

October 1, 2010

Lisa P. Jackson, Administrator  
U.S. Environmental Protection Agency  
EPA Docket Center, EPA West (Air Docket)  
Mail Code 2822 T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
*Attention: Docket I.D. No. EPA-HQ-OAR-2009-0491*

*Re: Proposed Rule –Federal Implementation Plans to Reduce Interstate Transport of  
Fine Particulate Matter and Ozone*

Dear Administrator Jackson:

The Northeast States for Coordinated Air Use Management (NESCAUM) offers the following comments on the U.S. Environmental Protection Agency's (EPA's) proposal, published on August 2, 2010 in the Federal Register, entitled *Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone* (75 FR 45210-45465). NESCAUM is the regional association of air pollution control agencies representing Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

The NESCAUM states are also members of the Ozone Transport Commission (OTC) and the National Association of Clean Air Agencies (NACAA). As such, we fully support comments on the proposed rule that are submitted to the EPA docket by those organizations. NESCAUM's comments focus on a few key issues.

### **Establishing a Framework**

We are pleased that EPA has acknowledged the importance of establishing a process and a framework to address transported air pollution for each new or revised National Ambient Air Quality Standard (NAAQS). Previous attempts by EPA to address transport solely through source-specific rules, without consideration of possible future NAAQS of greater stringency, have not proven effective in helping states to timely meet Clean Air Act requirements. In retrospect, that approach has hindered states in their attainment planning processes, created challenges for regulated industries that engage in long-term planning, and resulted in delays attaining the NAAQS. Transported pollution will likely even play a larger role, and have greater impacts, on the NESCAUM states as we work to meet the next generation (i.e., more protective) NAAQS. Thus, a framework to help implement transport requirements of the Clean Air Act is important.

### **Addressing Significant Transport**

EPA has indicated that this rule may not fully satisfy the transport requirements of the Clean Air Act for a few states, including within the NESCAUM region. EPA further indicates that a second transport rule is planned that will complete that task for future NAAQS. While we appreciate EPA's acknowledgement of this shortcoming, we find it troubling in several ways. First, we are concerned with the postponement of public health protection resulting from the rule's inadequacies in addressing transport in full. Second, we are concerned that it sets a precedent in the proposed framework that could allow postponement, to an uncertain date, of the essential remedy that downwind areas with significant pollution contributions from upwind sources need in order to meet the NAAQS. There are no assurances that future transport rules will not also fall short of their goals.

If EPA finalizes this rule without fully addressing significant transport, then it must clearly indicate as such in order to place the rule, and its new framework, in appropriate context. In addition, it should include a provision that ties State Implementation Plan (SIP) approvals to the resolution of necessary additional emission reductions in upwind states, as specified by EPA, to comply with Clean Air Act section 110(a)(2)(D) requirements where the remedy in the federal transport rule proves insufficient to do so.

### **Mechanism and Timing**

Meeting current and future NAAQS requires highly effective national and regional solutions, often coupled with strict local controls. Pollution transport is one key element of meeting NAAQS that must be characterized and addressed up front, before attainment plans are due. Having technical documentation of the amount of transport relief to be expected would allow downwind states to plan for and implement reasonable levels of local controls with the knowledge that significant transported pollution will be eliminated. We therefore urge EPA to promulgate future transport rules concurrent with finalizing new NAAQS. This would provide states with critical information needed to develop their SIPs at the beginning of the planning process. It would also greatly assist states in developing SIPs that are produced in a timely manner (i.e., within the required three years after EPA promulgates a NAAQS), approvable under Clean Air Act section 110(a)(2)(D), and effective in yielding the appropriate amount of emissions reductions.

We greatly appreciate EPA's efforts to bring the timing of the transport rule's reductions in line with NAAQS attainment dates. This is a vast improvement from the Clean Air Interstate Rule (CAIR), and will greatly assist states in meeting Clean Air Act obligations to reduce emissions as expeditiously as possible.

For this proposed rulemaking, EPA uses a Federal Implementation Plan (FIP) as the mechanism to compel states to achieve reductions to reduce significant transport. This approach is more expedient than a SIP call, and warranted in this particular situation in light of states already being on notice under the remanded CAIR that they are significant contributors to downwind nonattainment. EPA's transport framework should make use of all available tools, as appropriate

to the situation, to address significant contribution. In cases where EPA is using a FIP, EPA must ensure appropriate flexibility is given to states to ensure that there is no backsliding.

In cases where EPA employs the SIP call process, it must be done in a timely manner, and be backed up with a FIP. When EPA sets or revises a NAAQS, it must concurrently evaluate significant transport, and propose a SIP call at the same time that it promulgates that new NAAQS. Therefore, when a new or revised NAAQS is promulgated, EPA should concurrently determine that a state's current SIP is inadequate in accordance with its significant transport evaluation. EPA should then develop a response that addresses the Clean Air Act requirements as expeditiously as possible. That process should include having a FIP in place for use in cases where states do not submit timely SIPs. EPA should adhere to the following schedule in order to garner timely reductions:

#### Year 0

- EPA promulgates a new or revised NAAQS
- EPA proposes a Transport SIP call for the new or revised NAAQS
- EPA proposes a Transport FIP for the new or revised NAAQS
- EPA releases all modeling and technical information with the proposed Transport SIP call to help inform the process and to assist states in developing their Transport SIPs.

#### Year 1

- States recommend to EPA NAAQS designations (maximum one year after NAAQS)
- EPA finalizes Transport SIP call rule and Transport FIP

#### Year 2

- EPA finalizes NAAQS designations (maximum two years after NAAQS is promulgated)

#### Year 3

- States submit to EPA final Transport SIPs (maximum three years after NAAQS is promulgated)
- EPA finalizes transport FIPs for states that do not submit Transport SIPs. This is triggered in any state that fails to submit a complete its Transport SIP on time, and helps ensure that transport is dealt with in a timely manner.

#### Year 5

- States submit attainment SIPs (maximum three years after designations)
- Transport SIP/FIP controls are implemented (three years prior to attainment deadlines)

#### Year 7

- Attainment deadline under Clean Air Act Part D, subpart 1 for non-ozone NAAQS

#### Years 8+

- Attainment deadlines for ozone areas under Clean Air Act Part D, subpart 2

### **Transport Linkage Criterion**

We support EPA's proposal to adopt 1% of a NAAQS level as the transport linkage criterion. This is a metric that the states of the OTC and the Lake Michigan Air Directors Consortium analyzed in great detail and collectively proposed to Administrator Jackson in September, 2009. It ensures public health and environmental protection into the future, with the likelihood of subsequent NAAQS revisions based on new science. We also agree with EPA's decision not to use its previous rounding convention to establish 1% of the NAAQS.

### **Addressing Peak Ozone and Performance Standards**

The NESCAUM states support use of a regional cap-and-trade program as a means to reduce regional NO<sub>x</sub> emissions. We recognize that an interstate trading program has a place in addressing transport, but may not be able to do handle the all transport issues completely. EPA needs to ensure that it and states have mechanisms in place to address those cases where specific controls or rules are warranted.

For example, EPA's framework for addressing significant contribution does not help states address the short-term public health effects of ozone, PM 2.5, NO<sub>x</sub> and SO<sub>2</sub> exposures during high electricity demand days. It may even exacerbate this problem. Analyses indicate that, in the Northeast, NO<sub>x</sub> emissions are much higher, and in some cases nearly three times higher, on high electric demand days than during average summer days. Regulatory approaches that set standards, caps, or budgets that are based on annual averaging will likely be insufficient in addressing the peak exposures. EPA's proposed option for performance standards has an annual averaging time, and is therefore inappropriate for this purpose. EPA should incorporate short-term performance standards for electric generating units that apply to each upwind source. Such performance standards could co-exist with a trading program.

### **Cost per Ton Threshold**

The NESCAUM states are dismayed that the NO<sub>x</sub> budgets are not set at levels stringent enough to fully address significant contribution. EPA indicates that it did not consider cost thresholds for NO<sub>x</sub> beyond \$500/ton "because there are minimal additional NO<sub>x</sub> reductions until one considers cost levels higher than \$2,400/ton" (75 FR 45281). EPA's conclusion can only be sustained if one first assumes that the only air pollution controls that can be installed prior to 2014 are those controls that are already required to be installed due to existing federal or state requirements. This approach severely limits the type and cost of controls that can be installed.

We do not agree with EPA's assumption that allowance prices reflect the actual marginal costs of installing air pollution control equipment. There are many factors that may cause significant fluctuations in allowance prices, which in turn make allowance prices a poor predictor of the actual marginal cost of installing air pollution controls. An example of the impact of one such factor, regulatory uncertainty, was demonstrated in the recent fluctuations in allowance prices caused by the vacatur and subsequent remand of CAIR.

The NESCAUM states do not support EPA's proposed cost threshold for this phase of the transport rule, and are concerned that such a low threshold could create an unworkable regulatory hurdle especially for states that have already implemented successful programs at much greater per ton costs (some are even greater than \$40,000/ton). EPA's own cost/benefit analysis shows that significantly higher costs are cost effective based on the public health and welfare benefits. We understand that EPA used a \$2,500/ton threshold for CAIR.

EPA should not be using the cost for operating SCRs as the basis for setting the cost threshold. EPA should use the same baseline it used for assessing the efficacy of the program (without CAIR) and the controls that were assumed, and apply the full cost of installing and operating controls in order to provide a level playing field. EPA's proposed methodology advantages the recalcitrant because under EPA's approach, sources/states that previously chose not to install controls under CAIR are now advantaged by not having to install controls under this rule. The burden then falls entirely onto the sources that opted to control under CAIR, as they are assigned an artificially low control cost that only accounts for operating their existing controls, and not the cost of installing them under the previous (and now illegal) CAIR. This appears to be a "Catch-22" situation for those sources that acted in good faith to control emissions under CAIR, and a windfall for those sources that did not act at all.

We urge EPA to adopt a more realistic cost threshold that reflects the cost of controls already in place in many areas and is more aligned with state efforts. Furthermore, these costs should also reflect EPA's use of additional available methods to determine cost effectiveness, such as EPA's CUECost model to analyze costs of installing NO<sub>x</sub> and SO<sub>2</sub> controls on electric generating units (EGUs). For non-EGUs, these costs are more realistically reflected in the revised version of EPA's Control Strategy Tool (CoST). EPA should use CoST to analyze costs of NO<sub>x</sub> and SO<sub>2</sub> controls for non-EGU stationary sources such as industrial, commercial, and institutional (ICI) boilers.

### **Methodology to Set State Budgets**

We have concerns about the methodology used to develop the proposed remedy. It has been very difficult to ascertain the specific methodology employed. EPA has relied upon a proprietary model, the Integrated Planning Model (IPM), in developing its remedy. Notwithstanding our careful scrutiny, it has been extremely difficult for states to examine the underlying assumptions and processes used, and replicate EPA's budgets. If EPA chooses to continue using this model, it should purchase it and place it in the public domain, so that all data and cost algorithms used can be reviewed. As public agencies that must implement this program, we need more transparency and access. Moreover, the high cost of running IPM hinders our ability to conduct our own comparative analyses.

Without detailed explanation from EPA, we are not able determine which data sets were used to set the budgets for each state. State budgets were apparently established using different data sets (i.e., using either data from IPM or historical data, whichever were lower). This is troubling to us for several reasons. First, such an approach does not result in an equitable distribution of the

allowance budgets from state to state. Second, the quality of the data used by EPA to set budgets may not accurately reflect the current and planned/committed controls on existing units. Third, it appears that the results allow existing uncontrolled units to be allocated more allowances than existing controlled units, thus discouraging uncontrolled units from installing controls. We recommend that EPA employ a methodology that relies on the same data set for all state budgets, and establish a single, quality-assured data set for this purpose. Furthermore, states should be allowed an opportunity to review and comment on the accuracy of that data set.

While EPA's use of this model is appropriate in some analytical situations, we have serious concerns with the manner in which IPM has been employed in this regulatory context (i.e., to set state budgets and allocations). Over the years, we have repeatedly observed IPM predictions that do not reflect real world conditions because transmission constraints and reliability rules for our region are not always fully reflected in the model. The IPM future case scenarios run by EPA often do not accurately reflect operations of the electrical generation system in the Northeast. For example, IPM future case outputs predict the economic shutdown of many New York City oil/gas steam generators, even though these units are required to run due to transmission constraints and local reliability rules, and are not scheduled to be replaced. It appears that certain assumptions built into the IPM analysis are contributing to an SO<sub>2</sub> allowance allocation bias. Due to such issues, IPM is therefore not our preferred model for use in establishing state budgets and allocations. We urge EPA to use methodologies for this and future transport rules that are can be verified by the public and have the requisite resolution to more accurately predict operations of the electrical generating sector. Furthermore, when setting budgets, EPA should more closely review recent trends in the capacity factors and dispatch trends of regional transmission organizations for certain plant types, particularly oil/gas steam units and gas/oil combined cycle units.

The Northeast states, along with states in other regions, are seriously considering moving away from using IPM in future regional SIP modeling. We have been working with the Eastern Regional Technical Advisory Committee (ERTAC) on alternative modeling, which will be available for review in late Spring 2011. We urge EPA to examine this approach, participate in the ERTAC process, and consider its merits for use in future transport rules.

Furthermore, we strongly recommend that EPA use a bottom-up approach to setting budgets. The approach would entail evaluating a specific strategy and starting out with those specific technologies, and applying the appropriate controls to each unit in the database. EPA could then calculate the emissions rates and then model the strategy using an air quality database. This analysis would be conducted on a state-specific, unit-specific basis, by fuel type. Once the emissions rates were determined, EPA could calculate the emissions and assess whether those emissions triggered the 1% significant contribution linkage criterion through CMAQ. The IPM model could then be used for assessing costs (not establishing the budgets), and an air quality model, such as CMAQ or CALGRID, could be used to assess air quality benefits. We understand that EPA has employed a similar, but not as comprehensive, approach in conducting assessments of other cap-and-trade programs (i.e., EPA did not analyze on the state-specific level

nor employ air quality modeling). While this approach would entail multiple runs and take more time than EPA's current approach, it would produce results that we feel are more aligned with the intent of the program, and the July 11, 2008 decision of the U. S. Court of Appeals for the District of Columbia Circuit.<sup>1</sup>

The record appears to show that the emissions used in the modeling to determine the levels for eliminating significant contribution and interference with maintenance are lower than the emissions budgets set for states. EPA should better explain the emissions used in the modeling to determine the level of reductions required for each individual state to eliminate significant contribution and interference with maintenance. EPA must also explain how these emissions compare to the emissions budgets proposed in the FIP. If the emissions used in analysis are indeed lower than the FIP budgets, then we need to understand how the budgets will eliminate significant contribution and interference with maintenance. Failure to limit state-level emissions at the level used in the analysis would seem to deviate from the court's mandate:

*On remand, EPA must determine what level of emissions constitutes an upwind state's significant contribution to a downwind nonattainment area "consistent with the provisions of [Title I]," which include the deadlines for attainment of NAAQS and set the emissions reduction levels accordingly."*<sup>2</sup>

### **Allowance Allocations**

NESCAUM states recommend that EPA use the most recent three-year average of unit specific data to establish the input/output rates for calculating NO<sub>x</sub> allocations for each unit, multiplied by the unit specific NO<sub>x</sub> emission rate, and then sum the resultant allocations for all units in a state to determine the amount of NO<sub>x</sub> allowances to be allocated to that state. The same procedure could also be used with unit-specific SO<sub>2</sub> emission rates to determine the amount of SO<sub>2</sub> allowances to be allocated to each state.

It should be noted that, under the proposed rule, most of the Northeast states have allocated budgets well below those of upwind states. Moreover, our cost of compliance appears to be far greater than the \$500 cost per ton threshold that EPA appears to be using. This is not equitable. EPA must explain why the costs for reducing emissions are set higher in the Northeast. In addition, the location of emissions matters. Sources located near downwind borders contribute to out-of-state transport more than sources located farther from the border. The proposed rule does not guarantee that emissions from a specific source located in an upwind area that has a significant impact on a downwind area will be adequately controlled. These dynamics should be considered in how allowances are allowed to be distributed within a state, and EPA should ensure mechanisms are in place to address such emissions (e.g., employ performance standards as appropriate and/or allow states to allocate/control allowances).

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<sup>1</sup> *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008).

<sup>2</sup> *Id.* at 913.

Moreover, in order to achieve maximum public health protection, this allowance program should not link to past allowance programs. Neither the NO<sub>x</sub> SIP Call nor CAIR allowances should be allowed to be used in this program. We assume that Title IV Acid Rain SO<sub>2</sub> allowances are precluded from use in this program, as per the court decision in *North Carolina v. EPA*.

### **Variability Provisions**

While we support the concept of provisions that limit interstate trading, some of the implementation specifics are troubling. EPA proposes to set state-specific trading budgets at the level necessary to significantly address transport, but then allows sources in a state to emit at the budget plus an increased variability limit, without mitigation in a specific state exceeding its budget. By allowing emissions in a state to be higher than the budget, the variability provisions weaken the state budgets that are already inadequate to fully address significant contribution in some states. EPA should correct this by setting the state-specific budgets with an adequate margin of safety that accounts for periods of high variability, so that emissions will not exceed the levels of significant contribution. We also urge EPA to require variability provisions to take effect in 2012 rather than 2014.

### **Energy Efficiency**

Given this Administration's commitment to energy efficiency, we are disappointed at the lack of energy efficiency provisions in the proposal. EPA indicates that it did not incorporate end-use energy efficiency because of its use of the FIP as the implementation mechanism. "This means, among other things, that EPA allocates the emission allowances directly to individual sources. In contrast, when allowance based programs are implemented through SIPs, states may have significant flexibility to determine the methodology used to allocate or auction allowances" (75 FR 45343). Such reasoning is short-sighted. EPA can and should, at minimum, establish allocations based on output. It should also include energy-efficiency set-aside provisions in the final rule. EPA should work with the states and consult with energy offices to ensure that there are sufficient energy efficiency incentives or regulatory options provided in the final rule.

### **Non-EGU and Other Sources**

EPA has indicated that it did not include non-EGU sources because it did not want to delay release of the rule for such an evaluation. While we appreciate EPA's efforts to release the rule as soon as possible, we are concerned that the omission of non-EGU sources compromises EPA's framework by proposing only a partial solution to transport. In addition, states in the NESCAUM region that opted non-EGUs into their CAIR programs now must develop separate and distinct regulatory programs for these sources, which no longer enjoy the advantages of inclusion in a trading program. We expect that, when EPA develops responses to fully address significant contribution, it will consider *all* cost-effective controls from upwind areas, and not just those from a single source sector.

### **Clarification**

In the proposed rule, EPA states that "a downwind state must adopt controls to demonstrate timely attainment of the NAAQS despite any pollution transport from upwind states that is not

eliminated under section 110(a)(2)(D)" (75 FR 45271). We understand that EPA's intent, with this statement, is to clarify a nonattainment area's obligation to adopt reasonable local controls, notwithstanding transport, to make progress towards attainment. It is not meant to imply that a downwind area is solely responsible for implementing all measures to attain the standard while being affected by significant contribution of transport. This is especially of concern if the final transport rule does not provide relief sufficient to address significant contribution to downwind nonattainment. We request that EPA clarify its intent in the final rule.

### **Conclusion**

We underscore the value of having tools in the Clean Air Act, like the sec. 110(a)(2)(D) transport provisions, that require EPA and the states to limit pollution further to meet more protective NAAQS in light of new science. The NESCAUM states urge EPA to make appropriate changes to this proposed rule to ensure a strong and sufficient framework fully capable of addressing significant contributions from all sources for the most current NAAQS. The framework must also compel states to start their SIP planning in a timely manner, and provide states with the data needed to do so. It should allow states appropriate flexibility, while also requiring the timely public health protections afforded in the Clean Air Act. The NESCAUM states are poised to work with EPA in this effort.

Thank you for the opportunity to comment. If you or your staff has any questions regarding the issues raised in this letter, please contact Leah Weiss at NESCAUM (ph: 617-259-2094).

Sincerely,



Arthur N. Marin  
Executive Director

Cc: NESCAUM Directors  
Tim Smith, EPA/OAQPS  
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