



North Carolina Department of Environment and Natural Resources
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary
B. Keith Overcash, P.E., Director

December 13, 2007

Lyle Laverty
Assistant Secretary, Fish, Wildlife and Parks
United States Department of the Interior
1849 C Street, NW
Washington DC 20240

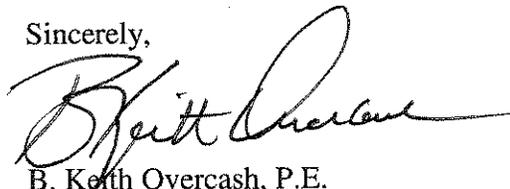
Dear Mr. Laverty:

Thank you for your comments dated October 2, 2007, on the pre-draft version of the Regional Haze State Implementation Plan (SIP) for North Carolina Class I areas. Since you and your staff shared with my staff many of your concerns in September, most of your comments could be addressed in the pre-hearing draft released for public comment on October 12, 2007.

Enclosed with this letter is our response to your comments. The North Carolina Division of Air Quality plans to submit its final Regional Haze SIP by December 17, 2007, the statutory deadline for regional haze plans. We hope to continue to work with you and your staff in the future as we monitor the progress in the North Carolina Class I areas of reaching natural background visibility conditions.

If you should have any questions, please contact Laura Boothe of my staff at (919) 733-1488 or laura.boothe@ncmail.net.

Sincerely,



B. Keith Overcash, P.E.

BKO:lab

Enclosure

CC: Laura Boothe
Kay Prince, USEPA Region 4
David Verhey, USDO
Tim Allen, USFWS
Bruce Polkowsky, NPS

Response to Comments received by U. S. Department of the Interior

USDOJ Comment: “The draft SIP has a policy decision regarding “reasonable progress” which limits consideration of additional sulfur dioxide control measures for reasonable progress of major stationary sources that “contribute” to visibility impairment to a cost impact associated with implementation of North Carolina’s Clean Smoke Stacks law. While this policy addresses costs equitably among various sources, it does not allow for consideration of the magnitude or frequency of an individual source’s impacts. In particular, Blue Ridge Paper has a very large visibility effect on multiple Class I areas and may warrant controls at a somewhat higher cost.”

NCDAQ Response: The control measure cost levels associated with the Clean Smokestacks Act were established by the North Carolina General Assembly after long and careful consideration of adequate protections for both the lives and livelihood of North Carolina’s citizens. It was a North Carolina Division of Air Quality (NCDAQ) policy decision that this benchmark was both appropriate and adequate to apply to control measures for visibility improvements.

USDOJ Comment: “The Fish & Wildlife Service and National Park Service request that specific information be presented in the main body of the SIP regarding sources significantly to the “reasonable progress” evaluation. Specifically, North Carolina should identify Blue Ridge Paper as a source that currently has “significant visibility impacts on multiple Class 1 areas”. We request that the State SIP describe a plan to address these impacts through consultation with the company and to identify potential control actions that could be implemented prior to 2018.”

NCDAQ Response: In the pre-hearing draft Regional Haze State Implementation Plan (SIP), released for public comment on October 12, 2007, the NCDAQ included in the main body of the SIP the reasonable progress evaluation for source that were identified as impacting Class I areas. Additionally, the NCDAQ acknowledged that the emissions from Blue Ridge Paper do have impacts on the Class I areas located in the mountains. The NCDAQ has notified the company that although additional controls are not being required this planning period, future-planning periods may require controls to be installed. The NCDAQ is committed to work with this company over the next review period and encourage the company to modernize some of its processes with more efficient, less polluting equipment.

USDOJ Comment: “We have concerns that the BART determination submitted by PCS Phosphate did not fully evaluate the effectiveness and associated cost of controls. We agree with the concerns raised by the EPA, and ask that NCDENR address the issues raised in that letter.”

NCDAQ Response: The issues raised by the U. S. Environmental Protection Agency (USEPA) were addressed as part of the BART determination made available in the pre-hearing draft Regional Haze SIP. The response to comments can be found in Appendix L.10 starting at page 514.

USDOJ Comment: “In regards to the dollar threshold NCDENR is establishing with its Clean Smoke Stack law, both PCS Phosphate and NCDENR have determined that no cost effective controls are available for the facility. However, as noted by EPA, PCS Phosphate did not evaluate

full efficiency of the use of cesium catalyst at sulfuric acid plants 3 and 4, nor were lesser control levels considered. Should a greater level of control be evaluated, the cost per ton could be significantly reduced. We believe PCS Phosphate has not adequately demonstrated that control costs are prohibitive, and we request that additional control efficiencies be analyzed.”

NCDAQ Response: PCS Phosphate has submitted a PSD application to the NCDAQ. According to this application, the facility plans to shut down sulfuric acid plants 3 and 4 and build a new plant 7. It would not make sense for the facility to put on controls at these two units if they will be shutdown in the near future.

USDOJ Comment: “Page 11, Table 2.3-1 shows natural background and baseline conditions for North Carolina Class I areas. Recently, errors in these estimates were found by CIRA. New estimates are available on both the IMPROVE and VIEWS websites. Please verify that all baseline and natural condition numbers match throughout the documents.”

NCDAQ Response: These values have been updated in the pre-hearing draft Regional Haze SIP.

USDOJ Comment: “Page 13, Particulate Organic Matter (POM) is stated as the second most important contributor to fine particulate matter, yet the discussion concludes that controlling anthropogenic sources will have little effect. Please add clarity by discussing the ratios of anthropogenic and non-anthropogenic contribution.”

NCDAQ Response: Clarifying language was added in the pre-hearing draft Regional Haze SIP.

USDOJ Comment: “Page 18, electric generating units and industrial sources are identified as the major categories for stationary point sources yet little discussion is provided on the effects of stationary sources. Please add more clarity on these effects.”

NCDAQ Response: The section that is referenced in the comment is for discussing the types of emission inventories and emission sources and not the effects of these sources on visibility impairment. In Section 4.2 of the final Regional Haze SIP, there is discussion about the pollutant that is the largest contributor to visibility impairment, the estimated emissions by source sector and the relative percent contribution by source sector.

USDOJ Comment: “Page 26, in the bullets, please change “Publicly available on no or low cost” to “Publicly available at no or low cost”.”

NCDAQ Response: This typographical error was corrected in the pre-hearing draft Regional Haze SIP.

USDOJ Comment: “Page 51, please identify on the glide slope charts whether data used was actual model output or the results of using a relative reduction factor. If these numbers were the result of a relative reduction, please provide a discussion of what and how those numbers were generated.”

NCDAQ Response: In the pre-hearing draft Regional Haze SIP, the plots were changed to say reasonable progress assessment, and language was added preceding the plots to discuss how the reasonable progress assessment was determined through the use of relative reduction factors.

USDOJ Comment: “Page 58-59, it is declared that all international fire emissions are natural even though subsequent discussion describes both natural and non-natural international components. Please clarify why a portion of international emissions from fire are not natural.”

NCDAQ Response: Since the international emissions inventory used in the GEOS-CHEM model did not distinguish between wildfires and anthropogenic fires, all international fire emissions were treated as wildfires. This treatment of the fire emissions would therefore underestimate the impact anthropogenic international emissions, since the anthropogenic international fire emissions are not included. The language in the SIP has been revised to help clarify this point.

USDOJ Comment: “Page 59, the CAMx model is addressed without description. Please provide an appropriate discussion on performance and usability of this model for comparison purposes.”

NCDAQ Response: The modeling results from the Central Regional Air Planning Association were included in the pre-draft SIP to show that the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) modeling results were similar to other studies. Since the USDOJ had issues with these modeling results being used without a discussion on model performance, which was not readily available, this reference has been removed.

USDOJ Comment: “Page 61, figure 7.3-3 presents results on projected visibility glide slope for Swanquarter NWR, NC. One data point is offered to represent a projection of haziness if international effects were removed. Providing this data is considerably misleading without removing an appropriate amount of international contribution from the 2064 estimate of natural condition. Please remove an appropriate international contribution from the natural condition and present a new glide slope line.”

NCDAQ Response: The USEPA had told states that the 2064 natural condition value were set and could not be changed even when discussing international emissions. Since the plot could not be displayed the way USDOJ requested, the plot was removed from the pre-hearing draft Regional Haze SIP.

USDOJ Comment: “Page 63-65, charts and discussion are provided to discuss neighboring state contribution to visibility degradation at Class I areas. Please provide additional discussion in the main body of the SIP discussing the consultation with these States to address those contributions.”

NCDAQ Response: The intent of using the sensitivity modeling results was not to determine what the relative contribution from different States/regions had on visibility, but rather to better understand how reductions in various source sectors would impact visibility. The NCDAQ used data from existing modeling as a qualitative guide to identify the key pollutants contributing to visibility impairment at each Class I area. Section 10 of the Regional Haze SIP narrative and Appendix J discusses the consultation process that the NCDAQ used.

USDOJ Comment: “Page 74+, tables provide apportionment information for a variety of source categories. Earlier in the document, it was stated that energy generation and industrial sources were the major contributors. Please provide more clarity on how these two source categories have been subdivided into these tables.”

NCDAQ Response: In the pre-hearing draft Regional Haze SIP, the definitions of the categories have been added.

USDOJ Comment: “Page 80, a discussion is presented identifying the need to evaluate the IPM and CAIR projections to address their associated uncertainties as part of your mid-term review. Please add discussion regarding the ongoing State PSD/NSR activities to ensure adequate protection for visibility impacts from major new or modified stationary sources on Class I areas.”

NCDAQ Response: The NCDAQ has addressed this comment in the pre-hearing draft Regional Haze SIP narrative, Section 11 – Comprehensive Periodic Implementation Plan Revisions. The NCDAQ believes this is a more appropriate place for this discussion.

USDOJ Comment: “Page 82-85, a discussion of BART sources is provided which includes specific lists of sources and description of estimated impact. Please provide a similar discussion on sources that were determined to be significant as part of the area of influence and reasonable progress evaluations as produced in the VISTAS work. Please provide equal detail including specific source names and individual impact discussion. Please provide this summary in the main body of the SIP.”

NCDAQ Response: The discussion of BART sources estimated impacts on Class I areas were provided by the sources for only the BART-eligible units using CALPUFF modeling. The NCDAQ does not have the resources to provide this detail of analyses for all sources within the area of influence. The NCDAQ believes it has adequately addressed the reasonable progress evaluation for North Carolina sources identified as contributing to visibility impairment in the Class I areas.

USDOJ Comment: “Page 88, please update the time estimate of the final CMAQ run. When will final visibility projections be ready for final submission to the public or EPA?”

NCDAQ Response: The VISTAS best and final modeling run, which included known reasonable progress and BART controls from other VISTAS states, was not completed in time to be included in the North Carolina final Regional Haze SIP. The statutory deadline for the Regional Haze SIP is December 17, 2007. Since the modeling used in the pre-hearing draft Regional Haze SIP included all reasonable progress and BART controls for North Carolina sources, this is the modeling that will be submitted in the final SIP. Any modeling results that come after the Regional Haze SIP is completed will be assessed and incorporated in the first periodic review.

USDOJ Comment: “Please provide specific procedures for assuring ongoing FLM-State consultation on implementation of the provisions of the SIP, the development of the 5-year review and work on the SIP revision due in 2017.”

NCDAQ Response: The NCDAQ is unsure what is meant by “specific procedures” for assuring ongoing Federal Land Manager (FLM)-State consultation. The NCDAQ has committed in the Regional Haze SIP to ongoing consultation with the FLMs throughout the implementation process, including annual discussions on the implementation process and the most recent IMPROVE monitoring data and VIEWS data. Additionally, a discussion was added, per USDOJ’s request, stating the requirement of consulting with the FLMs on sources that are subject to the new source review regulations. The NCDAQ believes these commitments adequately address how the agency will consult with the FLMs.

USDOJ Comment: “We do, however, recommend that the State “certify” the SMP as provided for in EPA’s “Interim Air Quality Policy on Wildland and Prescribed Fire”.

NCDAQ Response: As stated in the Regional Haze SIP, the NCDAQ is working with the North Carolina Division of Forest Resources to develop a smoke management program that addresses the issues laid out in the USEPA’s Interim Guidance. The NCDAQ intends to certify to the USEPA that the State has an acceptable smoke management program as a separate action, once it has been fully reviewed and agreed upon by all relevant parties.