efforts to combat and mitigate the effects of climate change. Secretary Grumbles also highlighted Maryland's leadership in greenhouse gas reduction programs in the transportation sector and through the Regional Greenhouse Gas Initiative (RGGI).

Council Member Larry Schoen inquired if there was any support AQCAC could provide, or there was action MDE can take to increase public transit, cycling, and walking options in

Maryland. Secretary Grumbles advised that interested parties should continue to provide input to the State, and Maryland will evaluate opportunities to expand transit-oriented and walking options.

### **APPROVAL OF MEETING MINUTES**

Acting Chair Mr. John Kumm requested a review of the June 17, 2019 and September 16, 2019 meeting minutes for approval.

*Motion to approve the June 2019 minutes was made by Mr. Larry Schoen and seconded by Mr. Tom Killeen. All members voted in favor (11) at approximately 8:48 a.m.*

*Motion to approve the September 2019 minutes was made by Mr. Bob Wright and seconded by Mr. Larry Schoen. All members voted in favor (11) at approximately 8:49 a.m.*

### **Overview of Climate Actions in Maryland**

Mr. Chris Hoagland, Program Manager of MDE's Climate Program, presented an introduction on Climate Action in Maryland to provide context on the proposed regulations to reduce greenhouse gases (GHG) at approximately 8:50 a.m.

The Greenhouse Gas Reduction Act (GGRA) requires Maryland to publish a plan to reduce GHGs by 25% from 2006 levels by 2020, and 40% from 2006 levels by 2030. Though MDE's most recent GHG emission estimates reveal that Maryland is on track to achieve its 2020 goal, additional state effort is needed to ensure Maryland maintains its progress to reach the 2030 GHG emission reduction goals. MDE has published the 2019 GGRA Draft Plan that will set Maryland on a path to achieve its 2030 goal and to achieve much deeper reductions in the 2040 to 2050 time-frame. However, recent findings from the Intergovernmental Panel on Climate Change, the National Climate Assessment, and University of Maryland point to an increasing urgency to reduce emissions, even beyond GGRA goals, due to short-lived climate pollutants (SLCP), which are potent climate-forcers. Maryland is working with other states through the United States Climate Alliance (USCA) on short-lived climate pollutant reductions, including hydrofluorocarbons (HFC) and methane.

The two regulations that will be proposed for AQCAC approval today are Maryland initiatives that begin to address SLCPs in order to achieve greater climate emission reductions. Mr. David Smedick with the Sierra Club noted the importance and urgency of moving forward with regulations that address SLCPs such as these proposed today.

### **ACTION ON REGULATIONS**

#### **New COMAR 26.11.33 – Prohibitions on Use of Hydrofluorocarbons**

Mr. Joshua Shodeinde began the presentation on restricting the use of certain hydrofluorocarbons in specific end-use categories at approximately 9:15 a.m.

The purpose of this action is to propose new Regulations .01 to .06 under new chapter COMAR 26.11.33 Prohibitions on Use of Certain Hydrofluorocarbons in Aerosol Propellants, Chillers, Foam, and Stationary Refrigeration End-Uses. This action seeks to reduce hydrofluorocarbon emissions by adopting specific United States Significant New Alternatives Policy Programs (SNAP) prohibitions for certain substances in air conditioning commercial equipment, refrigeration equipment, aerosol propellants, and foam end-uses. The prohibited HFCs are presented in Table 1 of the regulation when used in a specific end-use with the date of compliance. There are some exemptions listed in Table 2 of the regulation. MDE requires reporting and record keeping. The regulation is intended to link with other state efforts to provide a national solution while the EPA efforts may be stalled.

Mr. Julian Levy inquired how the regulation will affect residential consumers that are using equipment with prohibited substances, and if the proposed regulation will affect the cost of refrigerant. MDE responded that existing equipment, and equipment acquired prior to the effective date of prohibition for an affected end-use category, can still use the refrigerant it is designed to use, even if that substance is on the list of prohibited substances. Mr. Tom Killeen commented that with his experience in the HVAC sector, industry is able to adapt and can absorb the cost of changing refrigerants which has been demonstrated with other transitions that have occurred in the industry.

Dr. Ben Hobbs inquired on MDE's plan to address HFC emission sources not subject to the proposed rule. Dr. Ross Salawitch expressed disappointment in allowing HFCs with GWPs close to 750 to be allowed in Maryland. Dr. Salawitch also inquired as to why MDE is not aggressively requiring industry to use hydrofluoroolefin (HFO) instead of HFCs. Dr. Salawitch further inquired on MDE's plan to address HFC emissions from residential A/C and the transportation sector to achieve HFC emission reduction goals set forth in the Kigali Agreement. MDE responded that the Department is currently evaluating regulatory approaches to address HFC emissions from residential equipment, mobile A/C equipment, and other HFC emission sources. MDE is following discussions occurring on a global and state level to phase out the production and consumption of HFCs. MDE's proposal serves as a first step to address HFC emissions in Maryland based on other state-level initiatives.

Mr. John Kumm inquired on the cost of the proposed regulation to the public, especially low-income consumers. Mr. Kumm further inquired on how much the regulation will cost industry, who may pass the cost through to consumers. MDE responded that the Department relied on EPA's SNAP Rule 20 and 21 economic impact analysis to determine cost impacts to consumers. EPA's analysis determined that the cost of the regulations to consumers was minimal. Ms. Christina Theodoridi with the Natural Resources Defense Council (NRDC) confirmed MDE's assessment of the regulations minimal impact to consumers based on EPA's cost analysis. Ms. Theodoridi also added that EPA's analysis showed there will be minimal impact to small businesses as well.

Mr. Larry Schoen expressed concern on the proposed regulation's impact on the ability of existing equipment to be serviced with new refrigerant that is on the proposed prohibited list. Mr. Schoen suggested that refrigerants to service existing equipment be exempted from prohibition. The Council discussed possible regulation text edits to reflect that new refrigerants can be used to keep existing equipment in operation. MDE agreed that this is the intent of the regulation. Mr.

Schoen also inquired on the Department's outreach to organizations such as American Association of Contactor's Association (AACCA), and institutions such as hospitals and owners of commercial A/C equipment. MDE responded that the Department's intent of the regulation is to only restrict the use of prohibited substances in new product and equipment. The Department included AACCA in its outreach efforts, but did not reach out to retail owners of A/C.

Dr. Ben Hobbs inquired on the relevance of the District Court of Appeals' decision, which remanded portions of SNAP rules 20 and 21 back to EPA, on Maryland's proposed regulation. MDE consulted with the Attorney General's office and does not believe the D.C. Court of Appeals' decision will impact Maryland's rulemaking.

*Beginning at approximately 10:13 a.m., the following public participants made comments to the Council:*

Ms. Lisa Massaro with DuPont – supports the proposed regulations. DuPont requests that Maryland considers including language, in either the technical support document (TSD) or regulation, that will allow for previously banned HFCs and HFC blends approved by EPA's SNAP program to be acceptable for use. MDE agreed to include the language in the TSD and will consider initiating a rulemaking amendment should EPA approve a previously banned substance exemption.

Ms. Caitlin McDonough with Harris, Jones & Malone – generally supports the proposed regulations. Ms. McDonough, representing her client Arkema, requests that MDE grants a one-year extension for four foam end-uses prohibition dates. Arkema would like the prohibition date for those end-uses to be January 1, 2022.

Ms. Jessica Olson with Honeywell – strongly supports the proposed regulations and would like Maryland to maintain the prohibition dates proposed.

Ms. Allison Maginot and Jennifer Kane with Air-Conditioning Heating and Refrigeration Institute (AHRI) – strongly support the proposed regulations. AHRI requests the following modifications to the proposed rule: (1) MDE should include a provision that expressly allows for the use of internet disclosures instead of physical labels; and (2) MDE should work with relevant State agencies to update building codes to allow for the use of low-GWP HFCs. AHRI expressed concern with MDE relying on EPA's list of acceptable substitutes; the organization would like for MDE to recognize completeness letters from EPA instead of an actual listing.

Mr. Nicholas Georges with Household & Commercial Products Association (HCPA), representing the aerosol products industry – supports the proposed regulations. HCPA requests that Maryland adjust the recordkeeping timeframe requirement from 5 years to 3 years to align with existing Maryland regulations for consumer products (26.11.32). MDE did not object with making this modification.

Ms. Christina Theodoridi with NRDC – supports the proposed regulations and implementation as soon as possible.

MDE proposed that the Council consider a vote on the proposed regulations, and MDE would, either through a written format or another meeting, provide an update on amendments made to address the major issues presented today.

*Mr. John Kumm requested a motion to approve the proposed regulatory action conditionally. The Department is charged with considering the issues raised at today's meeting and reporting back to the Council on how those issues were resolved. Mr. Kumm also included in the motion Mr. Larry Schoen's request that the Department add clarifying language to the regulation that prohibited refrigerants, including those manufactured after the date of prohibition, can be used to keep existing equipment in operation.*

*Motion to approve the proposed action with the conditions stated was made by Mr. Todd Chason and seconded by Mr. Bob Wright. All members voted in favor (11), none opposed, and none abstained at approximately 10:50 a.m.*

### **New COMAR 26.11.41 – Control of Methane from Natural Gas Industry**

Mr. Joshua Shodeinde began the presentation on the proposed regulations to reduce methane emissions from the natural gas transmission sector at approximately 10:53 a.m.

The purpose of this action is to propose new Regulations .01 to .07 under new chapter COMAR 26.11.41 Control of Methane Emissions from the Natural Gas Industry. This action establishes requirements to reduce vented and fugitive emissions of methane from both new and existing natural gas transmission facilities in the State. This includes four existing compression stations, one underground storage facility and one LNG facility. Specifically, this action proposes requirements to mitigate methane emissions through fugitive emissions detection and repair, and control measure requirements to limit emissions from compressors and pneumatic devices. Facility-wide greenhouse gas emission data will be required to be calculated and submitted to the Department annually. Additionally, owners and operators will be required to notify the Department and the public during “blowdown events” which are the release of pressurized natural gas from stations, equipment, or pipelines into the atmosphere so that maintenance, testing or other activities can take place. The proposed regulation requires a blowdown plan to be submitted to the Department for approval which can determine the notification format when events are over 1 million standard cubic feet. This public notification process is unique to Maryland. The blowdown volume threshold was set based on federal safety standards and New York and Louisiana limits.

*Beginning at approximately 11:05 a.m., the following public participants made comments to the Council:*

Ms. Ruth White with Howard County Climate Action expressed concern on blowdown notification being made to the public. Ms. White would like affected facilities to report both emergency and non-emergency blowdowns to the public. The local communities are concerned about climate and VOC emissions and would like monitoring to understand what is being emitted in the communities. Ms. White supports the comments from CCAN and EIP.



Mr. Ben Kunstman with EIP supports the proposed regulation with modification. Mr. Kunstman believes the proposed threshold for blowdown notifications is too high and should be reduced. Mr. Kunstman also would like standards to be applied to intermittent bleed natural gas-powered pneumatic devices. Lastly, Mr. Kunstman would like the scope of the rule to include Baltimore Gas & Electric's (BGE) Springs Garden facility and wanted MDE to address why the BGE facility is not included in the proposed rule. Mr. Kunstman distributed a report on national blowdown emissions created by the Clean Air Task Force (CATF) to Council members present at the meeting. Mr. Kunstman summarized data from the EPA greenhouse gas reporting program which showed average blowdown volume and pneumatic counts.

Council member Dr. Ben Hobbs also inquired as to why BGE's facility is not included in the proposed regulation. MDE responded that the proposed regulation is one piece of Maryland's methane minimization strategy. Maryland intends to address methane emissions from other sectors, including the distribution segment, following adoption of the proposed regulations. BGE's Spring Gardens falls in the distribution segment.

Mr. Sunny Lee with EIP would like MDE to lower the threshold for rod-packing replacement. Mr. Lee also wanted to understand why MDE pushed back the transition dates for natural gas-powered pneumatic device requirements. Lastly, Mr. Lee is concerned with the exemption provided for continuous bleed natural gas-powered devices.

Ms. Anne Havemann with CCAN supports the proposed regulation with amendments. Ms. Havemann would like MDE to require affected sources to post blowdown notification plans on their website and would like for MDE to reduce the threshold for blowdown notification. Ms. Havemann urges MDE to maintain compliance dates presented in the October 2019 version of the draft regulation shared with stakeholders. Ms. Havemann requests that MDE include requirements that future permitted facilities conduct environmental justice evaluations on the impact of the facility to vulnerable communities and populations. Lastly, Mr. Havemann requests that MDE use a 20-year GWP timeline for methane instead of the 100-year GWP value.

Ms. Leah Kelly with EIP would like MDE to require affected sources to post blowdown notification plans online and would like the threshold lowered.

Mr. David McCabe with CATF supports the proposed regulation but believes other jurisdictions have adopted more stringent regulations. Mr. McCabe recommends MDE further addresses methane emissions in the distribution segment, the BGE LNG facility and at Cove Point's LNG export facility. Mr. McCabe also believes MDE should apply standards to intermittent bleed natural gas-powered pneumatic devices and reduce the threshold for blowdown notification. Mr. McCabe suggested that MDE revert to language proposed in the version of the draft regulation circulated to stakeholders before the October 2019 meeting for natural gas-powered pneumatic devices.

*Council Member discussion began at approximately 11:42 AM:*

Mr. Larry Schoen asked for clarification on the compliance dates extension for pneumatic devices, the increased threshold for rod packing replacement, and the established blowdown notification threshold. MDE responded that the compliance dates were extended based on the

anticipated date that the proposed regulations will be effective. The initial draft compliance dates were proposed anticipating an earlier effective date of the rule. Mr. Michael Hahn with Williams, an affected facility, added that replacing high-bleed continuous pneumatics is not as labor intensive as replacing the energy supply of pneumatic devices. Mr. Hahn stated that industry needs sufficient time to implement the proposed swap-outs. Mr. McCabe with CATF agreed with Mr. Hahn's statement. In regard to rod packing replacement, MDE stated that the rod packing replacement threshold was increased to be consistent with other state programs with condition-based standards for rod packing replacement.

Dr. Ross Salawitch inquired as to the justification for the blowdown emission threshold notification of one million standard cubic feet, and asked public participants to suggest a blowdown notification threshold and why. MDE responded that the State established a blowdown notification threshold based on the US Department of Transportation's Pipeline and Hazardous Materials Safety Administration's threshold for notification, as well as thresholds established in New York and Louisiana. Furthermore, Maryland is the only state that is proposing notification to the public. Mr. Ben Kunstman with EIP suggested that the blowdown notification threshold can either be based on deminimis events or using the national average of blowdown emissions he presented today.

*Motion to approve the proposed action was made by Mr. Todd Chason and seconded by Mr. Bob Wright. Eight (8) members voted in favor, two (2) members opposed, and none abstained at approximately 12:10 a.m. (One Council member had left the meeting before the vote)*

Motion to adjourn the meeting was made by Mr. John Kumm and seconded by Mr. Tom Killeen. *The meeting was adjourned at 12:13 p.m.*