

April 25, 2005

U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Mail Code 6102T  
Washington, DC 20460  
*Attention: Docket #OAR 2004-0013*

Re: Comments on Proposed Rule on Prevention of Significant Deterioration for Nitrogen Oxides

Dear Acting Administrator Johnson:

The Northeast States for Coordinated Air Use Management (NESCAUM) appreciates the opportunity to comment on the U.S. Environmental Protection Agency's (EPA's) *Prevention of Significant Deterioration for Nitrogen Oxides; Proposed Rule* (70 FR 8880-8917; February 23, 2005). NESCAUM is a regional association of the air quality control divisions of the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont.

Prevention of Significant Deterioration (PSD) requirements are often perceived to apply only to national parks and wilderness areas as a means to preserve air quality. However, PSD requirements apply to any area that is in compliance with the national ambient air quality standards (NAAQS), including many urban and rural areas as well as national parks and wilderness areas. Under the current rule, any new major source in an attainment area must demonstrate compliance with PSD requirements for the respective NAAQS pollutant. Compliance with PSD increments is typically demonstrated using dispersion modeling for an array of receptors within the influence of the new source.

EPA proposes three options to revise the current approach in the PSD program for nitrogen oxides (NO<sub>x</sub>). Option 1 retains the existing NO<sub>2</sub> increment system. Option 2 allows states to use a NO<sub>x</sub> cap-and-trade program in lieu of an increment system for NO<sub>x</sub>, specifically citing the model cap-and-trade program of the Clean Air Interstate Rule (CAIR). Option 3 allows a state to show that emissions reductions from other programs contained in its State Implementation Plan (SIP) satisfy the PSD provisions. Under this last option, EPA suggests that capping statewide emissions at 1990 levels could make the required showing.

NESCAUM finds each of EPA's proposed options either deficient or unacceptable. NESCAUM can generally support option 1 as an interim approach, provided that EPA updates the current increments and takes steps to develop and adopt a critical load approach necessary to adequately protect sensitive ecosystems. Taking each option in turn, NESCAUM offers the following comments:

**1. Option 1 must be updated and viewed as an interim approach.** Of the options proposed, NESCAUM can support retaining the approach of the current program for the near future if the existing NO<sub>2</sub> increments are updated. Scientific evidence indicates that the existing increments are not adequate to protect national parks, wilderness areas and other attainment and unclassifiable areas from the threats posed by nitrogen oxides deposition. Additional reductions are necessary to protect vulnerable areas and allow recovery from the negative impacts of past acid deposition. As an initial step, EPA must reevaluate and update the existing annual NO<sub>2</sub> increments, as they have not been revisited since 1988. Moving forward, EPA should take steps to adopt a critical load approach as indicated below.

**2. Option 2 is unacceptable and fails to meet minimum requirements of the Clean Air Act.** While NESCAUM agrees that a new approach to PSD is necessary, regional cap-and-trade programs and statewide emissions budgets are not suitable substitutes for a case-by-case analysis of air quality impacts and do not comport with sections 160 through 166 of the Clean Air Act (CAA). It is inappropriate to use a regulatory tool designed to meet NAAQS to satisfy the requirements for the PSD program - a program designed to address local environmental and health impacts that could occur notwithstanding the attainment of NAAQS.

Compliance with a regional-scale program such as the model cap-and-trade program of CAIR fails to ensure that new sources comply with the CAA requirement to not exceed PSD increments in areas near the affected sources. A regional cap-and-trade program allows emissions in certain local areas to increase as long as that increase is offset by reductions elsewhere in the region. Thus, a NOx allowance trading program could result in increased NOx emissions in localized areas that could increase ambient ozone levels in attainment urban and rural areas, parks and wilderness areas. The use of the CAIR model NOx trading program raises particular concerns, as that program does not limit growth in emissions from other stationary source categories, which is required under the PSD provisions of the CAA. Experience with sulfur dioxide modeling and permitting in the NESCAUM region indicates that local PSD increment modeling can lead to more restrictive permit limits that ensure compliance with the applicable increments. We would anticipate similar results with NOx, especially given the many NOx-emitting sources in the region.

The CAA requires that air quality impacts of proposed new sources be analyzed before a permit can be issued. Up-front analysis of a regional cap-and-trade program could not fulfill this requirement, because those assessments could not accurately predict where new sources could locate.

Furthermore, we strongly believe that EPA must retain case-by-case best available control technology (BACT) requirements for NOx. The CAA requires that major sources locating in clean air areas install BACT as a condition of obtaining a construction permit. This requirement applies independent of the NOx PSD program.

In addition, the PSD program's "additional impact analyses" provisions (40 CFR 51.166(o)) require a study of impairment to visibility, soils, and vegetation that would occur as a result of a source or source modification that triggers PSD review. The issue of critical loads to water bodies is within the purview of this provision in that nitrogen deposition to streams, rivers and estuaries produces excess vegetative growth, which in turn leads to eutrophication of water bodies. It appears that Option 2 (as well as option 3 below) would replace the additional impact analysis or render it meaningless. If this is the case, then water bodies would lose this important protection.

**3. Option 3 is unacceptable.** NESCAUM strongly disagrees with EPA's recommendation that statewide emissions budget caps set at 1990 levels would satisfy PSD requirements. First, as discussed with regard to Option 2, regional cap-and-trade programs with statewide budgets could not account for localized emissions growth and are not an acceptable substitute for consideration of source-specific impacts. Second, the lack of consistency with respect to SIP approvals across the country could lead to an uneven playing field from region to region with respect to PSD if option 3 were chosen. Third, with the advent of the Clean Air Amendments of 1990, significant NOx emissions reductions have occurred in the Northeast and in other areas of the country. Implementation of option 3 would likely result in an increase in NOx

emissions above current levels in many states, interfering with ozone and fine particulate NAAQS attainment.

**4. Adopting a Critical Load Approach is necessary and appropriate.** NESCAUM recommends that EPA expeditiously revise the PSD program to ensure that nitrogen deposition does not exceed the critical loads that ecosystems can tolerate. EPA should leverage the body of scientific research on nutrient loading and cycling in ecosystems and the success of regulations in other countries based on nutrient loading to establish critical loads for nitrogen deposition for each of the national parks and wilderness areas. Critical loads could determine what level of emissions is sustainable for an area. Such a critical load approach would also create a better tool to help set targets and reasonable progress goals for emissions reductions, where needed.

EPA's PSD proposal is in response to a 1990 court decision that stressed the need for PSD regulations for NO<sub>x</sub> that were at least as effective as the increments established for SO<sub>2</sub> and PM in order to be characterized as "safe harbor" approaches that would be considered viable if further analysis of the requirements of section 160 of the CAA did not indicate the need for tighter regulations.<sup>1</sup> Neither the cap-and-trade nor the SIP approaches qualify as "safe harbor" provisions. None of the three options satisfy the requirements of Sections 166(c) and (d) of the CAA particularly because they do not fulfill the goals of the prescribed PSD program. While revisions to the existing increment approach could result in an acceptable interim approach to regulating NO<sub>2</sub>, the critical load approach is the response most consistent with the court ruling and should be adopted by EPA.

Thank you again for the opportunity to comment. If you or your staff has any questions about these comments, you can contact me at the NESCAUM office at 617-259-2000.

Sincerely,



Arthur N. Marin  
Executive Director

cc: NESCAUM Directors  
Dan deRoeck, EPA

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<sup>1</sup> EDF v. EPA, 898 F.2d 183, 190 (D.C. Cir. 1990).