# **Air Quality Committee Meeting Minutes**

#### January 11, 2012

The Air Quality Committee (AQC) of the Environmental Management Commission (EMC) met on January 11, 2012, in the Ground Floor Hearing Room of the Archdale Building. The AQC members present: Chairman Marion Deerhake, Mr. Christopher Ayers, Mr. Marvin Cavanaugh, Mr. Les Hall, Dr. Ernest Larkin, Mr. Jeff Morse, Dr. David Peden, Mr. Dickson Phillips, and Mr. Stephen Smith. The Director and staff members of the Division of Air Quality (DAQ), Mr. Frank Crawley of the North Carolina Attorney General's Office, and the general public were also in attendance.

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

Chairman Deerhake called the meeting to order at approximately 2:30 p.m. She reminded the AQC members of the state ethics act regarding conflicts of interests or an appearance of conflicts of interests. No conflicts of interests were identified.

Chairman Deerhake disclosed that her employer, RTI International, has been a federal contractor with EPA (Environmental Protection Agency) for the development of the MACT standard for electric generating utilities. She said she has not been involved in that project and does not see it as a conflict of interests.

Agenda Item #2, Review and Approval of the November AQC Meeting Minutes

Chairman Deerhake asked whether there were revisions or comments regarding the November AQC meeting minutes. Mr. Hall stated that he was, in fact, in attendance at the November meeting. Mr. Cecich requested that on page 3, in the first full paragraph, the word "repeals" should be changed to "appeal". Mr. Cecich moved to approve the minutes with modifications and Dr. Peden seconded the motion. The minutes were approved with the noted modifications.

Chairman Deerhake pointed out that agenda item #5 under Draft Rules, should be treated as information item. She said that the open burning rules are already at the EMC level.

# **CONCEPTS**

**Agenda Item #3**, Revisions to the New Source Review (NSR) and Prevention of Significant Deterioration (PSD) Nitrogen Oxides (NOx) Significant Level for PM2.5 (512), (Joelle Burleson, DAQ, Rules Development Branch)

Ms. Burleson began by reminding the AQC that in 2010, the EMC adopted amendments to the NSR and PSD permitting rules to incorporate requirements relative to the PM2.5 NAAQS (National Ambient Air Quality Standards) and related Clean Air Fine Particle Implementation Rule. She said that current state rule amendments established the significance level for NOx for purposes of compliance with the PM2.5 NAAQS in NC at 140 tons per year (tpy) level based on monitoring and modeling data that supports that NOx is a lesser contributor to the formation of PM2.5 than sulfur dioxide (SO<sub>2</sub>). EPA determined that

while the federal rule allowed for a demonstration that NOx is not a significant precursor to forming PM2.5, there isn't an allowance to establish alternative significant level for the pollutant. As a result, it is necessary to revise the significance level to reflect the 40 tpy level in the federal rule. Ms. Burleson noted that Mr. Hall served as Hearing Officer for this rulemaking. At the end of the comment period, comment was received from the EPA indicating that Agency was not certain whether it would be allowed. The EMC adopted the rule. Ms. Burleson clarified with Chairman Deerhake that the EPA-required revision will have to go back to rulemaking to satisfy the Federal requirement.

Mr. Ceich asked whether EPA was taking a stand that the rule will require 40 tpy whether or not there is science behind it. He asked whether it was correct that although it allows for a demonstration but it doesn't matter whether or not the demonstration is performed. Ms. Burleson said that it is an all or nothing situation in terms of what EPA interprets the federal rule to allow and that according to EPA, NOx is either not a precursor or it is a precursor. If it is a precursor, then it needs to be 40 tpy from their perspective. She explained that the southeast has a NOx-limited environment, and there are data that support the 140 tpy value introduced by DAQ and adopted by the EMC, but EPA is saying that they can't legally approve that alternative. Mr. Cecich asked what would be the impact to businesses and the public in NC to go from 140 tpy to 40 tpy even though the science supports 140 tpy. Ms. Burleson said the DAQ Permitting staff has advised her that they have not had a facility use the 140 tpy threshold that wouldn't have already been covered by a 40 tpy threshold associated with ozone during this time frame. She said that there would be few if any sources that would be impacted by the change, but those sources were impacted might have administrative costs and that there might be administrative costs in DAQ as well.

There were no AQC objections voiced on the concept to proceeding to draft a revised rule at 140 tpy, so DAQ staff will proceed with rule drafting.

**Agenda Item #4**, Revision of Volatile Organic Compound (VOC) Reasonably Available Control Technology (RACT) Rules Applicability (513) (Joelle Burleson, DAQ, Rules Development Branch)

Ms. Burleson said that this concept is to adjust the applicability of these rules to meet Clean Air Act (CAA) requirements. She said that previously, a series of rules adopted to incorporate Control Technique Guidelines (CTGs) for particular source categories into the state RACT rules. At that time, the rules were structured so that the RACT requirements for these CTG category sources applied to emissions greater than 100 tpy in larger facilities which are those considered major sources. Since that time, EPA has been reviewing DAQ's redesignation requests and other submittals relative to the Metrolina area, they have identified an issue with that structure and the CAA Section 182 (b)(2) requires that RACT be considered for all sources addressed by CTGs. This means that all sources, not just the major sources, are required to be addressed through RACT rules for those CTG source categories. DAQ has been in discussion with EPA regarding adjusting the rules to meet the CAA requirement. DAQ anticipates coming back to the AQC and subsequently to the EMC with a rule change that would place these requirements in a contingency measure. Ms. Burleson said that under this scenario, the rules would apply to sources if a violation actually occurred, and the lower tonnage sources would have to apply the RACT requirement for these particular source categories. Chairman Deerhake asked whether DAQ would be able to agree with that. Ms. Burleson answered that EPA has indicated that this is a viable approach.

Mr. Cecich asked would what would this mean in real terms for someone who would fall into this category. Ms. Burleson answered that depending on the source category, the source could have to use an alternative chemical in production processes (e.g., a coating containing less VOCs in appliance manufacturing) and/or require some additional recordkeeping and reporting for the smaller sources typically. She said that without the full analysis, she could not answer whether or not there would be additional control technology required for particular sources. She said that EPA's CTGs are specific to the categories and many of the categories are coating related. She reminded the AQC that there is a cost component associated with RACT. Mr. Cecich commented that it appeared that EPA has basically trumped the best thinking in NC and he was trying to understand what the impact would be. He said that if there are good data to support a different position than EPA's position, the AQC should understand what the impact is. Director Holman explained that NC has been working with other southeastern states over the past year and a half and with EPA Region 4 to help them understand atmospheric chemistry in the Southeast and that we are NOx-limited and that the control of NOx is the way to lower ozone throughout much of the Southeast rather than additional control of VOCs. She said that EPA Region 4 has been a very good partner and has been working with DAQ to brief the Office of Air Quality Planning and Standards (OAQPS). Much of this work was underway as EPA was considering the reconsideration of the 2008 ozone standard. Director Holman said she is not clear whether DAQ would be able to get flexibility into the implementation rule of the 2008 ozone standard due to the timeframe. She assured that DAQ is trying to carry the best science forward. She said that the CAA is very prescriptive in this area. She said that as EPA reviewed some of DAO's implementation plans, the EPA realized that this 100 tpy threshold was not what was prescribed in the CAA and DAQ needs to revise the rule. She said that in follow-up conversations, there was discussion regarding moving this requirement into a contingency plan that would not be triggered unless there was a future exceedance of the 1997 ozone standard. Director Holman said that EPA is trying to work with DAQ but is also considering the clear legal reading of the CAA.

There were no AQC objections voiced on the concept to proceeding to rule drafting so DAQ staff will proceed.

#### **EMC AGENDA ITEMS**

**Agenda Item #5**, Request for Adoption of Amendments to Open Burning Rules to Incorporate Session Law 2011-394 Requirements (507) (Joelle Burleson, DAQ, Rules Development Branch)

Chairman Deerhake noted that Agenda Item #5 was an information item, not a draft rule.

Ms. Burleson reminded the AQC that in December 2011, DAQ came to both the AQC and the EMC with a request for a 30-day waiver and a request to proceed to public hearing on adoption of requirements specified by Session Law 2011-394 that adjusted the set-back requirements in the open burning rules. At the EMC meeting, the 30-day waiver was not approved and DAQ was instructed to bring this item back to the EMC in January 2012. She said that no action was required because the AQC had already moved the action forward to the EMC. Ms. Burleson explained that the item before the EMC would be to request approval of the amendments to the open burning rules to adjust the set-back requirements and to update

the name of the Division of Forest Resources to its new name, The North Carolina Forest Service. She noted that in response to some of the concerns raised at the previous meeting, the EPA brochure on how smoke from fires can affect your health was included in the AQC agenda package.

Dr. Peden asked for confirmation that the proposed change was to move the set-back from 1,000 feet to 500 feet. He asked whether proximity to schools and hospitals was considered and if special permission was required to move the burning away from those places. Dr. Peden said that as a result of these new set-back requirements, real people are going to get really sick because the particle load is going to be higher when exposure is only 500 feet away. He said that one of the most common calls he received this summer during the wildfires in eastern NC was from concerned parents asking whether they should send their kids to camp because of the wildfires. Dr. Peden said that from his perspective, it was worth the AQC making a stand on this part of SL 2011-394.

Mr. Ayers commented that in the November meeting, a suggestion was made to investigate the reasoning behind the legislative change to the set-back and he asked whether that had occurred. Ms. Burleson said that she had not learned anything new since the last meeting. Director Holman responded that it is her understanding that there were no special studies performed in support of the legislative change. Ms. Burleson reminded members that several suggestions were made at the conclusion of the EMC meeting and that members were asked to forward desires for information regarding the issues to Chairman Smith and he would coordinate any further presentations for future meetings.

Chairman Deerhake said that the EMC had discussed a resolution. Chairman Smith said that a draft resolution was included in the EMC agenda package and would be considered at the January EMC meeting. Mr. Cecich asked whether there would be an opportunity at the EMC meeting for discussion. Chairman Deerhake said that if the members are inclined to discuss it, it could be discussed. Mr. Cecich said he would not be at the EMC meeting. He asked whether the AQC should identify that there doesn't appear to be any science considered in the development of the legislation. Chairman Deerhake noted the comment and said it would be passed along at the EMC meeting.

### **INFORMATION ITEMS**

**Agenda Item #7**, Update on Implementation of Ozone National Ambient Air Quality Standards (NAAQS) (Laura Boothe, DAQ, Attainment Planning Branch)

Ms. Boothe gave a presentation updating the AQC on the 2008 ozone standard and where DAQ stands regarding implementation. Ms. Boothe's presentation handout is attached.

(See attached agenda item #7 handout.)

Chairman Deerhake commented about proposing the 1997 non-attainment areas but holding open the option to parts of those counties. Ms. Boothe explained DAQ is considering the data in two counties, Lincoln County and Union County. Both counties have monitors attaining ozone standards. She said the in the past, when a county had an attaining monitor, only part of that county would be recommended as non-attainment. DAQ, using the nine factors they are required to address, is considering whether the data

supports portions of these counties being recommended as attainment. Chairman Deerhake asked what the result of that would be. Ms. Boothe explained that nonattainment New Source Review (NSR) rules would not be required, those areas would not be subject to transportation conformity under the 2008 ozone standard and if the EPA revokes the standard completely, those areas would not have to do transportation conformity. However, if those counties maintain that standard, they would have to do the same transportation conformity they are currently doing. Director Holman said that given the marginal classification, that was correct.

Chairman Deerhake said she had the impression that there was extensive commuting occurring in those counties. Ms. Boothe said that the commuting patterns from Lincoln County into Mecklenburg County are low. She said that DAQ believes that the majority of the commuting comes from the more urban areas of Union County. She said that DAQ has average daily traffic counts maps and the maps show that there isn't significant traffic in those rural counties.

Mr. Cecich asked whether 8-hour ozone design values are actual data. Ms. Boothe explained that 8-hour ozone design values are based on actual ambient air quality data. She further explained that the way those design values are determined is to consider the fourth highest value for three consecutive years for a particular monitor and average those three values. That becomes the design value and is compared to the standard.

Mr. Ceich asked Ms. Boothe to define unclassifiable attainment. Ms. Boothe explained that in the CAA, EPA has identified three classifications. They are "attainment", "non-attainment", and "unclassifiable". Historically, if an area is not being designated non-attainment, EPA groups unclassifiable and attainment together because they do not have enough data to designate the area non-attainment. EPA has decided to classify areas "unclassifiable/attainment" as opposed to "attainment" or "non-attainment". Unclassifiable is often used in areas with no monitoring.

**Agenda Item #8**, Update on Air Quality Modeling Results for Mercury Total Maximum Daily Load (TMDL) (Laura Boothe, DAQ, Attainment Planning Branch)

Ms. Boothe began by talking about the update given at the Water Quality Committee (WQC) meeting by Kathy Stecker regarding DWQ's status regarding TMDL development for mercury. She said that in Ms. Stecker's presentation, she showed that about 2% of mercury in water bodies is derived from water point sources and about 98% is derived from atmospheric deposition from air sources. Mercury in North Carolina's water bodies needs to be decreased by about 67% in order to lift the fish advisory for large mouthed bass. She said that if all of the mercury emissions from NC sources were decreased, that 67% reduction would not be met because NC only emits 50-60% of the air emissions deposited. The remaining mercury emissions originate from and are transported to North Carolina from outside the state. NC is trying to do its part to decrease the 67% of mercury needed in the state's water bodies, but action will be required nationally and globally to meet the TMDL.

(See attached agenda item #8 handout.)

Chairman Deerhake asked about the Electric Generating Utility (EGU) Maximum Available Achievable Control Technology (MACT) rule and its influence on the table in the presentation. Director Holman responded by referring to the table and said that in the comparison between 2002 and 2010 for the electric generating sector, there is a decrease in North Carolina mercury emissions from 3500 lbs/yr to 963 lbs/yr. She said the decrease is a result of co-benefits from the Clean Smokestacks Act (CSA). She said the decrease in the table from 963 lbs/yr to 700 lbs/yr is probably a combination of the implementation of the EGU MACT and final implementation of the CSA.

Mr. Hall asked about the current status on national level in terms of EPA rulemaking. Director Holman said that the EPA Administrator signed the EGU MACT on December 16, 2011. The MACT standards allow for three years for compliance with a possible one year extension, and unless those standards are litigated, implementation is expected in the next three to four years across the country. Director Holman explained that another rulemaking - the Boiler MACT rule - is more complicated. She said that EPA finalized a rule last Spring and submitted a referral notice indicating that they were already reconsidering some of the issues because of the amount of data EPA received from the time of the proposed rule to the time they had to complete the final rulemaking in the Spring of 2011. EPA didn't feel they had time to adequately address the new information they had received. EPA, therefore, indicated they needed to reconsider certain portions of the Boiler MACT rule. In late December 2011, EPA issued new proposed rules based on those reconsidered issues. The issue that is complicating this rulemaking is a recent court ruling which vacated that deferral notice. EPA is scheduled to finalize the rule for Boiler MACT rule in April 2012.

Chairman Deerhake asked whether North Carolina's modeling has been reviewed by any parties or peers outside of NC DAQ. Ms. Boothe said that DAQ used EPA's data which zeroed out mercury emissions at the North Carolina boundaries to determine the role of non-North Carolina sources.

Chairman Deerhake asked when the last full year CMAQ met data was available. Ms. Boothe answered that 2005 data was used, which is the last mercury modeling available. Chairman Deerhake asked whether that data inventory might be improved considering the data that has been come about from the Utility MACT. Ms. Boothe explained that DAQ used the inventory that was recommended by EPA in 2011.

Chairman Deerhake asked about next steps. Ms. Boothe explained that DAQ is planning to have stakeholder meetings in at least two different parts of the state to talk about the impact on air emission sources as well as the impact on water sources. No additional air modeling is planned at this time. DAQ is considering looking into the more deposition prone species and what is the expected reduction in those species and providing those numbers to DWQ. Director Holman added that DAQ and DWQ are talking with DENR management regarding possible implementation options.

**Agenda Item #9**, Director's Remarks (Sheila Holman, DAQ)

Chairman Deerhake asked Director Holman to talk about the CSAPR (Cross-State Air Pollution Rule) and its current delay in the court system.

Director Holman said that on December 30, 2011, a DC circuit judge stayed the CSAPR, and EPA is continuing to implement the Clean Air Interstate Rule (CAIR). EPA is in the process of understanding the implications this stay has on other actions. Director Holman hopes to have updates at the March AQC meeting.

Director Holman remarked that the two PM2.5 non-attainment areas, the Hickory area and the Lexington-Greensboro area, were designated attainment on December 19, 2011, which means all areas in NC are currently attaining both the annual and the daily PM2.5 standard.

Director Holman mentioned that the temporary rule exempting the biogenic CO<sub>2</sub> emissions from Greenhouse Gas (GHG) emissions permitting was approved by the EMC at the November 2011 meeting. The temporary rule was approved by the Rules Review Commission (RRC) on December 15, 2011 and became effective December 23, 2011. It is expected to be published in the *North Carolina Register* on January 17, 2012. The public hearing on the permanent rule has been scheduled for March 14, 2012, in Raleigh, and Mr. Ayers has agreed to be the Hearing Officer.

Chairman Deerhake asked whether there were any remarks or request for updates on other topics to which there were none. Chairman Deerhake adjourned the meeting.