

**ENVIRONMENTAL MANAGEMENT COMMISSION  
AIR QUALITY COMMITTEE MEETING SUMMARY  
March 4, 2020  
Archdale Building-Ground Floor Hearing Room  
9:30 AM - 10:30 AM**



**MEETING BRIEF**

During their March 4, 2020 meeting, the Air Quality Committee (AQC) of the Environmental Management Commission (EMC):

- Heard an informational item presentation on 1-Hour Sulfur Dioxide NAAQS Designations presented by Randy Strait, Section Chief of Planning (DAQ).
- Heard remarks by Director Abraczinskas (DAQ).

**AQC MEMBERS IN ATTENDANCE**

|                                 |                     |
|---------------------------------|---------------------|
| Ms. Shannon M. Arata, AQC Chair | Ms. Marion Deerhake |
| Dr. Suzanne Lazorick            | Ms. Donna Davis     |
| Ms. Yvonne Bailey               |                     |

**OTHERS IN ATTENDANCE**

|                             |  |
|-----------------------------|--|
| Dr. Stan Meiburg, EMC Chair | Mr. Philip Reynolds, EMC Counsel         |
| Mr. John McAdams, EMC       | Mr. Mike Abraczinskas, DAQ Director      |
| Ms. Patricia Harris, EMC    | Mr. Michael Pjetraj, DAQ Deputy Director |
| Members of the public       | DAQ Staff                                |

**PRELIMINARY MATTERS**

**Agenda Item I-1, Call to Order and the State Government Ethics Act, N.C.G.S. §138A-15**

Chair Arata called the meeting to order and inquired, per General Statute §138A-15, as to whether any member knows of any known conflict of interest or appearance of conflict with respect to matters before the EMC's AQC. No conflicts were identified.

**Agenda Item I-2, Review and Approval of the January 8, 2020 Meeting Minutes**

Chair Arata inquired if everyone had been able to review the minutes from the January meeting and if there were any changes or corrections. Member Deerhake and EMC Chairperson Meiburg offered corrections and changes, which included revisions to statements on Page 4 and the proposed AAL value in Agenda Item V-1 on Page 3. Chair Arata asked for a motion to approve the January 8, 2020, meeting minutes. Commissioner Baily made a motion to move to table the approval of the minutes until corrections were made and distributed at the next AQC meeting. Commissioner Davis seconded this motion. The motion to defer minutes approval until the next regularly scheduled meeting was unanimously approved.

**RULEMAKING CONCEPTS**

None.

**ACTION ITEMS**

None.

**MARCH EMC AGENDA ITEMS**

None.

**INFORMATIONAL ITEMS****Agenda Item V-1, 1-Hour Sulfur Dioxide (SO<sub>2</sub>) NAAQS Designations (Randy Strait, DAQ)****Description:**

Randy Strait, Planning Section Chief, presented information to the committee concerning the state of the NAAQS SO<sub>2</sub> designations for North Carolina in an ongoing effort to address the EPA 2010 program change for this health-based standard. He stated that EPA revised the NAAQS for SO<sub>2</sub> to 75 parts per billion (ppb), which is measured as a 3-year average of the annual 99 percentile of the 1-hour daily maximum concentration. This means that the hourly concentrations of SO<sub>2</sub> are measured every day and then ranked. Typically, the 99 percentile corresponds to the 4<sup>th</sup> highest value from the 3 years of data. He added that within 1 year after EPA revises a NAAQS standard, states must submit their recommendations to EPA telling them how they want areas of the state designated with respect to the standard. This recommendation will be based on a review of the monitoring data, modeling, emission inventory, and analyses of the NAAQS pollutant. The EPA reviews the recommendations by the states and puts their designation decision out for public comment and makes a final decision on the designation of the areas with respect to the standard within two years after receiving the recommendations. The EPA uses three types of categories for designation: attainment; unclassified; and non-attainment. North Carolina recommended designations for the SO<sub>2</sub> 1-hour standard was done at the township level, which EPA has approved.

Mr. Strait provided an overview of the EPA's phased approach for incorporating new NAAQS standards and summarized North Carolina's recommendations for each of the phases. The State completed monitoring from 2017 to 2019 at three sites designated as unclassified: Duke Energy Asheville; Duke Energy Roxboro; and Blue Ridge Paper Products in Canton. A summary of the 2017-2019 results were presented and Mr. Strait noted that the two Duke Energy sites would be recommended to be in attainment. The Blue Ridge Paper facility's design value is above the standard; however, they have reduced their emissions over the past 3 years and their 2019 value does show compliance with the standard. The DAQ plans to develop a source-specific SIP for this facility and after EPA approval can recommend this area to be in attainment.

Mr. Strait provided a schedule for completing the Round 4 designations. He noted that the DAQ needs to submit their recommendations and monitoring data to EPA by May 1, 2020.

**Discussion:**

Commissioner Deerhake asked what the term was used for EPA conditional designation of the Blue Ridge Paper facility. Mr. Strait responded that it was a source-specific SIP. Commissioner Meiburg noted that there have been sulfur issues in the area around Blue Ridge Paper in the past and asked for confirmation that this facility did apply control technology in 2018 that achieved reductions in sulfur in 2019. Mr. Strait confirmed that was correct. Commissioner Meiburg noted that typically three years of monitoring data showing compliance are needed to show attainment; however, the EPA is allowing us to show one year of compliance and a federally enforceable SIP revision to show attainment. Mr. Strait added that in addition to the modeling data and SIP revision, the DAQ

is also submitting modeling showing compliance with the standard based on permitted emissions. Commissioner Meiburg understands the streamlining of the designation process by EPA but expressed concerned that the 2020 monitoring data would may not show the same level of sulfur reductions as the 2019 data. Mr. Strait noted that the source specific SIP limits are permanent and federally enforceable, and that a modeling demonstration is done to show compliance with the standards. Mr. Strait believes this provides some assurance to the EPA that this facility will maintain compliance with the standard. Commissioner Meiburg suggested that the DAQ closely monitor SO<sub>2</sub> emissions from this facility, because of changes in meteorological conditions in the area. Director Abraczinskas added this particular NAAQS is a 1-hour standard and exceedances can typically be attributed to a single source. He noted that the DAQ identified the source as Blue Ridge Paper and exercised their compliance authority to address this situation using a special order by consent. This resulted in a revision of the permit and the addition of enforceable Title V limits to address the 1-hour NAAQS. He pointed out that the Title V permit contains the same federally enforceable limits as the source specific SIP. He added that if EPA determined that the area was in non-attainment using the 2017-2019 monitoring data, that there would be no environmental benefit because the limits are already in place to achieve compliance with the NAAQS standard, and would require additional work by the division to obtain attainment status. Commissioner Meiburg noted that he was not opposed to this streamlined process, but he does encourage continuation of the monitoring of the facility to ensure that it does not exceed the NAAQS standard in future years. Commissioner Deerhake asked what changes were made to facility to reduce SO<sub>2</sub> emissions. Mr. Strait stated that the facility replaced two coal-fired power boilers with natural gas-fired boilers. The facility also has three other power boilers; two fired with coal and on powered by bark that they added additional controls to reduce emissions. Commissioner Deerhake asked if the facility was operating normally for the year that they achieved compliance with the NAAQS standard. Mr. Strait responded that he believes it was a typical operating year. Commissioner Deerhake also asked if the Duke Energy facilities were achieving the NAAQS standards because of conversion from coal to natural gas. Director Abraczinskas stated that was correct. Commissioner Deerhake asked about the status of the facility in Brunswick County. Mr. Strait stated that just needed to collect three years of monitoring data from the area to show compliance with the standards. The area is currently designated as unclassified because of a gap in data collection as a result of a hurricane coming through the area, but the data they do have shows compliance. Commissioner Deerhake asked if the town of Canton would be designated as attainment for the Blue Ridge Paper area. Mr. Strait stated that it would be attainment for Beaver Dam Township. Commissioner Deerhake asked what the difference in size between Canton and Beaver Dam Township is. Mr. Strait stated that he was not sure and would need to look at a map of the area to determine the difference. Chair Arata asked if a township has the same boundary as a municipality or are you changing the boundary based on monitoring. Mr. Strait responded that it was political boundary. Chair Arata also asked if there were other source specific SIPs around the country that they could get a sense of how effective this approach is. Mr. Strait stated that the examples that the EPA provided were for sources that were in non-attainment and the SIPs were done to determine the rates the facilities needed to meet and maintain compliance with the NAAQS. The EPA did provide one example of source specific SIP where the compliance determination had not been made, but the situation was a little bit different from what the DAQ is trying to do. Chair Arata asked if the DAQ would provide an update to the committee once everything has been approved. Mr. Strait stated that they would provide an update.

#### **Agenda Item V-2, Director's Remarks (Mike Abraczinskas, DAQ)**

##### **Description:**

Director Abraczinskas stated that members of the committee had asked for an update on a draft monitoring report that DEQ put on their website for public review. As a background, the Director stated that as part of a settlement agreement, the DEQ agreed to design and implement a temporary ambient air quality monitoring study in Duplin County. The DAQ was tasked with determining the degree of air pollution in the Duplin County airshed for three pollutants; fine particulates (PM<sub>2.5</sub>), hydrogen sulfide (H<sub>2</sub>S), and ammonia (NH<sub>3</sub>). The DAQ worked with the complainant, Rural Empowerment Association for Community Help (REACH) in both planning and implementation of the ambient monitoring. There were two stages in the study, the first stage was conducted for a couple of months in 2018. The second stage was conducted for 12 months starting from October 1, 2018 to

October 31, 2019. The 12-month study monitored concentrations of the three pollutants and compared them to reference values to determine the degree of air pollution in the area. The 12-month results showed that the fine particulate 24-hour reference values were barely exceeded for two days. The Director noted that these were exceedances and not violations of the National Ambient Air Quality Standards (NAAQS). The DAQ suspects that these exceedances were tied to short duration smoke events close to the monitor location. The H<sub>2</sub>S and NH<sub>3</sub> acceptable ambient levels were used as a reference value and were not exceeded during any of the monitoring days. Based on the data collected and the analyses, the DAQ did not find that the ambient air in the Duplin County area constituted an air quality issue and the DAQ has discontinued the air quality study. The DAQ also prepared a draft report of the findings and published the report on their website for public comment. The DAQ is currently reviewing the comments and developing the final report. The Director thanked the DAQ staff for their work on this project.

**Discussion:**

Commissioner Deerhake asked if there was any peer review or technical advisory committee of the sampling design and analyses for this project. Director Abraczinskas stated that they used their in-house expertise and also worked with the stakeholders on the design of the sampling protocols to meet the objectives of the study. Commissioner Deerhake asked if the reference values used in the study for H<sub>2</sub>S and NH<sub>3</sub> were the Acceptable Ambient Levels (AAL). Director Abraczinskas confirmed that was correct. Commissioner Deerhake asked if the PM<sub>2.5</sub> samples were speciated. Director Abraczinskas responded that equipment for doing speciation was not available. Commissioner Deerhake stated that she would look at the report to find where the sampling sites were located and if any NH<sub>3</sub> deposition data was included. Director Abraczinskas stated that there were no NH<sub>3</sub> deposition data collected for this study, but the sampling location information is available in the report. Commissioner Meiburg asked if the stakeholders have been briefed on the results of the study. DAQ staff noted that the draft report has been posted for public comment and progress reports have been provided to the stakeholders. Commissioner Meiburg asked if the DAQ has received any response from the stakeholders. DAQ staff stated that they have received comments from the interested parties. The staff added that the comments were mostly related to the location of the monitoring sites and that no risk assessment was done. Commissioner Deerhake pointed out that ammonium can be a component of PM<sub>2.5</sub> and may not be formed at the source. Director Abraczinskas added that they reviewed downwind PM<sub>2.5</sub> monitors and did not see any distinguishable difference between the monitoring data. Commissioner Deerhake pointed out that Water Quality Committee would hear a modeling presentation for Jordan Lake and will include pie charts that show that show the contribution of ammonia and nitrogen deposition.

**Agenda Item V-3, 1995-2019 Air Quality Committee and Environmental Management Commission Calendar****Agenda Item V-4, Status of Rulemaking Hearings and Rule Development****CLOSING REMARKS AND MEETING ADJOURNMENT**

Chair Arata noted that the second round of public hearings for the proposed log fumigation rules were scheduled for March 17, 2020 in Raleigh and March 18 in Wilmington. Chair Arata noted the next regularly scheduled meeting of the AQC would be May 6, 2020. Chair Arata adjourned the meeting.