Air Quality Control Advisory Council Meeting Notes August 5, 2015 @ 9:00 am MDE Headquarters—Aqua/Aeris/Terra Conference Room 1800 Washington Boulevard Baltimore, MD 21230

AQCAC MEMBERS PRESENT

Sania Amr, M.D. – by phone
Sue Garonzik
Jonathan Kays
Julian Levy
Lawrence Kasecamp
Hon. Leta Mach
Cindy Parker, M.D.
John Quinn
Lawrence Schoen
Ross Salawitch, PhD
Sara Tomlinson

AQCAC MEMBERS ABSENT

Andrea Bankoski Kevin Barnaba John Kumm

MDE

George (Tad) Aburn

Diane Franks

Randy Mosier

Eddie DuRant

Carolyn Jones

Husain Waheed

Kathleen Wehnes

Jay Apperson

Marcia Ways

Jed Miller

Karen Irons

Duane King – by phone

VISITORS

The following is a list of visitor's that signed in on 8/5/15. Please accept the Administration's apologies if the spelling of names is not accurate as they are transcribed from hand written entries.

AQCAC August 5, 2015 Minutes

Bill Henderson - NRG Shirley Banks - NRG John Lacaster Ronald Lemon - NRG Terry Deboe - NRG Dave Mayede Robert Koo - NRG David Goodrich Thomas H. Swann - NRG David Smedick - Sierra Club Margie Brassil – Del. Dana Stein Tim Martin Destiny Watford - Free Your Voice Neil Roloff - NRG Steve Mayor Doris Toles – Sierra Club Volunteer Jeff Riggleman - NRG Nathaniel Owen David H. Barett - NRG Ramon Vila - NRG Jacqueline Fullerton Rev. Frederick K. Weimert - Sierra Club Manny Lim Tom Weissinger - Raven Jack Lahr - CSGA Frances Alderson - Citizen Russell Donnelly - SECAP Joanna Hanes Lahr - CSGA Elaine Emling – Sierra Club (MD) Timmy Gardner, Sr John Daniels - NRG George Alderson - Citizen Linda Kangrga Mark Posner – Sierra Club (MD) Howard Aylesworth - Sierra Club Donald Quade - NRG Walter Stone - NRG Matt Dernoga – Sierra Club (MD) Joe DiMarco - NRG Hal Siegrest - NRG May Robinson – Sierra Club (MD) Brian Sturman – NRG Dave Cramer - NRG Charles Shafer - Sierra Club (MD) David Maddor - NRG Lawanda Edwards - Sen. Roger Manno Craig Gowldy Brian Ditzler - Citizen Isabelle Rice – Sierra Club Ray Capsey - NRG Greg Staggars - NRG Josh Berman – Sierra Club Greg Sneeringer - ERM Carol Anderson Austria Ted Conwell – Climate First! Jennifer Kunze – Citizen Liz Fuznel – HOCO Climate Change Regina Minniss – Breathing! Andrea Van Wyk Salem Brown Bridget Parlato – Sierra Club/Baltimore Trash Talk Mike Powell/Todd Chason-Raven Greg Sawtell Kurt Schwarz – Sierra Club Jim Griffin Nicole Maclean - NRG Seth Bush - Sierra Club Ray Copsey - NRG Debbie Knight - NRG Marie Murphy - Sierra Club Ian Ullman - Sen. Pinsky Marissa Gillett Donald Mills - NRG Mike Dodge Patti Mattingly – NRG Dawn Dickinson - NRG Steve Leitno - NRG Tom Turk Dolores McCormick - NRG John Shehadi - NRG Sharieff Shahid - NRG Peg Gardner – NJ (phone) Gary Helm – PJM (phone) Chris Pilan – PJM (phone) Darren Lovaas – NRDC (phone) John Sheholdi - NRG Wendy Ramsp Shutondi – Sierra Club Ken Rineker - NRG Liz Vanden Henvel – Sierra Club Jim Cecil - NRG Corey Smith - NRG Rev. Beverly Lewis – Sierra Club & VCC

Steve Miller - NRG

Chris Yoder

Steve Arabia

Ruth White - HOCO Climate Change

Jon Kenney – Chesapeake Climate Action Network

Sabue Johnson, MD – Ornithological Society

This is a summary of the August 5, 2015 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/ARMA. 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.

Available at MDE website

http://www.mde.state.md.us/programs/WorkwithMDE/MDEBoardsandCommissions/Pages/AQACmeetingminutes.aspx

MEETING OPENING/OPENING REMARKS

Chairman John Quinn opened the meeting by welcoming everyone to the meeting, he explained the meeting process, and conducted introductions.

Air Director George (Tad) Aburn briefed the Council on the release of EPA's Clean Power Plan, a major rule addressing greenhouse gas emissions from power plants, as well as EPA's recognition of ozone reductions in Baltimore by publishing a final "Clean Data Determination" for the Baltimore nonattainment area (80 FR 14041).

Approval of Minutes from June 8, 2015 meeting:

Chairman Quinn called for a motion on the June meeting minutes at approximately 9:23 a.m.

Dr. Ross Salawitch requested an amendment to page 8 to reference a task force created by the previous governor to study energy generation and recommended that future power generation will come from natural gas.

Motion to amend and approve the June 8, 2015 minutes was made by Dr. Ross Salawitch and seconded by Mr. Julian Levy. Ten members voted in favor, and none opposed, at approximately 9:23 a.m. (~ 11 min into recording).

Chair John Quinn made a note that Dr. Lorne Garretson, representative on AQCAC from CEHPAC, has retired. Julian Levy will henceforth be CEHPAC's representative on AQCAC.

ACTION ON REGULATIONS

<u>COMAR 26.11.38 – Amendments to Control of NOx Emissions from Coal-Fired Electric Generating Units</u>

Presentation

Mr. Tad Aburn made an in-depth presentation that included information on the current ozone standard, existing and expected Maryland monitoring data, Maryland Healthy Air Act requirements, and a review of previous Nitrogen Oxides (NOx) measures implemented in the State beginning at approximately 9:25 a.m. (~13 min into the audio recording). Highlights of the presentation and an explanation of the amendments to COMAR 26.11.38 follow.

COMAR 26.11.38 Control of NOx Emissions from Coal-Fired Electric Generating Units (EGUs) includes a 2015 requirement that provides immediate NOx reductions and public health protections. The

2015 requirements are designed to ensure EGUs are minimizing NOx emissions by optimizing emission control technology. MDE promulgated the 2015 requirements through an emergency regulation that became effective on May 1, 2015 to implement these requirements in the 2015 ozone season. MDE simultaneously processed an identical regulation that went through the regular administrative process and was adopted on August 4, 2015.

(~44 min into the audio recording) MDE is proposing amendments to COMAR 26.11.38 to include a second phase of reductions for 2020 to maintain compliance with the ozone standard. The 2020 provisions require units equipped with SNCR to comply with one of the following 4 options by June 1, 2020: 1) Install and operate an SCR control system that can meet a NO_x emission rate of 0.09 lbs/MMBtu based on a 30-day rolling average during the ozone season; 2) Permanently retire the unit; 3) Switch fuel permanently from coal to natural gas and operate the unit on natural gas; or 4) Meet a 30-day system-wide rolling average NO_x emission rate of 0.09 lbs/MMBtu and a system-wide, daily NO_x tonnage cap of 21 tons per day (tpd) for every day of the ozone season or a system-wide NO_x emission rate of 0.13 lbs/MMBtu as a 24-hour block average. If option 4 is selected, deeper reductions starting in May 2016, 2018 and 2020 must also be achieved.

All of the options for reductions in the 2020 time frame contained in the earlier proposal have been retained. The fourth option is new and designed to provide equal or greater public health protections in a more economically sustainable manner compared to the earlier 2020 proposal. It allows a company to use system-wide averaging to achieve the NOx rate of 0.09 lbs per MMBTU as a 30 day system-wide rolling average. This rate is consistent with levels assuming SCR controls on all units. To utilize the Option 4 system-wide averaging provision, the company must agree to earlier step-down reductions and a daily requirement. Beginning in 2016, all units in the system must meet a NOx rate of 0.13 lbs per MMBTU as a 30 day rolling system-wide average. In 2018, all units in the system must meet a NOx rate of 0.11 lbs per MMBTU as a 30 day rolling system-wide average. In 2020, all units in the system must meet a NOx rate of 0.09 lbs per MMBTU as a 30 day rolling system-wide average and meet one of two daily requirements: a daily NOx emission rate of 0.13 lb/MMBTU as determined on a 24-hour system-wide block average or a system-wide NOx tonnage cap of 21 tpd.

New language in the proposed regulation for 2020 requirements also includes a reliability safety valve in the event of a PJM Interconnection, LLC (PJM)-declared emergency operation. During such an instance, the regulation will allow for half a day or 12 hours of emissions to be excluded only from the calculation of daily limits. PJM is implementing new regulations designed to strengthen the electricity grid and reduce these infrequent events to zero.

Mr. Julian Levy asked about the cause of emergency action days (are they weather-related, due to units shutting down?). MDE responded that PJM performs a sophisticated forecast to determine electrical needs for expected high demand periods. PJM places companies on alert to provide additional electricity if needed and ensure sufficient supply. If more supply is needed, PJM will move the company's unit from the alert status to the warning status and/or to emergency status. Often the alert is removed without units being called into operation.

MDE projects the new regulation to have a small, but very important overall benefit in Maryland's plan to reduce pollution across the state. Most of the ozone pollution is dominated by ozone pollution floating in from upwind states. On many days, however, between 30% and 50 % of the State's pollution problem

is home grown – only about 12% is attributed to point EGUs. Maryland has other "on the books" or "on the way" emission reduction programs.

Dr. Ross Salawitch indicated that research papers suggest that mobile sources contribute much less to annual NOx emissions and are overestimated (by as much as a factor of two) based on assumptions made. Dr. Salawitch also stated research supports that during exceedance days, the share of NOx emissions from EGUs are much higher than 13%. MDE stated that the agency is working on measures to address NO_x pollution from a variety of sources, and both mobile and EGUs pollution control strategies are important.

Mr. Jonathan Kays asked for clarity on whether the proposed regulations only require that modern pollution control technology be applied to EGUs, or whether the controls are monitored to ensure operation. MDE responded that the current proposed regulation is seeking deeper NOx reductions through placing caps on emission rates.

Public Testimony

The Chairman asked for the following groups to speak: the two companies affected by the rule, a representative from Sierra Club, and state officials or their representatives (at or about 1 hour 45 min into recording).

Mr. Todd Chason stated that Raven Power supports the regulation proposed by MDE. Raven Power believes the emergency hour exemption is a smart approach, but they are concerned on how possible future weather-related or other unforeseen events will affect their choice in ensuring reliability or adhering to environmental regulations in the 13th hour which is beyond the exemption.

Mr. Joshua Berman, staff attorney with the Sierra Club, stated that the proposed regulations are weaker than the regulations proposed and approved by the Council in October 2014. Sierra Club stated they had very little time to review the additional option from announcement of Phase II and they propose that the 4th option is too lenient. Sierra Club also does not believe the Department needs to rush a decision to promulgate the proposed regulations presented at this meeting.

Mr. Walter Stone and Mr. Dave Cramer spoke on behalf of NRG. NRG believes the proposed rule is more restrictive than previously proposed version of the regulation. NRG also stated that Selective Catalytic Reduction (SCR) pollution control exists on their units, and that about 80% of the energy the company produces comes from units that are SCR controlled.

Ms. Lawanda Edwards spoke on behalf of Senator Roger Manno. Senator Manno believes the proposed regulation is weaker than previously proposed version of the regulation.

Ms. Margie Brassil spoke on behalf of Delegate Dana Stein. Delegate Stein also believes the proposed regulation is weaker than previously proposed version of the regulation, and does not support the averaging approach in setting limits. Delegate Stein encourages MDE to reinstate the earlier version of the regulation.

Mr. Ian Ullman spoke on behalf of Senator Paul Pinsky. Senator Pinsky is against the proposed regulation and is in favor of postponing a decision until there is justification for rejecting the earlier version of the regulation. Senator Pinsky believes the current proposed regulation is weaker than the

previously proposed version, and encourages MDE to consider EPA's upcoming proposed standard, and take the lead in important regulatory decisions.

Chairman John Quinn inquired on what happens if AQCAC did not act on the proposed regulation by the end of the meeting. MDE responded that Maryland would like to fulfill a commitment made to move ahead with a decision on the regulation by the end of the year, and is determined to move ahead quickly. MDE explained that there is a five week process for a proposal to be adopted and there will be an opportunity for public comment.

The Honorable Leta Mach inquired about the reason for the new approach in promulgating the proposed regulations. MDE responded that the Department moved ahead with Phase I of the regulation to provide important immediate health protection to all of Maryland, beginning with the 2015 ozone season on May 1, 2015. The Department revisited Phase II of the regulation as requested, with scrutiny to preserve jobs and maintain a sustainable economy.

Dr. Ross Salawitch expressed concern with Maryland's ability to negotiate with other states to install modern pollution control technology if Maryland itself is not requiring pollution control technology to be installed on all EGUs within the state. MDE responded that if other states adopted the currently proposed regulation, a 250 tpd reduction of NOx would be the result – which is what Maryland is pushing. MDE understands the technical and financial limitations in putting SCR on small units that do not run often.

The Council expressed concern on NOx emissions that occur on high energy demand days, particularly from units which do not have SCR controls being called upon to provide energy. The Council further expressed concern with companies having the option to choose between 21 tpd or 0.13 lb/MMBTU emission rate believing there is wiggle room that companies can take advantage of. MDE stated that there are four layers of controls being required from EGUs, including the 21 tpd daily cap or 0.13 lb/MMBTU emission rate.

Dr. Cindy Parker expressed concern with averaging having the ability to disguise high and low emissions, especially since high emissions are really important for lung tissue body damage. MDE stated that the Department's number one objective is to ensure that units do not produce high emissions. The cap on peak day emissions in the proposed regulations would limit NOx emissions.

The Chairman asked for members from the public who had signed up to speak to address the Council.

Approximately 30 people gave testimony:

Generally, environmental advocates and concerned public citizens spoke about protecting our planet and discussed the potential health concerns for individuals affected by emissions. Environmental advocates also requested more stringent pollution limits than what was proposed in the regulation and asked for the previously proposed version of the regulation to be reinstated.

Power Plant workers asked the Council to consider job security, as many of them feared the possible shutdown of power plants and job loss. Workers from both NRG and Raven Power asked the Council to consider the source of electricity from EGUs as well. If these power plants shut down, power plant workers stated, energy would be produced out of state and fewer taxes would be paid to Maryland.

MDE thanked those that spoke for their insightful comments. MDE stated that the current regulation is not a weaker, but a stronger version of the previously proposed regulation. MDE believes pollution from EGUs is a smaller piece of a bigger ozone problem.

The Chairman asked for Council comment's on the proposed regulations.

Council Discussion of the Proposed Amendments

The Council inquired about further comments on the 12 hour emergency portion of the regulation. MDE responded that the Department is satisfied with the portion as stated, and believes 12 hours is sufficient.

The Council asked if NRG and Raven are comfortable with the regulations as proposed. Both companies stated they are comfortable and support the regulation as proposed. The Council further inquired what changed between the last version and this version of regulation that gained their support. NRG stated that the fourth option led to their support. Raven Power stated that they were always in support of both versions of regulations.

The Council inquired about the effects of the new ozone standard to be proposed by EPA and how that would affect Maryland's approach in minimizing NOx emissions from EGUs. MDE responded that the Department will seek to reduce emissions from all emission sources, including EGUs. MDE believes that greater reductions need to occur in mobile sources, which will be the challenge in upcoming years.

Specifics and the full discussion can be heard from the audio recording http://www.mde.state.md.us/programs/WorkwithMDE/MDEBoardsandCommissions/Pages/AQACmeetingminutes.aspx

At approximately 12:30 p.m. the public comments ended and the Council began wrap-up discussions and proposal. The Chairman spoke on behalf of AQCAC member John Kumm who could not be in attendance, and stated his approval of the proposed action and asked that his vote to approve the regulation as proposed be counted in proxy if possible. (Although this was not stated out loud, according to AQCAC By Laws, this was not possible and therefore the vote did not count.)

Motion to adopt the proposed regulation was made by Mr. Jonathan Kays and seconded by Mr. Julian Levy. Seven members voted in favor, three opposed, and one abstained at approximately 12:52 p.m. (~ 3 hours and 41 min into recording).

Chairman Quinn adjourned the meeting at approximately 12:52 p.m. (~ 3 hours and 42 min. into the audio recording)

Confirmation of Next meeting dates:

September 21, 2015 December 7, 2015

The meeting was adjourned.