Air Quality Committee Meeting Minutes

July 11, 2012

The Air Quality Committee (AQC) of the Environmental Management Commission (EMC) met on July 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. Thomas Cecich, Mr. Les Hall, Dr. Ernest Larkin, Mr. Jeff Morse, Mayor Darryl Moss, Ms. Amy Pickle, Dr. David Peden, 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 interest or appearance of conflicts of interest.

Agenda Item #2, Review and Approval of the May 2012 AQC Meeting Minutes

Mayor Moss moved to approve the minutes. Dr. Larkin seconded the motion. The minutes were approved as written.

CONCEPTS

Agenda Item#3, Prevention of Significant Deterioration (PSD) Rule PM2.5 Increment Update (516) (John Evans, DAQ)

Mr. John Evans introduced the topic of PM2.5 increments as part of the Prevention of Significant Deterioration (PSD) program. The increment is the maximum allowable increase of a pollutant that is allowed to occur above the applicable baseline concentration in an area that is attainment or unclassifiable for a National Ambient Air Quality Standard (NAAQS). He explained that the PSD program applies to large stationary sources. When a facility triggers the PSD program, there are several requirements. One requirement is to install best available control technology (BACT). Another requirement is to make a demonstration that the facility will not cause or contribute to an exceedance of the national ambient air quality standards. The facility also needs to make a demonstration that it will not cause an exceedance of the increment. Mr. Evans then described the handout that was passed out to committee members.

The increment was developed in the 1970s so that areas that are already clean would not degrade significantly. Most increments are set as a percentage of the NAAQS. When a NAAQS is set, the Act requires an increment be set two years later. The PM2.5 increments for class I and II areas are 1 microgram/m^3(annual) and 2 micrograms/m^3 (24-hr) and 4 micrograms/m^3 (annual) and 9 micrograms/m^3 (24 h-hr), respectively. The class II increment is 25% of the NAAQS and the class I increment is about 6% to 7% of the NAAQS. Class I areas are areas of special national or regional value such as national

parks and wilderness areas. The areas of the state that are not class I areas in North Carolina are class II areas.

Mr. Evans stated that North Carolina must adopt EPA's increments as a minimal element of the state PSD Program. The state could be found deficient if it does not adopt the increments. Mr. Evans also noted that new increments for NOx and SO_2 will be coming out in the next few years and the state will need to implement those increments as well.

Chairman Deerhake asked if the increment is set by EPA. Mr. Evans confirmed that EPA sets the minimum standard. He said that the Clean Air Act (CAA) does provide for states to develop an alternative to the numerical increments in the concept as an option but that he has not seen that happen.

Mr. Jeff Morse asked about increments slowing down economic growth. He asked with the challenges in this country with creating jobs and regulations being developed that slow economic growth, how is that balanced. Mr. Evans said there was a concern with that very question. He said to be fair, for 20 years the increments looked challenging since they were set at 25% of the NAAQS but that it has not been that way. Sometimes the NAAQS is more limiting. He mentioned that as standards continue to be lowered the PM2.5 increments become more challenging and new increments for NOx and SO_2 will truly be more challenging. He noted that in moving forward, there may be a point where there is a need to look at the Act for alternatives to the numerical approach.

Chairman Deerhake asked if what was being presented was a concept for amendment and Mr. Evans confirmed. Upon receiving no objections or request for more extensive review, Chairman Deerhake indicated it was okay for Division staff to proceed with drafting the rule amendment.

DRAFT RULES

None

JULY EMC AGENDA ITEMS

Agenda Item #4, Final Report of the Division of Air Quality to the Environmental Management Commission on the Control of Mercury Emissions from Coal-Fired Electric Steam Generating Units (Steve, Schliesser, DAQ)

Director Holman apologized for the lateness of this report and explained that DAQ was involved in a very active legislative session along with departmental reviews. She said the DAQ could come back at the September meeting after the AQC has had more time to review the report and discuss it further. For a report copy, see http://daq.state.nc.us/news/pr/2012/mercury_07132012.shtml, Final Report of the Division of Air Quality (DAQ) on the Control of Mercury Emissions from Coal-Fired Electric Steam Generating Units under 15A NCAC 02D .2509(b).

The North Carolina Clean Smokestacks Act (CSA) and existing rules require DAQ to report on whether additional controls - beyond those required by the CSA and the U.S. Environmental Protection Agency (EPA) - are warranted to further reduce airborne mercury emissions from coal-fired electric generating units (EGUs). Four related DAQ reports in 2003-2005 and 2008 provided data showing coal-fired EGUs

were responsible for the majority of mercury emissions in North Carolina. This 2012 report updates the information related to the control of mercury emissions from coal-fired EGUs and other principal sources of mercury. Information was collected on the most recent and projected future mercury emissions, existing and emerging control technology performance and costs, new EPA rules with mercury emission limits, dispersion and deposition modeling, mercury in fish trends and mercury-related health indicators of people consuming local fish. The key findings of this report consist of the following:

Mercury emissions and emission control:

The 2010 point source inventory shows 1,850 pounds per year (lbs/yr) mercury emissions from largely the same facilities designated as the principal sources of mercury in the state as in the four earlier reports. There are 22 principal sources of mercury accounting for 98 percent of the state's emissions, including 14 coal-fired EGUs and eight other industrial facilities.

Fifty-two percent of current North Carolina mercury emissions (~960 lbs/yr) are attributed to coal-fired EGUs. In response to the CSA, new emission controls for nitrogen oxides (NOx) and sulfur dioxide (SO_2) were installed during 2005-2010 on seven of the largest EGU facilities at a cost of $2.9 billion to enhance existing control performance for a collective 90+ percent mercury emission removal. The remaining seven smaller coal-fired EGU facilities lack effective mercury controls and accordingly have been, or will be retired by 2015.

The remaining 48 percent of statewide emissions (~890 lbs/yr) come from two metal industry facilities, industrial boilers, waste incinerators and many small sources.

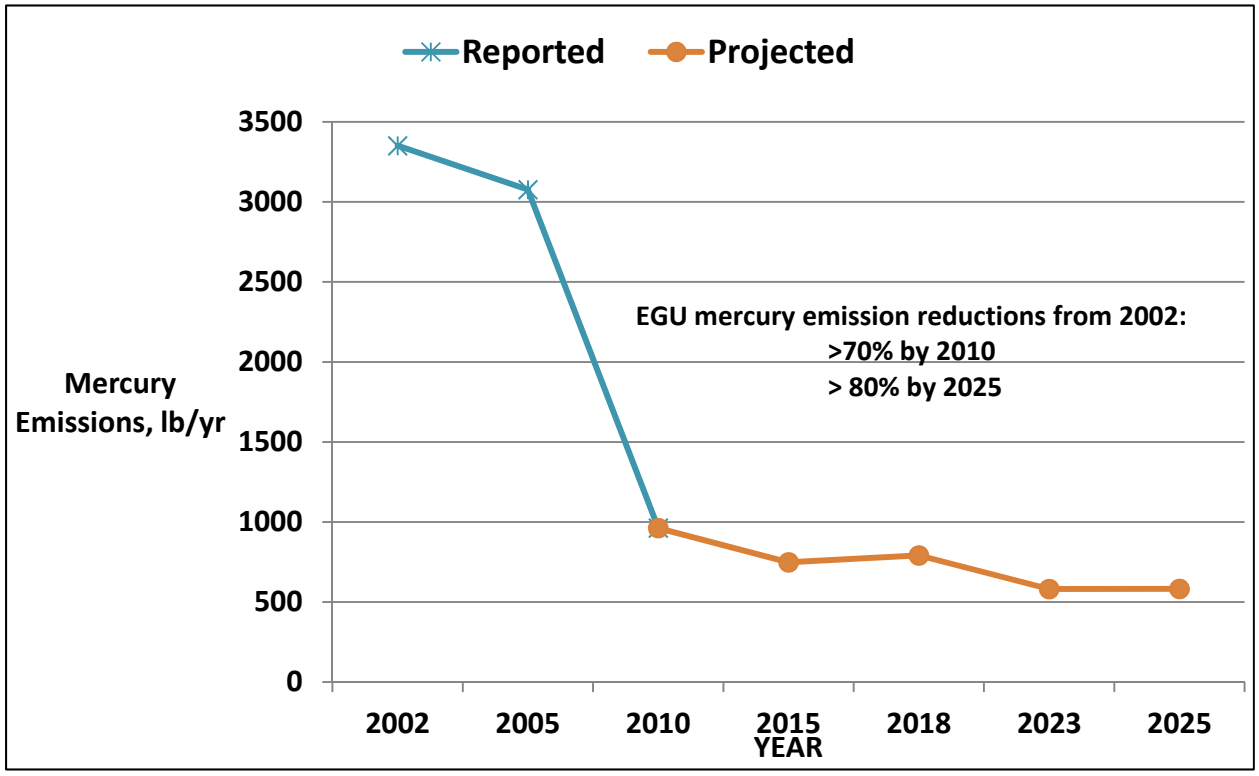
The 2012 EPA Mercury and Air Toxics Standards (MATS) Rule for certain EGUs require mercury emission control of 90 percent on average according to the U.S. EPA, verified by continuous monitors. Assessment by DAQ using measured mercury species emission data on installed mercury control technologies on one of the largest North Carolina EGUs indicate 90+ percent capture of total mercury on average and 95 percent of the forms of mercury prone to deposit shortly after release into the air, as indicated by Figure 6-4 and Reference 38 in the report. Minor performance improvements with costs well below the $2.9 billion CSA costs are underway at the largest EGUs to assure continuous compliance with the new EPA emission limits.

Figure 1 shows the actual EGU mercury emissions in 2010 and projections to 2025, with reductions greater than 70 percent and 80 percent from 2002 levels, respectively. The figure reflects:

Most recent reductions were achieved during 2005-2010 from CSA-required new emission controls, and

Most future reductions will be achieved from retiring 26 smaller coal-fired EGUs and from burning less coal in the 20 largest EGUs.

Figure 1. North Carolina EGU Mercury Emission Trend from 2002-2025



Deposition, fish levels and health problems related to mercury:

EPA conducted atmospheric deposition modeling with the Community Multi-scale Air Quality (CMAQ) using emission, meteorological, and related data believed to be representative and appropriate to develop *nationwide* estimates of mercury deposition in support of their recent EGU MATS rule. DAQ used the same model, data, and approach as EPA to develop *statewide* estimates of mercury deposition. Atmospheric deposition modeling performed by DAQ with the EPA CMAQ model indicates for the airborne mercury deposited in North Carolina with 2005 emission data, 16 percent came from sources located in North Carolina while the majority (84 percent) came from distant sources outside of North Carolina. Modeling with expected emission reductions resulting from the performance of CSA NO_X and SO_2 control technologies and the EPA Mercury and Air Toxics Standards rule also indicates mercury deposition in North Carolina will decline by 10 percent in 2016 compared to 2005. Modeling with expected 2016 emissions shows that only 3 percent of the airborne mercury deposition in North Carolina will come from North Carolina sources.

Routine statewide monitoring of mercury in fish tissue for the state's most popular sport fish (largemouth bass) has resulted in a statewide fish advisory. Analysis of fish tissue monitoring results by the North Carolina Division of Water Quality since 1990 indicate no statistically significant statewide trends in mercury-in-fish tissue levels at 13 sites near EGUs.

In a NC Department of Health and Human Services pilot study sponsored by the U.S. Center for Disease Control assessing mercury-related health problems in eastern North Carolina, no correlation was found between blood mercury levels and the amount of fish eaten.

DAQ Conclusions

Given the above findings, DAQ concludes that additional controls – beyond those required by the CSA and EPA – offer limited opportunities and benefits to further decrease mercury emissions from coal-fired EGUs. Future reports similar in scope to this 2012 report are required in 2018 and 2023 under current rules [15A NCAC 02D .2509(e)] to evaluate whether the above findings are confirmed and whether the EPA Mercury and Air Toxics Standards Rule for EGUs withstands the litigation

During his presentation Mr. Schliesser noted that researchers at North Carolina State University (NCSU) who examined the relative importance of proximity to coal-fired power plants on fish mercury concentrations indicated that selenium, which is also emitted from power plants, may have an impact on fish tissue mercury levels in lakes near power plants. Several requests for clarification regarding the role of selenium were made.

Mr. Smith asked for clarification on whether the selenium is consumed by fish as mehtylated mercury, goes into the fish, and if yes, if exposure to selenium kills the fish, making fish less available for capture and tissue monitoring. Mr. Schliesser said that is not his understanding noting that he is not a biologist and that further clarification would be pursued.

Mr. Smith also asked what is meant by selenium "mitigating mercury methylation." Mr. Schliesser said that selenium *apparently* decreases the methylation of mercury. NCSU researchers found that significantly less fish-mercury bioaccumulation occurs in lakes near coal-fired power plants. This indicates that differences in fish-mercury levels in lakes near power plants appear to be lower because selenium reduces mercury methylation. He said that just because a certain amount of mercury gets deposited in the water, it does not necessarily mean that the same amount of mercury will change from inorganic mercury to methyl mercury for all water bodies. Mr. Smith asked what impact the selenium has on fish. Mr. Schliesser explained that the statistical analysis that NCSU researchers performed showed an inverse relationship between selenium and mercury levels. The analysis *appeared* to show that selenium helped to reduce the amount of mercury that gets methylated and becomes available for fish uptake. However, high selenium levels cause toxicity in fish.

Mr. Morse asked whether selenium is lethal to fish. (Parenthetical note on information found after AQC meeting: In fish and other wildlife, low levels of selenium cause deficiency issues while high levels cause toxicity issues; see above parenthetical note on background information.)

Chairman Deerhake commented that instead of the mercury bonding with the methyl (CH_3) group, it is pre-empted by bonding with selenium. According to one study, selenium appears to decrease the rate of mercury methylation. She said that NCSU's analysis is only one study and an hypothesis that needs more investigation.

Mr. Cecich asked whether organic selenium is toxic. Chairman Deerhake said that what is being presumed in the study is that it is reducing the potential for bioaccumulation. She said the topic requires a lot more investigation. Mr. Schliesser agreed that the NCSU study's presumption about selenium

inhibiting mercury methylation is only a hypothesis, but noted that the NCSU statistician found a strong correlation between selenium and mercury levels in fish. He said that selenium is the most emissive toxic metal from coal-fired EGUs.

Subsequent to the meeting as follow-up to the questions raised regarding selenium, the following clarifying information is provided. Researchers at North Carolina State University (NCSU) examined the relative importance of proximity to coal-fired power plants on fish mercury concentrations. Using lakes located near (<10km) and far (>30km) from coal-fired power plants, their study tested whether higher deposition levels near power plants would also translate into higher fish mercury levels. In addition to confirming that mercury concentrations in fish are driven by biotic characteristics (*e.g.*, trophic position, age, total length) and waterbody characteristics (*e.g.*, pH, dissolved organic carbon and sulfate), they found that significantly less fish-mercury bioaccumulation occurs in lakes near coal fired power plants. This indicates that differences in fish-mercury levels in lakes near power plants appear to be lower because selenium reduces the methylation of mercury. Although reduced fish tissue mercury in waters near power plants may decrease mercury-specific risks to human consumers, these benefits are highly localized and the relatively high selenium associated with these tissues may compromise ecological health. Quantifying the relative risk of Hg exposure through fish consumption can be complicated by the presence of selenium, an element also released in emissions from coal-fired power plants that interacts dynamically with mercury.)Selenium is an essential dietary trace element for many animals, including humans, but is toxic at high concentrations, particularly for fish and wildlife. Though often toxic, elevated selenium levels in fish have been linked to reduced mercury levels in fish. While lower fish tissue mercury concentrations in waters close to power plants is a welcome result for human health, the concurrent high selenium concentrations in these waters may have adverse consequences for piscivorous fish and wildlife. In fish and other wildlife, low levels of selenium cause deficiency while high levels cause toxicity. For example, in salmon, the optimal concentration of selenium in the fish tissue is about 1 microgram selenium per gram of tissue. At levels much below that concentration, young salmon die from selenium deficiency[1]; much above that level they die from toxic excess.[2])

Mr. Cecich asked for more detail about slide #10, which states that results on largemouth bass show no significant change in mercury fish levels. He asked over what period this was based on. Mr. Schliesser explained that there was no statistically significant change since 1990 in mercury levels in largemouth bass. He furthered explained that in some water bodies, there were small increases in mercury levels in fish and a small decrease in other waters, but collectively the results indicated there was no statistically significant change on a statewide basis. Mr. Schliesser referred to the slide that shows the 13 monitoring sites near the coal-fired EGUs and where those sites are located. He noted that there are plans to close seven coal-fired EGU plants by 2015 and two of the seven plants have already closed.

Mr. Cecich asked for clarification regarding there being no significant change in mercury levels in fish over twenty years despite recent reductions in mercury emissions in North Carolina. Mr. Schliesser explained that the deposition modeling indicated that 84% of the mercury deposited in North Carolina comes from outside of our state from sources with only modest recent mercury emissions reductions.

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[1] Poston, H. A. (1976). "Vitamin E and selenium interrelations in the diet of Atlantic salmon (Salmo salar): gross, histological and biochemical signs". *Journal of Nutrition* **106**: 892–904.

[2] Hamilton, Steven J.; Buhl, Kevin J.; Faerber, Neil L.; Bullard, Fern A.; Wiedmeyer, Raymond H. (1990). "Toxicity of organic selenium in the diet to chinook salmon". *Environ. Toxicol. Chem.* **9** (3): 347–358.

Pilot study conducted by the Centers for Disease Control (CDC) along with the NC Department of Health and Human Services (DHHS)

In the presentation Mr. Schliesser discussed a pilot study conducted by the CDC along with our state DHHS down east. The study involved 100 participants with locally caught fish diets in an area with elevated mercury levels in fish tissue with high modeled mercury levels for atmospheric deposition with water bodies having characteristic very conducive to methylation of mercury. The blood analyses of those participants showed that no childbearing age women had unsafe blood levels of mercury. There was no correlation found between those blood levels and the amount of fish consumed. He noted the area was selected for the study because it represented a worst-case location to test if there were health problems with people with locally caught fish diets.

Mr. Morse asked whether this study indicates that it is safe to eat fish in North Carolina. Mr. Schliesser explained that this was a limited pilot study to see whether people who ate locally caught fish showed elevated mercury levels in their blood levels. Mr. Morse asked what those results indicated. Mr. Schliesser said the results showed no correlation was found in serum mercury levels and number of fish servings eaten per week for the 100 participants during the study period. It also showed no correlation was found in serum mercury levels and number of fish servings eaten per week There were no conclusions drawn from the study on whether it is safe to eat fish caught in North Carolina due to the limitations of the study.

Ms. Pickle asked whether there was any analysis in the study of what fish were actually eaten by those 100 participants or level of mercury exposure they were actually getting from their locally caught fish diet. Mr. Schliesser said no, and that it was a pilot study with a limited scope over a short time period that only analyzed the blood mercury levels in the 100 participants.

Director Holman commented that on page 10-2 of the Mercury Report, it talks about the questionnaire that was completed by each study participant including a mean number of servings of locally caught fish and the mean number of servings of any fish. The study says that 21% of the participants ate fish from other local fishing sites. Black fish, Bowfin, Catfish and Largemouth Bass were the most popular species consumed.

Ms. Pickle asked whether the study indicated how much each participant was exposed to and what was the corresponding blood level of mercury. Director Holman said that information is not clear from the summary. She said that if this is an item of particular interest, DAQ staff can have the main investigators that conducted the study address the Committee at a future meeting.

Chairman Deerhake commented that more discussion on this presentation would be presented the next day at the July EMC meeting. She further commented that the report covers a variety of topics and a lot of effort was obviously put into producing this report. However, there are a number of topics within the report that require more examination by the AQC. She said that there are cases in the report where statements are made based on studies and the conditions of those studies are not fully vetted in the report. She said it would be valuable to explore some report topics further, including the selenium and methyl mercury relationship. She said that it appears the wet deposition monitoring data reflects some of North Carolina's most drought stricken years. Chairman Deerhake said that the fact that the Clean Smokestacks controls are primarily NO_x and SO_x controls which have a co-benefit of mercury emission reductions, and

the actual mercury control technologies that are required in the Mercury Air Toxic Standard (MATS) are not yet implemented. Also, the role of non-EGUs, and deposition modeling assumptions are amongthere are a variety of topics that would be beneficial for the AQC to examine further a variety of topics that would be beneficial for the AQC to examine further.

Chairman Deerhake asked whether the mercury emissions data presented in the report are estimates that are primarily based on generic non-site-specific emission factors. She said DAQ discussed the limitations and uncertainties with using emission factors for annual emission inventories. Starting in 2015, the mercury continuous emission monitoring systems (CEMS) will be installed on the coal-fired EGU facilities and that is when we'll have the actual emissions measurements. Mr. Schliesser agreed that the mercury emission data produced by CEMS will have higher quality than data produced by emission factors, but clarified that site specific mercury emission factors, and not generic emission factors, were made for all the power plants and for most of the other principal emission sources.

Mr. Cecich asked whether Mr. Schliesser would be at the July EMC meeting and Mr. Schliesser confirmed and said he has a longer version of his presentation to present to the EMC.

Chairman Deerhake acknowledged the utilities for the installation of the NO_x and SO_x controls that are achieving reductions in the emissions.

Mr. Morse asked whether there is a vetting process of science that either confirms or challenges reports like this before they are made available to the public. He asked whether there is a consensus built that the data is accountable and whether the science community is involved. Chairman Deerhake answered that the particular report that the AQC is hearing today has not had any public review but is reported to the EMC.

Dr. Peden explained that typically scientific reports with important new findings are submitted to a journal. To be published in a journal, there is a peer review critique of the "draft" report, with any peer review comments addressed by the author(s) before being published. He said that is the traditional way that findings are vetted before they are published in a scientific peer review journal and that is the gold standard for establishing rigorously reviewed science.

Mr. Morse asked whether the DAQ mercury report and the CDC/DHHS report goes through a review process before it comes before the AQC.

Director Holman commented that the DAQ mercury report went through internal DAQ review but it was not planned to be published in a peer review journal. Director Holman said the CDC/DHHS report likewise was not published in a peer review journal, but was a report that was presented to the North Carolina Science Advisory Board. Mr. Schliesser confirmed and added that the pilot study was federally funded and assistance was provided by DHHS.

Chairman Deerhake commented that a number of studies are cited in this report and she hopes that the DAQ draws conclusions based on scientific findings with very careful review.

INFORMATION ITEMS

Agenda Item #5, Proposed Fine Particulate Matter (PM2.5) National Ambient Air Quality Standards (NAAQS) (Donnie Redmond)

SEE HANDOUT
The EPA's proposed revisions to the fine particulate matter (PM2.5) National Ambient Air Quality Standards (NAAQS) was signed on June 14 and published on June 29, 2012.

Among the proposed standards:

- The daily standard is proposed to remain at 35 $\mu g/m^3$, as was set in 2006.
- The annual standard is proposed to be tightened from the 15 $\mu g/m^3$ set in 1997 to a range of 12-13$\mu g/m^3$.
- A new secondary standard for visibility is proposed at either 30 deciviews or 28 deciviews. Federally-operated monitors may be used to determine attainment with the visibility standard.

The DAQ estimates that the entire state currently attains each of these standards.

In addition to the standards, the EPA also proposed to grandfather preconstruction permitting applications that have made substantial progress through the review process at the time the final standards are issued. The new rule requires the state to operate PM2.5 monitors at near road sites to be established in Charlotte and Raleigh.

The EPA has held two public hearings for the rule, and is soliciting comments through August 31. The final rule is expected by December 14, 2012 (per consent decree). States will provide recommendations for attainment designations in December 2013.

Mr. Cecich asked Mr. Redmond to refer back to the slide that shows annual PM2.5 design values for North Carolina. He asked if the source of particulates is mostly motor vehicles or natural occurrences, specifically regarding western counties around the Great Smokey Mountains National Park. Mr. Redmond explained that particulate levels in the state were drastically reduced as a result of North Carolina's expanded Inspection & Maintenance (I&M) program and the Clean Smokestacks Act (CSA). Mr. Cecich asked whether the higher PM2.5 levels in western counties are transported from other states. Mr. Redmond explained that the standards are relatively low. Director Holman commented that the PM2.5 levels in North Carolina are one of DAQ's key success stories in the last 10 years. She said that when DAQ first started monitoring PM2.5, values in the 18 to 19 ug/m^3 range with the highest levels always being in the western piedmont area. She explained that that sulfates made up roughly 30% of the fine particulate matter pre-CSA. Nitrates were about 7%. Organic carbon was another 30%. Director Holman said that clearly the SO_2 reductions successful in bringing the PM2.5 levels down in addition to low-sulfur fuels that have helped in reducing the contributions from the mobile sources.

Chairman Deerhake reminded the AQC that Mr. Evans had referred to the standard as 0.15 but when the standard is fully implemented it could be between 0.12 and 0.13. Mr. Redmond said that as long as the permit is out for public review before the rule is finalize the standard could still be 0.15.

Agenda Item #6, Air Toxics Legislation (Michael Abraczinskas, DAQ)

SEE HANDOUT

Mike Abraczinskas provided a brief summary of the State Air Toxics Legislation. Air toxics rule reform was a subject of great interest at the General Assembly during the 2011 long legislative session. The Environmental Review Commission (ERC) heard presentations on this subject in September and October of 2011. Soon thereafter, the leadership of the ERC requested that DENR and DAQ participate in a small working group with industry and commerce representatives to develop consensus legislation. The workgroup's product was presented and discussed at ERC meetings in April and May of 2012. On May 16, 2012, it was introduced as House Bill 952. It passed through the legislative process without being amended, and was eventually signed into law by the governor on June 28, 2012.

The law has four main sections. Section 1 exempts from the State air toxics rules sources of toxic air pollutants subject to certain federal regulations, including:

- National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61
- Maximum Achievable Control Technology (MACT) standards, 40 CFR Part 63
- Generally Available Control Technology (GACT) standards, 40 CFR Part 63
- Subject to case-by-case MACT, 112(j) of the Clean Air Act

Section 1 also includes a provision that requires DAQ to determine if the toxic air emissions (a net increase) from a new or modified source or facility would pose an unacceptable risk to human health… and if it does, the Division Director would make a written finding and require a permit application that eliminates the unacceptable risk… (for all practical purposes this is the existing Director's Call provision). DAQ started implementing this change when it became law.

Section 2 requires the Environmental Management Commission (EMC) to amend the State air toxics rules to be consistent with Section 1 above.

Section 3 requires DAQ to review the state air toxics rules and their implementation to determine whether changes could reduce unnecessary regulatory burden and increase the efficient use of DAQ resources while maintaining protection of public health. DAQ shall report the results of the review and include recommendations to the ERC by December 1, 2012. Mr. Abraczinskas noted that DAQ will be holding a stakeholder meeting in the future to gather input and feedback from stakeholders.

Section 4 requires DAQ report to the ERC on the implementation of this Act on December 1, 2012, 2013 and 2014. The report shall include an analysis of air toxic emission changes and a summary of results of the Division's analysis of air quality impacts.

The Session Law can be found here: http://www.ncleg.net/Sessions/2011/Bills/House/PDF/H952v4.pdf

Chairman Deerhake asked what the calendar is. Mr. Abraczinskas said that at this stage, Section 2 requires the EMC to make adjustments to the rule pursuant to Section 1. He said that DAQ would go through a stakeholder process to gather additional input that might be necessary pursuant to Section 3. He

said DAQ's preliminary thinking is to go through the stakeholder process later this year and come back early 2013 with a comprehensive package that is responsive to both Section 2 and Section 3.

Ms. Pickle asked whether DAQ made preliminary estimates on the likely changes in terms of modifications in developing this bill. Mr. Abraczinskas said that it is difficult to predict what kinds of changes will be seen in the future in terms of modifications in new facilities. However, there is a portion in Section 1 that says that DAQ should consider each application to ensure that there is not an unacceptable risk posed. He said that DAQ would expect emissions levels, in general, to decrease in the future as part of this process. He said that DAQ has examined a significant amount of data and implementation of this program over the past twenty years including emission levels. He said toxics emission levels in North Carolina have decreased by 67% over the past twenty years. He said DAQ expects those levels to continue to decline regardless of this change due to existing federal and state rules.

Chairman Deerhake commented that she assumed the stakeholder process would focus mostly on the non-exempt sources. She asked the DAQ to track the residual risk analyses that are being performed for various sectors under federal rule that are being published and to keep the AQC apprised of the outcome of those analyses. She also asked that the DAQ maintain accessibility to the public if there are concerns expressed by neighboring residents of facilities they think could be potentially associated with those emissions. Mr. Abraczinskas agreed and said that nothing has changed with regard to facilities that are not exempt to the program, and that DAQ has no intention of limiting the scope or attendance in the stakeholder process.

Agenda Item #7, Director's Remarks (Sheila Holman, DAQ)

Director Holman began by talking about House Bill 585. She said the bill passed both the House and the Senate. She explained that this bill exempts the first three model years from the Vehicle Inspection and Maintenance (I/M) Program. It also exempts those 1996 and later model years that have less than 70,000 miles driven. Director Holman referred to the update that Laura Boothe gave the AQC regarding the I/M Study Bill that DAQ conducted in concert with the Division of Motor Vehicles (DMV). In that study, the exemption of the first three model years was evaluated, and it was concluded that implementation of that exemption could be supported based on new compliance information. She said that the less than 70,000 miles driven exemption has not yet been studied, but will be doing so in the coming weeks. Director Holman reminded the AQC that this bill does not take effect until the DAQ has updated its State Implementation Plan (SIP) and received EPA approval of this change to the Vehicle I/M Program and until DMV has been able to update their system and make appropriate changes so that the new bill language can be implemented.

Chairman Deerhake asked whether the 70,000 mile cut-off was something that came up outside of the evaluation performed by the DAQ. She asked whether DAQ has any voice to the legislation to impact this decision. Director Holman confirmed that DAQ does have a voice in the decision and acknowledges that they did not study the air quality impact because they did not have the information that would indicate if there would be a problem with maintaining the standards and the emission reductions already claimed in existing SIPS (State Implementation Plans), but DAQ will have to study that and if there is a problem, DAQ will have an obligation to carry it back to the bill sponsors and work through any concerns.

Subsequent to the meeting, the DAQ obtained clarification from General Assembly staff regarding how the 70,000 mile condition in the legislation applies. Specifically, a vehicle needs an emissions inspection if either of the following are true: if a vehicle is a 1996 or later model year and older than the three most recent model years; or if a vehicle is a 1996 or later model year and has 70,000 miles or more on its odometer.

Director Holman talked about the wildfire in the Croatan National Forest and said that it began as a prescribed fire and became a wildfire. She said that the fire grew to over 21,000 acres that were burned. As a result of the wildfire, DAQ produced daily air quality forecast for eight days. She said the PM2.5 monitors in the region of the wildfire observed 25 $\mu g/m^3$, which is still below the standard of 35 $\mu g/m^3$. However, the visibility data in the region indicated that there were much higher levels of PM2.5 in the area, but it just wasn't occurring where the monitors were.

Director Holman provided background regarding the events that resulted in the recent code orange and code red ozone days. She explained it began in Colorado with a high pressure system that slowly traveled east and resulted in the unprecedented heat wave. She explained that some of the pollution that resulted was created in NC, but a lot of the pollution was contributed by those states west of NC. She said that NC started this ozone season with only four monitors violating the 2008 standard of 75 ppb and those were all in the Charlotte area. She said that currently there are five monitors in the Charlotte area that violate the standard and three monitors in the Triad area that violate. She said she would keep the AQC posted as to how EPA may respond. Director Holman said that NC is not unique in this as lots of the southeastern states also observed higher ozone levels than have been seen in recent years. She said that for the first time since 2002, NC had a day when all of the areas where ozone is forecasted in NC observed code orange or higher levels. Director Holman expressed that DAQ will continue to study all the elements that contributed to those high levels and will keep the AQC posted.

Director Holman talked about the proposed Portland Cement Maximum Achievable Control Technologies (MACT) revisions that have been issued by EPA. She pointed out that this particular rule may impact the Titan Cement air quality permit in the future. She noted that EPA has not proposed to change the mercury limit in this proposal but has proposed to change the PM2.5 limit from 0.01 lbs/tons of clinker to 0.02 lbs/tons of clinker. She said the rule is currently out for public comment.

Director Holman advised that the DC Circuit upheld the endangerment finding and also upheld the light-duty motor vehicle tailpipe rule regarding the Greenhouse Gas (GHG) ruling. EPA also found that no party had standing to challenge the titling and the tailoring rules. She said she GHG regulation is continuing to be implemented.

Director Holman ended her remarks by making the AQC aware of an Air Quality Forum that is being sponsored by the Congressional House Energy & Commerce Committee scheduled for July 31, 2012 to be held in DC. She said that some of the Environmental Commissioners have been invited including Bob King form South Carolina and Bob Martineau from Tennessee. She said that she has a link to a press release that she can share with AQC.

Chairman Deerhake commented that the Croatan Forest fire is not the first time in recent years when a prescribed burn became a wildfire. Director Holman explained that the Open Burning rules allow for prescribed burning conducted under the guidelines of the North Carolina Forest Service as an acceptable

practice. She said it is one of the twelve exemptions to the otherwise burning ban across the state. She added that the U.S. Forest Service is investigating what happened to this particular fire and how the prescribed burning became a wildfire.

Chairman Deerhake adjourned the meeting.