Air Quality Committee Meeting Minutes

July 10, 2013

The Air Quality Committee (AQC) of the Environmental Management Commission (EMC) met on July 10, 2013, in the Ground Floor Hearing Room of the Archdale Building. The AQC members present: Mr. Marvin Cavanaugh, Mr. Les Hall, Ms. Amy Pickle, Ms. Yvonne Bailey 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 10:00 a.m. Chairman Deerhake reminded the AQC members of the State Government Ethics Act regarding conflicts of interests or appearance of conflicts of interests. Chairman Deerhake advised that her employer, RTI International, supports EPA's (Environmental Protection Agency) position and two of their responsibilities are utilities and pulp and paper. However, Chairman Deerhake advised that she does not work on either of those. She said she has discussed this matter with General Counsel and does not believe she has a conflict of interests.

Agenda Item #2, Review and Approval of the March 2013 AQC Meeting Minutes

Ms. Bailey made the motion to approve the minutes. Mr. Cavanaugh seconded the motion. The minutes were approved.

CONCEPTS

None

DRAFT RULES

Agenda Item #3, Request for 30-day Waiver and to Proceed to Hearing on Inspection/Maintenance (I/M) Rules Revision (517) (Steve Schliesser, DAQ)

Mr. Schliesser explained that in response to statutory revisions in North Carolina Session Law 2012-199, the Division of Air Quality (DAQ) is proposing changes to its emission inspections rules. In the

existing rule, only the current model year vehicles are excluded from emission inspections in the 48 counties required to have an emission inspection program under federal or State rules. The revised statute excludes from emissions inspections those vehicles in the three most recent model years with less than 70,000 miles on the odometer. Several additional minor housekeeping rule amendments are proposed to clarify definitions. DAQ also recommends repealing rule .1009 and relying solely on the federal heavy-duty engine standards rules. This is based on the fact that the California rule referenced in rule .1009 is equivalent to the EPA Heavy Duty Diesel (HDD) regulations and EPA did not delay or relax their HDD rules. NC General Statute 150B-19.3 stipulates that a State agency may not adopt a rule for environmental protection that imposes a more restrictive standard than that imposed by federal law.

Mr. Schliesser continued to explain that the purpose of this document is to conduct an evaluation of the costs and benefits associated with changes and revisions to the DAQ rules on motor vehicles emission inspections in the 48 counties required to have those inspections under State or federal rules. The new statute will amend the current rule's exclusion of the current model year for emission inspection to exclude vehicles of the three most recent model years with less than 70,000 miles on its odometer. This change directly involves amending four rules:
15A NCAC 02D .1002, Applicability;
15A NCAC 02D .1003, Definitions;
15A NCAC 02D .1005, On-Board Diagnostic Standards; and
15A NCAC 02D .1006, Sale and Service of Analyzers (see proposed changes in Appendix A).

He said that these four rules establish and define which vehicles are subject to the Motor Vehicle Emission Control Standard and which analyzers are suitable for conducting the emission inspections. In addition, this change involves minor housekeeping amendments and the repealing a rule – 15A NCAC 02D .1009, Model Year 2008 and Subsequent Model Year Heavy-Duty Diesel Vehicle Requirements. This rule establishes heavy-duty diesel vehicle requirements for 2008 and more recent model years referencing regulations from California instead of regulations from EPA. Mr. Schliesser said none of these minor changes have any additional impact.

Mr. Schliesser referred to Table 1, Estimated Fiscal Impacts of the Proposed Amendments, which shows the fiscal impacts of exempting the second and third model year vehicles which are estimated to be $6.7 million during the last half of State Fiscal Year (SFY) ending on June 30, 2014. The full

impacts are realized in SFY-2015 and SFY-2016, reaching $14.0 million and $14.6 million, respectively, due to a projected 2.8% annual growth on the number of vehicles affected. Owners of vehicles benefit from cost savings that are equally offset by the combined revenue losses by State government agencies and private sector impacts on owners of inspection stations. If station owners are required to purchase software upgrades to implement the rule changes, there could be an additional one-time expenditure of $990,000 paid by the 4,550 station owners (about $180 for the typical station) and $200,000 paid by DMV. Other optional paths to implement the rule changes would not entail any additional one-time expenditure to station owners.

Mr. Schliesser said that the net present value of these fiscal impacts of these proposed amendments are estimated to equal $30,155,000 over the initial three year period of this analysis. These rule amendments cause substantial economic impacts, as defined in the Administrative Procedures Act in N.C.G.S. 150B-21.4, meaning that the estimated impacts exceed $500,000 in any calendar year.

Mr. Schliesser noted that the federal Clean Air Act (CAA), as amended, established National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: carbon monoxide, lead, ozone, nitrogen dioxide, particulate matter and sulfur dioxide. The North Carolina vehicle inspection and maintenance (I&M) program started in 1982 with Mecklenburg County being required to have an emission inspection program to address violations of the carbon monoxide NAAQS. In 1984, Wake County was added to the program for carbon monoxide NAAQS violations. With the passage of the 1990 CAA Amendments, seven other Counties (Cabarrus, Durham, Forsyth, Gaston, Guilford, Orange and Union) were added to the emission inspection program to address violations of the 1-hour ozone and/or carbon monoxide standards. Under the 1997 8-hour ozone standard, the Charlotte/Gastonia/Rock Hill area was designated as a moderate nonattainment area. Senate Bill 953 (Session Law 1999-328) required an additional 39 counties to have the vehicle emission program in order to improve air quality statewide. These counties were added to the program based on population, vehicle miles traveled, and the likely contribution by motor vehicles to high ozone levels in these counties and nearby counties. This expanded the program to a total of 48 counties.

Mr. Schliesser explained that the initial emission inspection program in North Carolina was based on a “tail-pipe” test. The test was administered by inserting a probe in the vehicle’s tail-pipe and measuring the emissions of the pollutants. The tail-pipe test measured carbon monoxide and total hydrocarbon emissions. The test could not identify the emission-related component that was malfunctioning, nor could it measure emissions of nitrogen oxides, which is a key precursor to ozone formation. He said

that starting in October 2002, inspection stations in the original nine counties converted from tailpipe testing to the new On-Board Diagnostic II (OBD) emission testing for all 1996 and newer light duty gasoline vehicles. The program continued to expand until January 1, 2006, at which time inspection stations in 48 counties were performing the OBD emission test on all 1996 and newer light duty gasoline vehicles. Once the program was fully implemented, tail-pipe testing for vehicles older than 1996 was discontinued. Model year 1996 and newer vehicles have standardized computer systems that continually monitor the electronic sensors of engines and emission control system parameters. When a potential problem is detected, a dashboard warning light is illuminated to alert the driver.

Mr. Schliesser explained that an OBD system detects a problem well before symptoms such as poor performance, high emissions or poor fuel economy are recognized by the driver. An OBD emission test provides a more timely and comprehensive picture of a vehicle's emission status because it continuously evaluates emission performance during operation, whereas a tail-pipe test measures emissions only for a few moments once a year. Early detection helps to avoid costly repairs and improves engine and emission performance.

Mr. Schliesser explained that in response to statutory revisions in North Carolina Session Law 2012-199, the Division of Air Quality (DAQ) is proposing changes to its emission inspections rules. In the existing rule, only the current model year vehicles are excluded from emission inspections in the 48 counties required to have an emission inspection program under federal or State rules. The revised statute excludes from emissions inspections those vehicles in the three most recent model years with less than 70,000 miles on the odometer. Several additional minor housekeeping rule amendments are proposed to clarify definitions. DAQ also recommends repealing rule .1009 and relying solely on the federal heavy-duty engine standards rules. This is based on the fact that the California rule referenced in rule .1009 is equivalent to the EPA Heavy Duty Diesel (HDD) regulations and EPA did not delay or relax their HDD rules. NC General Statute 150B-19.3 stipulates that a State agency may not adopt a rule for environmental protection that imposes a more restrictive standard than that imposed by federal law.

Mr. Schliesser continued by saying that in 2008, North Carolina began the electronic authorization program. This program replaced the paper stickers that had been placed on vehicle windshields by inspection stations with electronic authorizations. The electronic authorization program also synchronized the vehicle registration renewal date with the vehicle inspection renewal date. A safety only inspection is required for all vehicles less than 35 years old. A vehicle that qualifies for an

emission waiver may have their registration renewed after passing the safety equipment portion of the inspection and receiving a waiver for the OBD portion. The Department of Transportation (DOT) Division of Motor Vehicles (DMV) had contracted with Verizon Business to manage the Vehicle Inspection Database (VID). In April 2012 the DMV signed a contract with Systech International (now Opus Inspection) to serve as the State's new VID program vendor and to enhance its functionality. This new system will allow for real time data transfer between the inspection stations, the VID and the DMV's vehicle registration database, thus minimizing wait time for vehicle registration issuance and renewals.

Mr. Schliesser explained that the rule amendments discussed in this analysis are necessary to comply with the new Session Law 2012-199 statute that reduces the regulatory burden on many vehicle owners while meeting federal air quality standards. The DMV and DAQ jointly led a study per Session law 2011-145 to examine exempting vehicles from the emission inspection requirements under G.S. 20-183.2(b) for the three newest model year vehicles. As part of this study, DAQ in coordination with the DMV evaluated the potential impacts of exempting these motor vehicles on emission levels and air quality and determined that the exemption would not have a negative effect on air quality or on EPA accepting the State Implementation Plan (SIP) revision. Despite a slight emission increase from the inspection exemption, DAQ modeling showed that the offsetting emission effects of a higher compliance rate were stronger, the net result having a positive effect on air quality. A higher compliance rate than in previous modeling was assumed because recent data shows a higher rate has been achieved since the 2008.

Mr. Schliesser said that the January 2014 effective date of this legislation is structured to allow the DMV the time needed to recode its software to properly reflect the change in legislation. Additionally, it is important that the State submit to EPA the appropriate SIP revisions addressing any legislative change in the program prior to implementation of the amendment. The effective date would allow DAQ to submit the revisions demonstrating that no net increase in certain pollutants would result from 16 percent of the baseline number of vehicles being exempt from emission inspections since this would be offset by a higher compliance rate. Recent data shows a higher compliance rate than what is stated in the current SIP has been achieved since the electronic authorization program and synchronized vehicle registration and inspection renewal dates started in 2008. As a result, the State could move forward with the proposed three most recent model years exemption without losing eligibility to secure federal transportation funds.

Mr. Schiesser talked about rule 15A NCAC 02D .1002, *Applicability*. He said that this rule defines the trigger mechanisms for *which* specific vehicles (*i.e.*, current model year) are subject to the Motor Vehicle Emission Control Standard in the 48 counties specified in G.S. 143-215.107A. Those subject are gasoline-powered motor vehicles, except motorcycles and excluding the current model year, that are:

(1) required to be registered by the DMV in the 48 designated counties

(2) part of a fleet primarily operated within the 48 counties

(3) operated on a federal installation located in one of the 48 counties.

He talked about rule 15A NCAC 02D .1003, *Definitions.* He said that this rule defines the key terms, but the previous version did not include all the terminology with corresponding definitions for the related new rule and available types of motor vehicles (i.e., hybrids, and the different types of electric vehicles), which are added in the rule change.

Finally, Mr. Schliesser talked about rule 15A NCAC 02D .1005, O*n-Board Diagnostic Standards.* He said that this rule defines *what* the requirements are for the vehicles subject to emission inspection and those performing the inspection. The standards are:

1. pass the on-board diagnostic test as prescribed in 40 CFR 85.2207,
2. use equipment meeting the performance warranty tests in 40 CFR 85.2231, and
3. report test results to DAQ satisfying the computerized system and data analysis requirements specified in 40 CFR 51.358, 51.365, and 51.366.

Chairman Deerhake referred to page 2 of 7, attachment B of the AQC agenda package where the rule states the definitions for 15A NCAC 02D .1003. She asked Mr. Schliesser to explain why there is an upper bound of 14,001 pounds for heavy-duty gasoline vehicles. Mr. Schliesser said it is due to a recent change that is in line with federal standards. Chairman Deerhake noted a typographical error in line 19 on page 2, attachment B. The word “any” should be changed to “and”. Chairman Deerhake asked whether diesel fuel is captured under this rule. Mr. Schliesser said “No.” Chairman Deerhake asked whether that was clear to the public. Mr. Schliesser said that the DAQ has not received any questions yet. Chairman Deerhake asked that the DAQ keep that in mind. Chairman Deerhake asked whether DMV’s (Division of Motor Vehicles) process that assures that the three most recent years or 70,000 miles are captured by this motion. Mr. Schliesser confirmed and said that the DMV are in the process of changing their software to provide that. He explained that the current law only exempts new vehicles and all the new vehicles come from dealership, so the issue with how to handle this at the

non-dealership stations is not in play. When the new rule becomes effective some of those three most recent year vehicles will be serviced at non-dealership stations.

Chairman Deerhake asked Counsel whether they should have two motions; one motion for the 30-day waiver and another motion to proceed to public hearing, or if the two could be combined. Mr. Crawley said that at this stage the motions could be combined. Director Holman noted that the Economic Assessment (EA) has been approved at the staff level but has not yet been approved by OSBM (Office of State Budget & Management). The delay is due in large part to the focus on the budget and the tax reform. There is a question of whether the EMC (Environmental Management Commission) would be comfortable moving forward contingent on the EA being approved. Chairman Deerhake asked whether there was any chance the OSBM would approve the EA within in the next 24 hours. Director Holman said it was not likely and that if the EA approval is not received within the next few days, July 25 will be the next time to publish it in the register. She said that an option is to hold a separate conference call once the full EA approval is received. Another option is to delay voting until the AQC has the full EA approval. She said that the 30-day waiver is requested in order to get the rule state-effective as close to January 1, 2014 in response to the legislation. Chairman Deerhake suggested that the AQC move forward and leave it to the EMC Chairman to decide whether and how to proceed. She advised that the motion would be contingent upon OSBM approval of the EA.

Mr. Hall moved for a motion for a 30-day waiver and to proceed to public hearing contingent upon OSBM approval. Mr. Cavanaugh made a second motion.

Ms. Pickle asked whether the AQC is assuming that the contingency means that there are no substantive changes in the EA and is that part of the motion that if there were substantive changes it would come back to the AQC. Mr. Crawley confirmed. With no further discussion, the motion carried.

Agenda Item #4, Request for 30-Day Waiver and to Proceed to Hearing on Air Toxics Rule Revisions (519) and Asbestos Acceptable Ambient Level (AAL) Correction (518) (Patrick Knowlson, DAQ)

Agenda Item #4, Request for 30-Day Waiver and to Proceed to Hearing on Air Toxics Rule Revisions (519) and Asbestos Acceptable Ambient Level (AAL) Correction (518) (Patrick Knowlson, DAQ)

Mr. Knowlson stated that he would be presenting the Air Toxics Rule changes pursuant to Session Law 2012-91 and also the asbestos AAL change that was combined with this package for efficiency. He began with a slide showing acronyms frequently used in his presentation.

Mr. Knowlson summarized Session Law2012-91. He explained that there were four sections. Section 1 of Session Law 2012-91 refers to the exempt sources from certain regulations and codifies the Director's Call provision. Section 2 requires rule amendments for Section 1 regulations and Section 3. Section 3 requires the DAQ to review the rules and their implementation to determine whether regulatory burden can be reduced while increasing Division efficiency while maintaining the protection of public health. Section 4 requires the DAQ to report back to the Environmental Review Commission (ERC) in 2012, 2013, and 2014. DAQ provided a report to the ERC on December 1, 2012.

Mr. Knowlson further explained that Section 1 of the Session Law exempts facilities from certain federal regulations. Those regulations would be national emission standard for hazardous air pollutants (NESHAPS) of 40 CFR, part 61, the MACT (Maximum Achievable Control Technologies) of 40 CFR, part 63, the GACT (Generally Available Control Technology) of 40 CFR, part 63, and facilities subject to case-by-case MACT in Section 112(j) of the Clean Air Act (CAA). Under Section 1, when DAQ receives a permit application from a new or modified facility, they are required to determine whether an unacceptable risk to human health exists and if is determined that a risk is imposed the Director is required to make a written finding and require a source submit a permit application that eliminates the unacceptable risk.

Mr. Knowlson explained that Section 3 of Session Law 2012-91 requires DAQ to review its rules and reduce unnecessary regulatory burden while increasing efficient use of its resources while maintaining the protection of public health. He said that DAQ held a stakeholder meeting in September 2012 to review recommendations. DAQ also received comments and produced a report for the ERC in December 2012. DAQ came back to the stakeholders in March 2013 to review the draft rules that DAQ would be brought before the AQC and the EMC. Interested parties consisted of people from industry and from environmental groups.

The recommendations that resulted from this process were; to develop an additional set of emission thresholds for pollutants from unobstructed vertical stacks, exempt natural gas and propane-fired boilers, exempt emergency engines, eliminate the SIC call, clarify the use of actual rate emissions, and to remove the term "unadulterated" from the rules.

The first recommendation was to develop additional toxic permitting emission thresholds on emissions rates which are TPERs. When this additional set of thresholds was developed (Table B of rule 15A NCAC 02Q .0702) the new thresholds were approximately 1.3 lbs/yr higher than the current thresholds in Table A. The TPERs are quite conservative. Modeling analysis often shows the emissions many times lower than the health-based AAL (Acceptable Ambient Levels).

Mr. Knowlson showed a slide that showed the formula used to derive the TPERs presented in Table B of 15A NCAC 02Q .0702. He said the modeling parameters used in the determination are listed on the slide. He said the difference between the values in Table A and in Table B is that the stack velocity is 0.01 meters/second in Table A and it is 1 meter/second in Table B. This stack velocity is quite conservative with the lowest source at 1.5 m/sec.

Mr. Knowlson continued by saying that the second recommendation is to exempt natural gas and propane-fired combustion sources. As part of the March stakeholder meeting, a comment was received that this recommendation could be expanded beyond boilers. The DAQ researched and did not find any issue with amending the original recommendation regarding combustion sources. The USEPA exempts certain gas-fired combustion units from the federal air toxics rules. Process heaters are exempted from the boiler GACT rule and another federal rule only prescribes work practice standards. The emissions from these sources are well below the TPERs which is quite conservative values. The DAQ reviewed all of the emission profiles from all of the TAPs (toxic air pollutants) from combustion sources. Those emissions spreadsheets to back-calculate and determine what size source would be needed to exceed the existing TPER. The limiting compound is benzene which would require 450 mm BTU/hr for that source to exceed the current TPER.

Mr. Knowlson described recommendation three which is to exempt emergency engines. He said that the federal air toxics rules already apply to emergency engines in Subpart ZZZZ. These emergency engines are used in temporary emergency situations and are often small and only operate for a few hours. Peak-shaving engines are not considered emergency engines. The DAQ reviewed emissions of all of the TAPS from using diesel fuel in emergency engines. The DAQ back-calculated emission spreadsheets to determine the size unit was required to exceed the existing TPER. The results showed that formaldehyde was the controlling compound and 4,843 HP was required to exceed the hourly TPER rate.

The fourth recommendation, as Mr. Patrick explained, was to eliminate the SIC Call. This rule allowed the Director of the DAQ to call in all facilities of certain SIC classifications to submit a permit application. The Director's Call provides adequate authority to address any unacceptable risks to human health from any facility making it a redundant rule.

Recommendation five was to clarify the use of actual rate of emissions. Throughout the state toxics rules, the use the actual rate of emissions is used. In 15 NCAC 02Q .0711, "or permitted emissions" is used. Looking back at the hearing records it is clear that the intent was to always use the actual rate of emissions when performing TPER screening calculations for consistency purposes among the permit engineers in the DAQ who are doing the screening calculations.

The sixth recommendation was to remove the term "unadulterated wood" from the state air toxic rules. This would eliminate some of the confusion. The boiler rules and their related solid waste rules have defined what is a fuel versus what is a solid waste is. Using the term "unadulterated wood" in the state rules would provide confusion to the regulated community.

Mr. Knowlson advised that there were two additional rule changes as part of this process. One is that the DAQ is repealing 15 NCAC 2Q .0705, which is the rule for existing sources that were not modifying anything. The Session Law eliminated the last MACT/GACT provision. The other change was to repeal 15 NCAC 2Q .0711 related to wastewater treatment at pulp paper mills due to obsolete requirements and implementation schedules all requirements are passed their current dates leaving nothing in the rule to apply to a new or current source.

Also as part of this package are changes to the Asbestos AAL and TPERs. This change was discovered and recommended by the Scientific Advisory Board (SAB). He said that the DAQ looked back ten years and did not see any asbestos emissions so no impact is anticipated in North Carolina as a result of this change.

Mr. Knowlson talked about the impacts due to these rule changes. He said that the DAQ considered how many permit applications were received over the last decade and found that 94 permit applications per year were received for toxics. Then, the Section 1 changes were looked at and it was determined that out of the 94 permit applications per year submitted there were approximately 34 facilities that may have an exempt source. The DAQ looked at the next three recommendations (the unobstructed vertical stacks, the combustion source exemption, and the emergency engines) and out of the 94 permit applications 16, 20 and 15 facilities respectively would have a reduced burden. The DAQ did not find any impacts due to the recommendations 4, 5 and 6. The facilities would see reduced regulatory burden related to collection and modeling costs. The DAQ found that there is an impact of $147,000 in savings to the regulated community. These changes will also add increased DAQ staff time to perform the unacceptable risks determinations as a result of the statute. A value of $6,400 in opportunity costs was assigned reflecting other things the DAQ could do with that time.

Chairman Deerhake confirmed with Mr. Knowlson that this draft also has a 30-day waiver request. She asked him to explain for the record why the 30-day record is needed. Mr. Knowlson explained that these rules have been looked at extensively from various groups and DAQ staff and part of the statute is to regulatory burden while increasing efficiency while maintaining protection of public health. He said that since these rules have been well vetted, there is no reason to wait another two months to accomplish what the statute requires. Chairman Deerhake asked Mr. Crawley to remind the AQC of the rational required justifying the 30-day waiver. Mr. Crawley advised that the AQC placed that rule in its bylaws in order to allow members of the AQC who did not attend committee meetings when rules are reviewed 30 days to review the recommendation of the Committee before it is presented to the EMC. He said that the 30-day waiver is to benefit the members who are not present to familiarize themselves with the rule proposal. Chairman Deerhake asked whether there has to be a rationale of time sensitivity. Mr. Crawley said that the other members of the Committee have to be convinced that there is a reason for the 30-day waiver.

Chairman Deerhake advised that the Committee has heard this draft rule proposal as a concept to which Mr. Knowlson confirmed. She said that it was on the Committee's record but that she didn't know whether the Commissioners had read it in the AQC minutes.

Mr. Knowlson advised that the DAQ desired to make a substitute rule in 15 NCAC 2Q .0702. He said that when the DAQ developed the fiscal note and the agenda item in this process, it was based on combustion source. However, that change was not made in the actual rule. He referred to page 3, line 15, in paragraph (a) 25 of the rule. Currently the rule reads "propane and natural gas-fired boilers" and the DAQ would like to change it to read "propane and natural gas-fired combustion sources" which is what was assumed in the fiscal note and the rulemaking process.

Chairman Deerhake clarified that the Committee was in the position where they would be taking this draft rule to the EMC to go to public hearing. Mr. Knowlson confirmed and added that the DAQ has fiscal note that was approved on June 28, 2013.

Ms. Bailey said that she was not convinced about the 30-day waiver. She said that considering the proposed changes and the fact that the Commission has been provided this information in their materials, she feels that the Committee could go forward with it to go to public hearing and she doesn't think that would be eliminating the opportunity for people to review the draft rule. She said she would like to see this draft rule go to public hearing so that comments could be received and the process could be moved forward. Ms. Bailey made a motion as the DAQ staff recommends to request the 30-day waiver and go to public hearing and to approve the fiscal note. Mr. Cavanaugh seconded the motion.

Ms. Pickle noted that because of her general guiding principles regarding 30-day rules is for them to be the exception rather than the rule. She said that in her view, there needs to be a more compelling reason other than that the DAQ staff and the stakeholders have deliberated. She said that the rule is in place to provide the full Commission ample opportunity to adjust often complicated rule changes and statutory or regulatory authority that underlies those rule changes. Ms. Pickle noted that her general proposition of the 30-day rule it should not become the new normal to waive the 30-day rule. She noted that for the reasons that Commissioner Bailey outlined she will vote in favor of this motion, but that she is generally uncomfortable with that becoming the normal mode of operation.

Mr. Hutson asked if the statutes in question were from the 2012 General Assembly Session and when did the stakeholder process begin. Mr. Knowlson confirmed and said that it was first presented to the Outside Involvement Committee in August 2012. He said that the DAQ conducted the stakeholder process with the comment period in September 2012 and then developed a recommendation for the ERC. Mr. Hutson said he was trying to get a sense of the timeframe, which Mr. Knowlson confirmed was about a year. He added that Section 1 went into effect at the time of the signing of the statute and that DAQ is aligning the rules to meet the statute. He said that the six recommendations he talked about were not implemented directly at the time of the signing of the statute. Mr. Huston asked Mr. Crawley for clarification of the standards to implement the 30-day waiver. He asked whether the 30-day rule can be waived with a 2/3 vote with no reason. Mr. Crawley advised that it can be waived on a 2/3 majority vote. The motion carried.

July EMC AGENDA ITEMS

Agenda Item #5, Hearing officer's Report on Revisions to New Source Review and Prevention of Significant Deterioration (PSD) Nitrogen Oxides (NOx) Significance Level for PM2.5 (512) and PM2.5 Increment (516) (Benne Hutson and Joelle Burleson, DAQ)

Mr. Hutson began by saying that there had been a couple of court appeals decisions from the DC Circuit in regard to the PM standard which questions what the standard is. He said that DAQ staff is getting an interpretation from EPA as to the meaning of these court decisions, which is a very debatable position. He said that they are recommending action to be taken because the SIP requirement requires taking action, but it is action that may have to be revisited as the court decisions and EPA's interpretation are resolved.

A public hearing was held in Kannapolis, NC on January 15, 2013, to take public comments on amendments to 15A NCAC 02D .0530 and .0531. Mr. Benne Hutson of the Environmental Management Commission (EMC) was appointed and acted as the hearing officer for this hearing. The EMC amended the New Source Review (NSR) and Prevention of Significant Deterioration (PSD) permitting rules in 2010 to establish the significance level for nitrogen oxides (NOx) for fine particulate matter in North Carolina at 140 tons per year (tpy). Fine Particulate Matter (PM2.5) is particles less than 2.5 micrometers in diameter and is interchangeably referred to as "fine" particles. This significance level was based on monitoring and modeling data indicating that NOx is a lesser contributor to the formation of PM2.5 than sulfur dioxide (SO2). As part of its rule review of North Carolina's state implementation plan (SIP), the United States Environmental Protection Agency (EPA) has determined that, while the federal rule allows for a demonstration that NOx is not a significant precursor to formation of PM2.5, there is not an allowance for states to establish an alternate significance level. As a result, the state significance level must be revised to reflect the federal 40 tpy significance level in the EPA PM2.5 Implementation Rule.

In 2010, the EPA added PM2.5 increments under the program. An increment is the maximum allowable increase in ambient pollutant concentration. Federal increments were established for 24-hour and annual averaging periods in Class I, Class II and Class III areas. Adoption of these federal increments is required in order for the EPA to approve North Carolina's SIP. The current date of incorporation in the state rule was proposed to be updated to reflect the current PM2.5 increments for the current annual and 24-hour NAAQS established by the EPA.

15A NCAC 02D .0530, Prevention of Significant Deterioration, is proposed for amendment to revise North Carolina's NOx significance level from 140 tons per year to 40 tons per year and to update the federal cross-reference to reflect the current federal increments for PM2.5. AGENDA ITEM 5 Page 1 of 3 15A NCAC 02D .0531 Sources in Nonattainment Areas, is proposed for amendment to revise North Carolina's NOx significance level from 140 tons per year to 40 tons per year.

During the public comment period, two court decisions were issued on the implementation of PM2.5 regulations. The first court decision was the U.S. Court of Appeals for the District of Columbia Circuit, January 4, 2013, Sierra Club vs. EPA, No. 08-1250. The petitioners challenged EPA's decision to promulgate its PM2.5 implementation rules pursuant to Subpart 1 of Part D of Title I who contains the implementation provisions for nonattainment areas in general rather than Subpart 4 of Part D of Title I which contains implementation provisions specific to PM10. Subpart 4 is specific to

PM10. The court decision remanded the two implementation rules to EPA to re-promulgate them pursuant to Subpart 4 of Part D of Title I of the Clean Air Act.

The second court decision was the U.S Court of Appeals for the District of Columbia Circuit, January 22, 2013, National Resources Defense Council and Sierra Club vs. EPA, No. 10-1413. The court reviewed of the PM2.5 Increments, Significant Impact Levels (SIL) and Significant Monitoring Concentration (SMC) final rule in 75 FR 64864 (October 20, 2010). The SILs set a de minimis ambient impact where a source's impact that is below a SIL is not required to conduct more extensive modeling to demonstrate its emission will not contribute to a violation of the NAAQS. The SMC sets a de minimis concentration where a source can show through modeling that its impacts are less than the SMC, eliminating the requirement to collect additional monitoring data. The court decision vacated and remanded the SILs for further consideration by EPA. The decision also vacated the parts of the rule establishing the SMCs due to EPA exceeding its statutory authority.

One person commented that the North Carolina Division of Air Quality (DAQ) delay or revise the October 20, 2010 incorporation by reference date in the proposed rule. One person requested that DAQ not continue rulemaking on adding the significant impact levels and significant monitoring concentration provisions to North Carolina PSD regulations. The proposed rule was amended to remove the incorporation by reference date of October 20, 2010 and keep the prehearing May 16, 2008 incorporation by reference date. DAQ also explicitly added the PM2.5 and PM10 increments as indicators of particulate matter in Paragraph (v) of Rule 15A NCAC 02D .0530 since increments are a required minimum element for an approvable SIP. AGENDA ITEM 5 Page 2 of 3.

One person asked DAQ to clarify "particulate emissions" in the definition of "regulated NSR pollutant" since Rule 15A NCAC 02D .0530 does not capture EPA's October 25, 2012 final rule amending the definition of "regulated NSR pollutant. DAQ relies on the test methods in Rule 15A NCAC 02D .2609 to determine the measurement of specific particulate matter pollutants. North Carolina DAQ will include a clarification letter with its SIP submittal. One person commented that the proposed rule does not include the May 18, 2011 PM2.5 grandfathering provision repeal in 40 CFR 52.21(i)(l)(xi). DAQ does not reference this grandfathering provision in its rules. No changes were made in the proposed rule.

The fiscal impact of SILs and SMC provisions in EPA's October 20, 2010 final PM2.5 implementation rule were included in the fiscal note for the proposed PSD rule. EPA's SILs and SMC

provisions were vacated by the January 22, 2013 U.S. Court of Appeals decision. Removing the SILs and SMC from DAQ's proposed rule did not change the fiscal impact calculations in the approved fiscal note.

Ms. Burleson said that the Hearing Officer recommends that the Commission adopt the proposed rule as presented in Chapter II of the hearing record.

Chairman Deerhake asked Ms. Burleson to explain the difference between the 2008 and the 2010 baseline and the impact of going against EPA's recommendations would be and would EPA object the SIP (State Implementation Plan). Ms. Burleson said that EPA objecting the SIP was certainly a possibility, but adjustments will be required anyway depending upon how this issue resolves itself. She further explained that if the State does not submit anything, the conditional approval would automatically become disapproved. Mr. Hutson said that EPA is obviously taking a position throughout the litigation that the rule is valid and effective. However, a federal court has vacated the rule. Mr. Hutson said that his recommendation in consultation with DAQ staff was that currently the only rule that is legally enforceable is the 2008 rule as the 2010 rule has been vacated and remanded back to the agency for further action. He said that EPA may be in a situation where once the SIP it is submitted, they may have to reject it in order to maintain their litigation posture that the rule was indeed valid. That is the confusion and frustration that was incurred in discussions with EPA. The EPA attorneys could not present a convincing argument as to how the 2010 standard could be used to base rules on when a federal court in the DC Circuit the rule is vacated and remanded for further guidance and the rule doesn't currently exist. Therefore, DAQ feels that their decision is appropriate based on the rule.

Chairman Deerhake asked whether although this rule is still in limbo, EPA still requires this rule to be addressed in the SIP. Director Holman confirmed and explained that conditional approval has been received on the earlier SIP submittal and that if the DAQ fails to submit anything, that conditional approval automatically becomes disapproved. She said there is clearly some confusion because of the January 4 decision which says that PM2.5 is not a new pollutant. The DAQ believes that raises questions as to whether a new baseline could be established. EPA has verbally agreed that the 2010 baseline date should stand because that was not the subject of that particular court decision. However, considering how EPA is treating other aspects of PM2.5 implementation, they've pulled back on implementation guidance and they are treating PM2.5 as an indicator species for PM10 not as a new

pollutant. Chairman Deerhake advised that there was not a required vote on this issue today, but was an information item and thanked DAQ for sharing the details.

Agenda Item #8, Hearing Officer's Report on Revision of Arsenic Acceptable Ambient Level (AAL) (Donnie Redmond, DAQ)

Mr. Redmond introduced himself as the Ambient Monitoring Section Chief in the DAQ. He said that initially he and Mr. Ayers had been appointed as co-chairs of this hearing but early in the process, Mr. Ayers recused himself leaving Mr. Redmond the sole hearing officer for this hearing.
Mr. Redmond explained that this hearing addressed two specific rule changes. One was rule 15A NCAC 02D .1104: revise North Carolina's acceptable ambient level for arsenic and inorganic arsenic compounds from the current annual value of 2.3×10^{-7} milligrams per cubic meter to 2.1×10^{-6} milligrams per cubic meter. The second rule change was in rule 15A NCAC 02Q .0711: revise the corresponding emission rate requiring permit for arsenic and inorganic arsenic compounds from the current value of 0.016 pounds per year to 0.053 pounds per year. He said that in changing the standard, there would only be one chance in one million of additional cancer risks. Therefore, this change does not change the public health risks but determines what the appropriate AAL is to provide that level of protection.

Mr. Redmond advised that according to the SAB (Scientific Advisory Board) risk assessment 2008 data, 88% of arsenic in ambient air in NC is from background and of those emissions, 92% are from point sources, 74% of those are from electrical power generation, followed by 13% from pulp, paper mills. By fuel type, 96% is from coal. The SAB risk assessment 2008 data indicates that ambient concentrations are decreasing.

Mr. Redmond said that 450 facilities are subject to these existing rules with emissions greater than the existing TPER and have to demonstrate compliance. Under the revised rule, 313 facilities would still exceed the TPER.

Mr. Redmond talked about the background regarding these rule revisions. He said that the arsenic standard was set in 1990 and was based on health data that is now 30 years old. In the past 10 years or so, more ambient monitoring has been performed and it was noted that the background levels of arsenic exceed the AAL in many parts of the State. This indicates a health problem or an inappropriate AAL recommendation. In 2010 the Director asked the NCSAB to review the current

AAL to determine whether the standard was appropriate. In 2011 the NCSAB met several times to review the literature and develop a recommendation. They voted unanimously to submit this recommendation for public comment. They met twice more to discuss the public comments received and in January 2012 they unanimously agreed to submit the draft risk assessment to the EMC. In March 2012 the AQC received the concept and in January 2013 the AQC received the draft rule and EA. The request to proceed to public hearing went to the EMC in March 2013. A public hearing was held on May 14, 2013.

Mr. Redmond explained that his approach to conducting this hearing was not to second-guess what SAB and the EMC have already reviewed. His approach was to receive public comments and see if there was anything to be considered that had not already been considered or had been reviewed inappropriately.

He said that there was only one speaker at the public hearing. He was an attorney representing several facilities that were subject this rule. Five sets of written comments were received. Three were from industries; Jackson Paper, Evergreen Packaging, & NC Manufacturers Alliance. The industry groups agreed with the rule revisions. They stated their reasons as more robust data set than the original rule, low AAL could give the wrong impression about actual air, and it is consistent with recent toxics program legislation (SL 2012-99). Comments were also received from two environmental groups; SELC (Southern Environmental Law Center) & BREDL (Blue Ridge Environmental Defense League). The environmental groups disagreed with the rule revisions questioning the studies and models used by the SAB. Mr. Redmond said that he those same points were previously covered by the SAB a year and a half ago and the SAB has considered those comments and dealt with them appropriately. The environmental groups also commented that the SAB failed to take into consideration ingestion of arsenic. The minutes from the SAB indicate that they did discuss whether ingestion should be considered. They noted that the primary source of ingesting arsenic is from drinking water and the primary source of ingestion of arsenic in drinking water derives from groundwater flowing through rock by natural process or from pesticides that seeped through the water supplies. It was determined that it wasn't deposition of arsenic onto surface waters therefore they did not need to address the ingestion issue. There was also the comment that this change to the AAL should not be made while other changes to the state toxics program are in progress. However, DAQ staff who are dealing with these changes believe it is appropriate to handle these concurrently. Comments also expressed concerns that the background levels should be considered in setting the

AAL. He said it is beyond the scope of the structure of the toxics program to consider the background which would require legislative or regulatory changes to include that as part of the review process.

Mr. Redmond said that there was one item that gave him pause as to whether to recommend this rule. That was the fact that EPA is starting its own review of arsenic. The environmental groups said we should wait for that process to be completed. Industry groups thought we should proceed. The EPA is scheduled to be complete their review process in 2016. In evaluating the benefit of waiting versus the benefit of proceeding, Mr. Redmond considered that the best case scenario would be that EPA would review a lot of the same data that the SAB has already reviewed and would likely derive at a lot of the same conclusions. The worst case scenario is that it is not unusual for EPA to get delayed due to the technical work taking longer than they anticipated or legal or funding issues. If we move ahead now with the rule we could end up 3-5 years ahead of the game. If we decide to wait, the wait could be indefinite as the rule could be derailed.

Mr. Redmond recommends approving the rules for the following reasons: It is not relaxation of a health standard since by definition it is equally protective of health. Arsenic concentrations are trending downward. The largest sources of arsenic are still subject to this rule. If needed, the rule can be revisited after EPA completes their process.

Chairman Deerhake thanked Mr. Redmond for a very clear report. She referred to the comments made by the SELC and the BREDL that the methodology which resulted in this adjustment with the basic unit risks remaining the same and asked whether those methodologies had been peer-reviewed. She noted that the hearing officer's report says that there had been a peer review since the proposal date submitted in July 2013 and published recently. She asked whether that article can be included in the hearing record or is the AQC prevented from discussing the substance of that article because it is not in the hearing record. Mr. Crawley advised that if it is knowledgeable to the members of the EMC and you're in the legislative process, you can inform the other members of the EMC of your particular knowledge of the subject. Chairman Deerhake asked whether someone could quote statements from that article even though it is not in the hearing record. Mr. Crawley confirmed and said it would then become part of the record.

Chairman Deerhake noted that she has expressed concerns and reservations in the past regarding whether to proceed with decisions while EPA is beginning their review of arsenic and it continues to give her pause.

Chairman Deerhake asked whether the methodology used was the same methodology used in Texas to help them to make decisions related to adjusting their AALs for arsenic. Mr. Redmond confirmed. Chairman Deerhake also commented about the ambient background level of arsenic. She said that although it is probably beyond the scope of legislation to perform a public health risk assessment for background levels of arsenic in the state, she still pauses when there is a comment in the hearing officer's report that people have been exposed to this higher level for a long time and there is no evidence of adverse affect. She said that is not a scientifically-based statement and a risk analysis would be required to draw that conclusion.

Agenda Item #10, Director's Remarks (Sheila Holman, DAQ)

Director Holman began by providing an update on sulfur dioxide (SO2) designations. She reminded the AQC that in March she had informed them that the governor had received a letter from the EPA acknowledging that the site in the New Hanover County area did have clean data for the new short-term SO2 standard and that designations for monitors with violating data would be concluded by June 3, 2013. The EPA also indicated in the letter that they were planning to defer designations for all areas that had clean data as well as all areas with no monitoring data. After discussing this at the Department level, NC elected to send a letter to EPA in April encouraging EPA to carry out its statutory duty in the Clean Air Act (CAA) and perform designations for all areas. Options were provided to EPA as to how they could take that action. The letter expressed that the unclassifiable category under the CAA is an adequate category when either no data or not enough information is available. As of today, the EPA has not officially designated any areas at any locations in the United States (US). She said they aren't clear on what the schedule is but the Secretary of DENR has a video conference scheduled with the EPA Region 4 Administrator on Friday and may obtain more information at that meeting.

Director Holman talked about the proposed SIP Call for the startup, shutdown, and malfunction (SSM) provisions. She said that the DAQ provided comments to EPA regarding the finding of deficiency of NC provisions. A conference call has been scheduled for next Tuesday with EPA to discuss comments. EPA is scheduled to take final action on that SIP Call not later than September 26. Director Holman reminded that the Cross State Air Pollution Rule (CSAPR) was vacated and the EPA filed an appeal to the US Supreme Court. She said that the Supreme Court has granted a hearing on the CSAPR and there will be briefs done over this summer and the hearing is set for this fall. Before

hearing from the Supreme Court, EPA had begun a technical analysis and engaged the states to gather information on emission inventory data. The EPA is considering doing a base year evaluation of 2011 and a future year of 2018. Work is ongoing while we wait to see how the Supreme Court rules in regards to the CSAPR.

Director Holman talked about the Metrolina 1997 8-hours ozone nonattainment area redesignation request. She noted that in March, the AQC took action on the VOC (Volatile Organic Compounds) RACT (Reasonably Available Control Technology) rules that was a missing element taking the threshold from 100 tons per year down to the thresholds that were consistent with the EPA control guidelines. The AQC took action on those rules in March 2013 and they were submitted to EPA. The EPA has proposed to move conditional approval to full approval for the RACT rules. The public comment period ended on July 8, 2013 and they received no comment. She said the next step is to finalize the approval action and to propose approval of Metrolina area redesignation. Both of those actions are in the signature chain at EPA Region 4. The DAQ expects that the Metrolina area will be redesignated within the next couple of months and can update the AQC at the September meeting. Director Holman confirmed for Chairman Deerhake that the designation category would officially be moved to maintenance. She said it is currently categorized as nonattainment even though the ambient data shows that it is attaining the 1997 1-hour ozone standard.

Director Holman provided an update on the 2013 ozone season. She said that with the summer being wetter than normal only one ozone exceedance has occurred in NC so far in the 2013 ozone season. That exceedance occurred at a monitor in Forsythe County in May. She said it has been a very quiet ozone season and that ozone is responsive or nonresponsive to meteorological conditions. She advised that the EPA has released their implementation rule for the 2008 ozone standard. That rule is out for public comment and comments are due by August 5, 2013. DAQ staff are reviewing the different provisions and will be providing comments to EPA on the implementation rule.

Director Holman provided an update on activities related to shale gas development. She said that the DAQ has provided several updates to the Mining and Energy Commission (MEC) including an overview of its baseline air quality monitoring plan which was presented to the AQC in March 2013. The DAQ is adding a new comprehensive multi-pollutant air quality monitoring station in Lee County. The site for the new monitoring station has been identified and is located southwest of Sanford on Blackstone Road. A shelter is in place and work is in progress to get electricity to the building so that monitors can be installed later this summer. Director Holman said that a profile of the potential air

emissions sources associated with shale gas development and the regulatory structure is in place and was presented to the MEC and was similar to the presentation given to the AQC at the March meeting. The DAQ has also provided information on existing source testing rules emphasizing that additional rules are not necessary. DAQ has provided information on how DAQ handles requests for confidential records and DAQ is currently participating in coordinating a permitted study group looking at the feasibility of developing a single comprehensive environmental permit for developmental activities. Director Holman said that DAQ has spent quite a bit of time researching what other states already engaged in shale gas development are doing in terms of their air permitting. That research has helped outline a potential path forward for permitting shale gas activities in NC but work continues regarding the potential permitting approach. DAQ staff are working on a compilation of emission factors from all activities related to shale gas development. This information will help in providing projections on level of activity in a particular geographic area and will allow DAQ to run modeling scenarios to estimate how ozone and fine particle concentrations may change as a result of shale gas development.

Finally, Director Holman provided a handout of President Obama's climate action plan. She said that the climate action plan has three key areas. The first is to cut carbon pollution in America. The second is to prepare the US for the impacts of climate change. The third is to lead international efforts to combat global climate change and prepare for its impacts.

Director Holman focused on cutting carbon pollution in America because there are rules anticipated that will affect the DAQ and the EMC. She said that in March or April of 2012 EPA proposed new source performance standards for new electric generating units for greenhouse gases (GHG). That proposal resulted in over two million comments and EPA was unable to finalize the rule a year later. One of the things that President Obama did was to send a memo to EPA directing them on timelines for further activity and the first action item is to re-propose the new source standard for new electric generating units by September 2013 which will result in another comment period. Additionally, for modified, reconstructed and existing power plants, the President directed EPA to issue a proposal by June 1, 2014 and to issue final standards by June 1, 2015. That would include the guideline requirements that states submit implementation plans by no later than June 30, 2016.

Chairman Deerhake asked whether Director Holman wanted to comment on reducing manmade pollution given NC's large agricultural presence. Director Holman was not prepared to say much

more on the subject since she had not had yet had the opportunity to study the full plan. She said more detail could be provided at the September meeting.

Chairman Deerhake advised that there are four basic greenhouse gases; carbon dioxide (CO2), methane (which is more potent than CO2 and is a common emission from agricultural operations including livestock), nitrous oxide (which also comes from agricultural operations and is much more potent than CO2), and there is chlorinate compounds (which are typically from the chemical industry). She said that when we talk about climate change we are not only talking about CO2 but are tasked with tackling emission sources other than the typical electric generating units. She noted that there is a section of the President's Climate Action Plan on page 12 that says "Agencies have also partnered with communities through targeted grant and technical-assistance programs-for example, the Environmental Protection Agency is working with low-lying communities in North Carolina to assess the vulnerability of infrastructure investments to sea level rise and identify solutions to reduce risks." Chairman Deerhake said she would be interested to know whether someone at DENR is working with EPA on this particular effort.

Chairman Deerhake adjourned the meeting.