

**ENVIRONMENTAL MANAGEMENT COMMISSION
AIR QUALITY COMMITTEE MEETING SUMMARY**

March 13, 2019

Archdale Building-Ground Floor Hearing Room

10:00 AM - 11:00 PM



MEETING BRIEF

During their March 13, 2019 meeting, the Air Quality Committee (AQC) of the Environmental Management Commission (EMC):

- Received an overview of Governor Cooper’s Executive Order No. 80: North Carolina’s Commitment to Address Climate Change and Transition to a Clean Energy Economy
- Received an update on the NC Science Advisory Board’s activities for the methyl bromide Acceptable Ambient Level (AAL)
- Provided the preliminary results from background Per- and Polyfluoroalkyl Substances (PFAS) rainwater sampling

AQC MEMBERS IN ATTENDANCE

Mr. John D. “JD” Solomon, AQC Chairman	Dr. Suzanne Lazorick
Mr. Charles S. Carter, AQC Vice Chair	Mr. George H. Pettus
Mr. Gerard “Jerry” Carroll	Ms. Julie Wilsey
Ms. Marion Deerhake	

OTHERS IN ATTENDANCE

Dr. Stan Meiburg, EMC Chair	Mr. Mike Abraczinskas, DAQ Director
Mr. David Anderson, Vice Chair of WAC	Mr. Michael Pjetraj, DAQ Deputy Director
Ms. Shannon Arata, EMC	Members of the public
Mr. Manning “Bill” Puette, Chair of GWWC	DAQ Staff
Mr. Philip Reynolds, EMC Counsel	

PRELIMINARY ITEMS

Agenda Item #1, Call to Order and the State Government Ethics Act, N.C.G.S. §138A-15(e)

Chairman Solomon called the meeting to order and noted Dr. Meiburg is now the Chairman of the EMC and Mr. Solomon will take over the role as Chairman of the AQC until July. Chairman Solomon inquired, per General Statute §138A-15(e), as to whether any committee member knows of any known conflict of interest or appearance of conflict with respect to matters before the Environmental Management Commission’s Air Quality Committee. No conflicts were identified.

Agenda Item #2, Review and Approval of the November 2018 and January 2019 Meeting Minutes

Chairman Solomon asked if there were any comments on the January 9, 2019 minutes. No comments were provided and Chairman Solomon asked for a motion to approve these minutes. Commissioner Carrol made a motion to approve the minutes and Commissioner Wilsey seconded the motion. The January minutes were unanimously approved. Chairman Solomon asked if the changes to the November 7, 2018 minutes were satisfactory. Commissioner Carter agreed with the changes and made a motion to approve these minutes. Commissioner Wilsey seconded the motion and the November minutes were unanimously approved.

RULEMAKING CONCEPTS

None.

DRAFT RULES

None.

MARCH EMC AGENDA ITEMS

***Agenda Item #5, Request for Approval of Proposed Rule Revisions, Regulatory Impact Analysis and to Proceed to Public Hearing on Readoption of Group 5 Rules – 15A NCAC 02D .0600-.0615, .2100-.2104, .2300-.2311, .2600-.2621 (547) (Joelle Burleson, DAQ)**

Due to time constraints, Chairman Solomon stated that the Committee may choose to wait to hear the agenda items containing an asterisk (*) during the full Commission. The Committee affirmed to hear the asterisked items during the full Commission meeting on March 14, 2019.

INFORMATIONAL ITEMS

Agenda Item #6, Overview of Governor Cooper’s Executive Order No. 80: North Carolina’s Commitment to Address Climate Change and Transition to a Clean Energy Economy (Sushma Masemore, DEQ)

Sushma Masemore provided an update on the implementation of Governor Cooper’s Executive Order No. 80: North Carolina’s Commitment to Address Climate Change and Transition to Clean Energy Economy. She stated that the first interagency climate council meeting was held in December 2018 in Raleigh, and held another meeting in February in Elizabeth City. In these meetings, Cabinet members and their designees provided updates on the specific and general directives in the Executive Order for their departments. In addition, there was a panel of local, county, state, and federal experts providing information on the effects of climate change on weather related events and coastal communities. This included information on long term planning for floods and sea-level rise.

Ms. Masemore stated that the DEQ released their clean energy development plan process which outlines a 5-month stakeholder engagement period to receive input from the public on North Carolina’s clean energy future. This process includes holding workshops, listening sessions, and road shows to provide information to the public and receive feedback and ideas concerning a clean energy future for North Carolina.

Ms. Masemore stated the DOT is working on a zero emission vehicle plan as part of the Executive Order directive. This plan involves developing infrastructure and the expansion of 80,000 electric vehicles in NC. The DEQ also plans to meet with other Cabinet agencies to discuss methodologies for achieving an additional 10 percent reduction in energy usage amongst state buildings. The DEQ has prepared a report documenting the 2002 baseline energy usage and current energy reductions throughout the state outlining the target each agency will need to achieve to meet the overall target of 40 percent energy usage reduction. Each agency submitted an energy management plan outlining the energy reduction activities they plan to take in the short term. Ms. Masemore also

noted some recent legislation has been introduced requiring all state agencies and the university system to meet a 40 percent reduction in energy usage by 2025. She added the Executive Order also requires the agencies to integrate climate change adaptation and resiliency into their policy programs and operations. The DEQ is helping the agencies with this by developing a report using North Carolina data from the National Climate Assessment which provides information on local and regional impacts of climate change. Ms. Masemore stated she will provide an update on this report at future meetings.

Discussion:

Chairman Solomon stated the National Climate Assessment focused on four particular areas; temperature change, rainfall change, extreme events, and sea level rise. He noted in the report that for the southeast, rainfall was slightly increasing, temperature was decreasing, the number of extreme events was increasing, and the sea level was rising slightly. He also noted the climate assessment should be done on a state-by-state basis. Ms. Masemore added the DEQ held conversations with the personnel whom developed the national report. The developers stated at the time there was state-level data utilized for the particular areas mentioned by Chairman Solomon. Ms. Masemore added they were also discussing how to develop regional cumulative impacts of climate change. Chairman Solomon asked if the DEQ was tracking climate change, and if they could provide a presentation showing the changes in rainfall and temperature throughout the state. Ms. Masemore responded they had several people working on the issues separately and she could arrange for them to provide information to the committee. She added the state does have a climatologist from NC State. Ms. Masemore stated, based on the historical trends from the National Climate Assessment, she believes humans are influencing climate change, but there remains uncertainty in projecting future climate conditions for specific locations. Ms. Masemore stated many reports are starting to look at representative concentration pathways (RCP) as a method for predicting climate futures. She added the current trajectory of this RCP value is 8.5 watts per square meter of radiative force and tremendous amounts of reductions are needed to reduce this RCP value.

Chairman Solomon asked what variables should the state be looking at to address climate change issues in North Carolina. Commissioner Meiburg noted if other countries don't address climate change, North Carolina will be impacted. He added this issue occurs at the city-level, state-level, and nation-level and was the reason for the Paris Climate Accord. He added the stark reality exists, unless there are contributions by governments to reduce global emissions, the RCP 8.5 scenario will occur leading to significant impacts on North Carolina. Chairman Solomon commented he was unsure if the 8.5 scenario or another scenario will ultimately impact North Carolina the most. He asked what data does North Carolina need to regulate our practices here for climate change. Commissioner Meiburg added even though North Carolina should look after its self-interests, North Carolina is also part of regional and global communities impacted by the decisions we make locally. Ms. Masemore responded North Carolina enacted NOx and SOx emission limits because it was in the best interest of its citizens. She also added if the state decision makers only looked at the ambient air concentration levels needed to achieve attainment, we would have a tougher time meeting the stricter ambient air quality standards in the future. Ms. Masemore stated in instances where there are economical options for reducing air pollution allowing North Carolina to grow our economy and improve public safety and public health, it makes sense to explore these options. She noted North Carolina ranks 45th in the world in terms of greenhouse gas emissions out of 190 countries that signed the Paris Accords. She stated North Carolina emissions were higher than entire countries like Denmark, Israel, Greece, Austria, and New Zealand.

Commissioner Deerhake believes we should also be looking at not only where flooding is occurring, but the cost of the property damage as a result of the flooding. Chairman Solomon pointed out that flooding from extreme events are increasing in the southeast, but we need to determine how much we can control. Commissioner Deerhake believes the impacts of sea level rise needs to be factored into local impacts, and North Carolina should be an example for other states in reducing greenhouse gases.

Commissioner Puette asked if the DEQ has updated the greenhouse gas inventory. Ms. Masemore responded the DEQ has updated the inventory and the report is currently on the website. Commissioner Puette asked if methane was 20 times more potent than CO₂. Ms. Masemore recalls it has been documented methane is something like 25 to 26 times more potent than CO₂. She added hydrofluorocarbons and sulfurhexafluorides used in refrigeration have global warming potential in the hundreds of thousands. Chairman Solomon pointed out North Carolina has made great progress in reducing greenhouse gas emissions, but we have not achieved our goal of 30 percent reduction from the 2005 baseline. Ms. Masemore stated North Carolina has reduced greenhouse gas emissions by 24 percent from 2005 levels. She explained further, at our current pace, North Carolina can expect to reduce greenhouse gas emissions by 31 percent by 2025 but needs an additional 9 percent to achieve the 40 percent goal in the Executive Order. Commissioner Puette asked how are methane emissions regulated at multi-county landfills. Ms. Masemore stated landfills capture methane to be used as a fuel source whereby most landfills in North Carolina have methane capture systems installed. Director Abraczinskas added North Carolina's landfill rules will be presented to the committee as part of the Group 6 rule Readoption Package. He added the EPA is currently reconsidering the New Source Performance Standards, Emission Guidelines, and Risk and Technology Rule for landfills and expects the results of these outcomes to be provided later this year.

Commissioner Carter asked what agencies the experts were from whom provided help on the energy issues of the Executive Order. Ms. Masemore answered they contacted the Department of Energy, National Association of State Energy Officials, National Association of Regulatory Agencies, and the EPA. She added four additional states have joined the U.S. Climate Alliance in the past couple of months. Chairman Solomon stated the committee will continue to keep track of the climate change issue.

Motion:

No motion required.

Agenda Item #7, Update on SAB Activities for the Methyl Bromide AAL (Mike Abraczinskas, DAQ)

Director Abraczinskas stated the DAQ provided a summary of other state AAL information, including the derivation of the value to the SAB. He stated some states have AALs comparable to the proposed value by DAQ, and other states have used occupational data or threshold limit value (TLV) as the basis for their value. He noted there were discussions with the SAB regarding the use of occupational data and whether this data would be protective of human health. He noted TLVs were developed for the protection of workers not the general public. He also stated the SAB discussed a range of risk from log fumigation and what would be the rationale for developing a range of risk. He mentioned a SAB member stated there were uncertainties in the risk assessment, and in the past, the SAB provided a range of risk to allow the EMC to make risk management decisions. He noted the SAB agreed the range of risk may include values below the proposed AAL and the EPA reference concentration is an estimate with an uncertainty potentially spanning an order of magnitude. He added the SAB pointed out the importance of the confidence level of the Integrated Risk Information System (IRIS) risk assessment for methyl bromide, which found medium confidence in the adverse effect level and high confidence in the database and the concentration.

Director Abraczinskas stated the SAB provided comments on the DAQ risk assessment for methyl bromide, and a final draft of the document was prepared and posted on the DAQ website for a 30-day public comment period. He stated the risk assessment proposes an upper bound value of 0.005 micrograms per cubic meter and a lower bound value of 0.002 micrograms per cubic meter. He added the lower bound value accounts for the enhanced neurotoxin potentials associated with the enzymatic response to methyl bromide genetically inherent in 60-70 percent of the population. He stated the lower bound value was determined by applying an uncertainty factor of the square root of 10 (e.g., 3.16). He stated the public comment period will end on March 27, and the SAB will consider all comments at their April 1 meeting before finalizing the report.

Director Abraczinskas provided an update of discussions with Ecolab on interim control measures, such as temporary duct work and stacks and aeration times to increase dispersion of methyl bromide. He stated Ecolab has indicated the cost of these measures would be cost-prohibitive for them to operate in North Carolina. He also stated the DAQ is trying to obtain monitoring data from areas close to log fumigation sites. Ecolab previously indicated they would provide this data; however, after reviewing the technical capabilities of certain monitors and the cost of performing the monitoring, Ecolab replied to DAQ they have concerns with investing money in monitoring if the state intends to use the proposed AAL. Ecolab has not communicated with the DAQ since these discussions.

Discussion:

Commissioner Carter asked if the state information summary was available in the report. Director Abraczinskas stated such information is not available in the report but will be provided to the committee. He added a summary of the individual state values was provided to the committee in previous meetings, but the descriptions of the derivations of these values were not. He added that the derivation summary is available on the SAB website, but he will also provide a copy of the summary to the committee members. Chairman Solomon asked if this summary lists the states that have comparable AALs to the proposed IRIS value. Director Abraczinskas stated that the derivation summary will list those states that used the same IRIS value for their AAL. Commissioner Deerpake requested before this topic comes before the EMC, the committee is reminded of the criteria used to select from the range of values provided by the SAB. Director Abraczinskas stated the DAQ will investigate these criteria and would appreciate any information from the committee.

In response to a question by Commissioner Carroll on what Ecolab was doing in other states with respect to log fumigation, Director Abraczinskas stated Ecolab was unwilling to share any information on operations in other states and referred the DAQ to the respective state environmental agency. Commissioner Carter asked what states did the DAQ ask for information from Ecolab on log fumigation operations. Director Abraczinskas responded states along the east coast whom have a shipping port, and some inland states. Commissioner Carroll asked if Ecolab controls all the log fumigation in the state. Director Abraczinskas stated that Ecolab is performing the fumigation for the five permitted sites; however, only one site is actively fumigating this season. Commissioner Pettus asked if other states had upper and lower bound values comparable to the proposed North Carolina AAL. Director Abraczinskas responded some states have an AAL and some states do not. He added the values vary widely based on the averaging time and methods used to set those standards, because depending when the state adopted the rule directly correlates to the best available scientific information. Chairman Solomon stated we need to look at this issue in detail. He pointed out North Carolina was not regulating this compound like some other states, and now we are proposing a limit is lower than these other southeastern states. Commissioner Pettus asked why Ecolab would be reluctant to perform log fumigation in North Carolina if they are having to meet the same AAL in other states. Chairman Solomon believes this may be a legal issue, but added the Commission needs to go forward with their determination. Commissioner Carter stated the other state AALs may not be the same as the AAL proposed for North Carolina. Commissioner Meiburg asked if the DAQ has petitioned the EPA to set a standard for this type of operation. Director Abraczinskas stated the DAQ along with many other jurisdictional agencies held discussions with the EPA on this topic but have not yet officially petitioned the EPA. He believes the DAQ and private industry stakeholders like Ecolab prefer consistent federal standards for this type of operation.

Director Abraczinskas provided the next steps for the log fumigation rule. He stated they plan to meet with the SAB in April to finalize the recommendation. If the SAB finalizes their recommendation, the DAQ plans to present the draft rule and fiscal note to the Committee in May. The committee can discuss whether they want to provide a 30-day waiver and request for a public hearing from the EMC. Chairman Solomon noted there may be a new group of people on the committee in July and additional delay to allow the new members to become familiar with this issue.

Agenda Item #8, Preliminary Results from Background PFAS Rainwater Sampling (DAQ Staff)

Deputy Director Pjetraj provided an update of the rainwater sampling in North Carolina for Per- and Polyfluoroalkyl Substances (PFAS). He stated that since the Spring of 2018, the DAQ has had 4-5 rainwater collection samplers installed around the Chemours facility measuring GenX and 32 other PFAS compounds. The DAQ has also installed rainwater collection samplers across North Carolina at the DAQ regional offices to determine background levels for these compounds. There has been only one detection at these background sites for perfluorobutanoic acid (PFBA) at a concentration of 7.4 nanograms per liter at the Raleigh location during the week of May 29 to June 5, 2018. He presented slides showing the locations of the rainwater collection samplers and the results of the PFAS measurements at these locations up to January 2019. He added that the results are typically received five weeks after the samples have been collected. Deputy Director Pjetraj stated that the purpose for doing the background sampling is to determine if there are any atmospheric contributions to any PFAS compounds that can be measured in various areas of North Carolina.

Discussion:

Chairman Solomon asked if the DAQ was working on other theories for transport of these compounds. Deputy Director Pjetraj stated that the DAQ has been in discussions with other state agencies and the EPA and the belief is that these compounds are global pollutants. He noted that there have been studies that have found these PFAS compounds in the blood of arctic animals. He stated that the main purpose for the background collection is to determine any atmospheric contributions to the areas. Chairman Solomon asked how are the PFAS transported. Deputy Director Pjetraj stated that transport may be through particle deposition or could be transported as a gas. Commissioner Deerhake asked if the DAQ was measuring other chemicals such as ammonia from these samplers. Deputy Director Pjetraj stated that currently they were only analyzing the samples using EPA Method 537 for the determination of PFAS compounds. Commissioner Meiburg noted that they would need to collect samples for a full year to determine the meteorological cycle of these compounds.

Agenda Item #9, Director's Remarks (Mike Abraczinskas, DAQ)

Director Abraczinskas stated that for the Group 4 rule readoption, the regulatory impact analysis posted for the public comment period was incorrect for the odor portion of these rules (15A NCAC 02D .1800). The DAQ plans to re-notice this rule set with the correct regulatory impact analysis on Friday for another 60-day comment period. In addition, the DAQ received comments from the EPA on the air curtain incinerator rule (15A NCAC 02D .1904) where they identified some inconsistencies with their rule and the DAQ rule. The DAQ is currently working on addressing these issues and will most likely present this rule again to the committee in May. Commissioner Carter asked if this rule would be going back to public hearing. Director Abraczinskas stated that the DAQ could provide an option for the public to request a public hearing. Commissioner Carter noted that he was the public hearing officer for the Group 4 public hearings and they only received three public comments in Raleigh and zero public comments in Clinton. Chairman Solomon asked if the written comments received during the first public comment period will also be considered for the second comment period. Director Abraczinskas affirmed this fact.

MEETING ADJOURNMENT

Chairman Solomon asked for additional questions or comments, and upon hearing none, noted that the next meeting of the AQC would be May 8, 2019. Chairman Solomon adjourned the meeting.