



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

March 30, 2004

Air Docket
U.S. Environmental Protection Agency
Mail Code 6102T
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Docket #OAR 2003-0053

To Whom It May Concern:

On behalf of the North Carolina Division of Air Quality (NCDAQ), I would like to offer the following comments on the U.S. Environmental Protection Agency's (EPA's) Proposed Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Interstate Air Quality Rule, IAQR), published in the Federal Register on January 30, 2004.

NCDAQ generally commends EPA for this proposed rule that will address the transported contributions to downwind non-attainment for both ozone and fine particulate matter. The proposed action would require significant reductions of emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO₂) from EGUs in other states. North Carolina's Clean Smokestacks Act (CSA), which was enacted in 2002, will require reductions of NO_x and SO₂ from the State's 14 largest coal-fired power plants of more than 70% from 1998 levels. The reductions proposed in the IAQR in the other states are needed to ensure that North Carolina can attain and maintain the health-based air quality standards for fine particulate matter and 8-hour ozone.

Control of NO_x for Ozone

In the IAQR preamble, EPA proposes to rely on the Ozone Transport Assessment Group finding that regional control of NO_x, instead of volatile organic compounds (VOCs), is the appropriate focus for reducing ozone. NCDAQ supports this approach. Our modeling shows that VOC reductions have very limited benefits in our state.

Control of SO₂ and NO_x for Fine Particles

EPA proposes to set budgets for SO₂ and NO_x emitted from EGUs in order to reduce the regional transport of fine particles, but not for direct PM_{2.5} emissions or organic precursors (e.g., VOCs or ammonia). Again, given the large role of both SO₂ and NO_x, especially in the quantities emitted from EGUs, in PM_{2.5} formation, NCDAQ concurs with the proposed approach of the establishment of budgets for these two pollutants from these sources and not to address in this rule the issues raised by ammonia deposition.

Definition of Significance Threshold

NCDAQ supports the significance threshold proposed in the IAQR for fine particles. EPA has proposed to determine that emissions from sources in any state that collectively contribute 0.15 µg/m³ or more to non-attainment or maintenance problems in a downwind state are significant (before considering cost). As pointed out in the preamble, even these contributions of pollution transport to downwind non-attainment or maintenance problems should be considered significant from an air quality standpoint for the reasons noted by EPA. NC DAQ also supports the threshold and methodology employed to determine significance of contributions of NO_x to downwind ozone problems.

Relationship Between Section 110 and Section 126

As discussed by our Attorney General in his comments (filed separately today), sections 110 and 126 of the Clean Air Act are substantially related. We incorporate those comments here by reference. North Carolina recently filed with the Administrator a petition pursuant to section 126 of the Clean Air Act (CAA) to effect reductions of emissions of NO_x and/or SO₂ from EGUs in thirteen states that are upwind of the State. My staff worked closely with our Attorney General's office to determine that such emissions in these thirteen states contribute significantly to non-attainment in and interfere with maintenance by North Carolina. In reaching this conclusion, we relied in part on data and information provided by EPA in the preamble to the proposed IAQR and associated documentation. We also supplemented EPA's work with our own technical information and studies. The results of our work are presented in some detail in the petition itself. I submit the *Final Report* of the Southern Appalachian Mountain Initiative (SAMI) with our comments today. The SAMI modeling was referenced in the body of evidence that EPA used to support the need for regional reductions. The section 126 petition also referenced the SAMI analysis.

IAQR and Best Available Retrofit Technology (BART)

In the IAQR preamble, EPA asks for comments on whether BART for EGUs can be met if a State imposes the full amount of SO₂ and NO_x emission reductions on EGUs. NCDAQ believes that this approach may be sufficient to meet BART if the State elects to meet the statewide cap, and not participate in the inter-state cap and trade program. Otherwise, if trading is allowed, how can a State be sure that the impacts on the Class I area by any source are addressed? A source close to and significantly impacting a Class I area could elect to buy allowances from another source hundreds of miles away that has no impact whatsoever. The Class I area impacts therefore would not be addressed.

IAQR and Regional Haze Reasonable Progress Goals

EPA asks for comment on whether the proposed reductions could be sufficient to meet the needs of the first long term strategy for regional haze. NCDAQ does not believe that the emission inventory and modeling work have been sufficient to establish that the first regional haze goals have been met. The emissions and modeling analysis have been sufficient to show significant contribution of one state to another state, but not for the State Implementation Plan work required under the regional haze rule. NCDAQ believes that an appropriate approach is to allow the technical analyses underway by the Regional Planning Organizations to continue, with the controls proposed in the IAQR being part of the strategies analyzed to determine necessary reasonable progress goals for the Class I areas.

EPA also asks for comment on whether a cap and trade approach proposed in the IAQR is a suitable mechanism for States to use in meeting the regional haze obligations. NCDAQ does not believe that a cap and trade approach is the best mechanism for meeting reasonable progress goals, because it could

cause a hot spot issue at one of the Class I areas if, for example, a source near and significantly affecting the Class I area buys allowances from another source perhaps hundreds of miles away whose emissions do not affect the ambient air quality of the Class I area. The proposed approach would need to include, and presently it does not, an effective way to deal with hot spots.

Emissions and Modeling Analysis Comments

In reviewing the emissions inventory and modeling *Technical Support Document* as well as other emissions modeling files, NCDAQ discovered that the CSA compliance plan was not modeled appropriately in the 2010 base case model run. To ensure that the applicable compliance plans are modeled correctly in any future modeling work done for the IAQR or other EPA analyses, I am providing the May 30, 2003 report, *Implementation of the Clean Smokestacks Act*. This report contains Duke Energy and Progress Energy's compliance plans for both SO₂ and NO_x budgets. In particular, EPA modeling should reflect that the CSA cap may not be met by the use of emissions allowances.

For example, we question whether the apparent anomaly noted in footnote 17 of North Carolina's recently filed CAA Section 126 petition may have resulted in part from the incorrect modeling of North Carolina's projected power plant emissions data for facilities covered by North Carolina's CSA.

Banking and Trading of Emissions Allowances

NCDAQ strongly opposes the proposed approach regarding the use of banked emission reduction credits. This approach would delay the actual achievement of the emission reductions required by the IAQR. The result is that the significant contributions from an upwind state would not be sufficiently addressed in a timely fashion. The concern is exacerbated by the prolonged period during which there is no discounting of banked Title IV allowances that predate the initial IAQR compliance date.

In addition, our Attorney General, in his comments, addressed trading of emissions allowances among sources in different upwind states. This subject is also discussed in detail in the State's Section 126 petition. We agree with the concerns expressed by the Attorney General and incorporate those discussions here by reference.

Inter-pollutant Trading

In the IAQR Preamble, EPA asks whether SO₂ allowances and NO_x allowances should be interchangeable, and if so, at what ratio the two pollutants should be interchangeable. NCDAQ believes that inter-pollutant trading is not appropriate given the different importance that SO₂ and NO_x emissions have in the different regions of the country. For example, SO₂ is very important to fine particle formation in the Southeast, and NO_x has a lesser role. However, in the Midwest, NO_x plays a greater role in fine particle formation, especially in the winter. Due to the complex chemistry, it would be difficult to develop a ratio over the region covered by the IAQR to ensure that all significant contribution is addressed while allowing inter-pollutant trading.

Caps for Non-EGUs

EPA requests comments on whether States that elect to control non-EGUs to meet their NO_x or SO₂ budgets should be required to establish emission caps for those non-EGU sources. NCDAQ believes that the only way to ensure that the overall budget is being met is to establish caps on the sources that will be controlled to meet the budget, even if those sources are non-EGUs.

Regulatory Text

EPA has not yet published any actual rule text for this rulemaking. When that text is made available, it is likely that it will cast new light on all issues discussed in the preamble. Therefore, State reserves its right to revisit the issues in the preamble upon publication of the rule text and any other supplemental notices.

Thank you for the opportunity to comment and for your consideration of these comments in the development of the final rule. Should you have any questions on the comments, please contact Sheila Holman of my staff at (919) 715-0971.

Sincerely,


for B. Keith Overcash, P.E.

Attachments

cc: Secretary Bill Ross