

July 6, 2006

Stephen L. Johnson
U.S. Environmental Protection Agency
Mail Code 6102T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Attention: Docket ID # EPA-HQ-OAR-2005-0175

Re: *Transition to New or Revised Particulate Matter (PM); National Ambient Air Quality Standards (NAAQS)*

Dear Administrator Johnson:

NESCAUM, the Clean Air Association of the Northeast States, offers the following comments on the U.S. Environmental Protection Agency's (EPA's) advance notice of proposed rulemaking (ANPR) entitled *Transition to New or Revised Particulate Matter (PM); National Ambient Air Quality Standards (NAAQS)* and published on February 9, 2006 in the Federal Register (71 FR 6718-6729). NESCAUM includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

Please note that NESCAUM's comments are limited to the ANPR and do not reflect our position on what level and form of the PM standards we believe are necessary to protect public health with an adequate margin of safety. In addition, we note that EPA has indicated in the ANPR that, when finalized, the proposed implementation rule for PM-2.5 (70 FR 65984) "will govern any revised standards" (71 FR 6723). We are concerned with this approach. When new PM NAAQS are promulgated, EPA should revisit and revise, as appropriate, the PM implementation rule that is being developed to implement the current PM NAAQS. We reserve the right to comment on the implementation rule in light of the newly promulgated PM NAAQS at that time.

1. General Approach

EPA proposes two general options for transitioning to a revised PM NAAQS. Under Option 1 for the annual standard, EPA proposes no new designations. EPA bases this option on its proposed annual PM-2.5 NAAQS revision, which solely modifies the application of spatial averaging, and considers the proposed change to be *de minimis* with respect to designations. Consequently, EPA proposes no new State Implementation Plan (SIP) submission and attainment deadlines. Under this scenario, the current annual PM-2.5 standard would not be revoked, and areas designated under the current annual standard would continue to develop and implement SIPs based on the PM implementation rule (which was proposed in November 2005 and has not yet been finalized by EPA). Under Option 1, for the 24-hour standard, EPA proposes to revoke the existing standard one year after designations are finalized under a new standard. New designations would only be made for areas that violate the new 24-hour standard, and nonattainment areas would be required to submit a SIP by April 2013. EPA indicates that this option would not require an anti-backsliding rule, as no areas are currently in nonattainment based solely on the 24-hour standard.

Under Option 2, EPA proposes to revoke the existing annual and 24-hour standards one year after designations are made under any new 2006 PM standards. This option is similar to EPA's approach for transitioning from the one-hour to eight-hour ozone NAAQS. Under this option, EPA would develop and implement an anti-backsliding rule to address the planning and control requirements that would remain in effect, as well as effects of the revised NAAQS on the New Source Review (NSR) and conformity programs. EPA indicates that it would follow the approach it developed for the ozone program, requiring nonattainment areas for both standards to maintain mandatory controls and allowing areas to revise or remove discretionary measures following a section 110(l) demonstration. In addition, each area would implement transportation conformity and NSR based only on their designations under the revised standards.

If EPA finalizes its proposal to retain its current $15 \mu\text{g}/\text{m}^3$ annual PM-2.5 NAAQS, then NESCAUM would prefer Option 1 over Option 2 for the annual PM-2.5 NAAQS. In such a case, there is no reason to go through a new designation process for the annual standard. Undergoing a designation process would extend attainment dates, delay implementing emission reduction programs, and result in adverse public health impacts. We prefer Option 1 because it retains the requirement to attain the annual PM-2.5 standard by the end of 2009.

However, if EPA opts to adopt a more stringent annual PM-2.5 standard, then NESCAUM supports EPA implementing the general approach in Option 2. In this case, EPA must develop and implement anti-backsliding provisions that ensure no slowdown of progress in emission reductions that would help to attain the current PM NAAQS while states commence their efforts to address the new PM NAAQS. In EPA's anti-backsliding rule, EPA must ensure that transport is adequately assessed and addressed before any area could eliminate any control measure implemented to address the current NAAQS.

2. Revoking the Current PM Standards

a. PM-2.5 NAAQS

We disagree with EPA's proposal, described in Options 1 and 2, to revoke the current 24-hour PM-2.5 NAAQS one year after designations for the new PM-2.5 NAAQS, and to revoke the annual PM-2.5 NAAQS if EPA makes significant changes to that standard (71 FR 6722). The standards should be revoked only when EPA approves an area's SIP for the new PM standards, with control measures effective upon approval. If EPA were to revoke the existing standard before SIPs have been submitted to address the new standard, EPA would not be able to make findings of failure to attain the current standard after revocation, even if violations of that standard were to occur. There would be no impetus to address those violations in a timely manner (e.g., by adopting additional measures to reduce emissions and exposure). EPA must also ensure that approvable PM-2.5 attainment SIPs for the current NAAQS are submitted and used as the basis for its anti-backsliding policy.

In addition, EPA should be mindful that Congestion Mitigation and Air Quality (CMAQ) funding is dependent on states being designated as nonattainment or in maintenance for the PM NAAQS. Standards revoked too soon, while states are still working on attaining those standards, could result in less funding for states to implement needed transportation-related control measures.

b. PM-10 NAAQS

We disagree with EPA's proposal, contained in a separate rulemaking action (71 FR 2620) and described in the ANPR (71 FR 6725), that the annual PM-10 NAAQS should be revoked when the new PM standards are finalized (i.e., in December 2006) and that the 24-hour PM-10 NAAQS should be revoked everywhere except for specified urbanized areas. In *Whitman v. American Trucking Association*, 531 U.S. 437 (2001), the PM-10 NAAQS was not vacated; it was remanded to EPA. It is therefore within EPA's discretion to ascertain how, in the interest of public health and safety, to best transition to the new PM standards. The PM-10 standard should not be revoked until at least one year after redesignations to attainment or nonattainment occur for PM-2.5-10 (PM-coarse) (i.e., based on three years of monitoring data, not on the placeholder unclassified designations). In addition, EPA should maintain the current 24-hour PM-10 NAAQS until enforceable controls for PM-coarse are in place through SIPs.

3. Proposed Timelines

NESCAUM has overarching concerns with EPA's reductions in the existing PM-2.5 monitoring network, its proposed cuts for monitoring funding for Fiscal Year (FY) 2007, and the effects these actions may have with regard to states being able to provide robust data for NAAQS compliance purposes in a timely manner. In New York in 2002, for example, 35 percent of the PM-2.5 Federal Reference Method (FRM) monitoring network was shut down after it was determined that those sites were not needed to determine compliance with the controlling annual standard. Now that the proposed 24-hour PM standard is likely to be the controlling standard for New York, the PM-2.5 monitoring network in the State will need to be redesigned to ensure adequate coverage, especially for mid-sized Metropolitan Statistical Areas (MSAs). EPA's proposed FY2007 monitoring budget, however, includes a national program cut for PM-2.5 monitoring that may effectively cut the monitoring program in half. We urge EPA to work with states to ensure adequate funding for monitoring and network design that is responsive to Clean Air Act requirements and deadlines.

a. PM-2.5 NAAQS

Assuming the above-mentioned challenges are resolved, if EPA were to promulgate a revised 24-hour PM-2.5 NAAQS, then the timelines for collecting monitoring data, receiving state designation recommendations, and finalizing designations must be tighter than proposed (71 FR 6722-6723). Section 107(d)(1)(B) of the Clean Air Act requires EPA to designate areas "as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the... revised... standard." While the Act also provides for EPA to extend that period for "up to one year in the event the Administrator has insufficient information to promulgate the designations," we see no reason for EPA to assume the additional year will be necessary in all cases. Overall, EPA does not need two years to evaluate state recommendations and sign final designations. EPA should expedite its process in order to hasten the transition time between the standards. EPA should, at minimum, change the date for "Final designations signature" from December 2009 to December 2008. In addition, we do not understand why four full months is needed, from December to April, for the effective date of the designations. In the case of the 1997 eight-hour ozone designations, EPA chose a 60-day window between the "Final designations signature" and "Effective date of designations." EPA should change the "Effective date of designations" from April 2010 to February 2009, thus requiring that the SIPs be due in February 2012 rather than in April 2013. This tightening of the PM-2.5 timeline would initiate the SIP process sooner, resulting in much needed timely public health protection.

b. PM-coarse NAAQS

Given that there will be insufficient data to finalize either nonattainment or attainment designations for PM-coarse within the two- or three-year period allowed under the Clean Air Act (i.e., by December 2008 or December 2009¹), EPA proposes a timeline based on the deployment of the PM-coarse network, including a May 2013 date for “Final designations signature” (71 FR 6723-6724). We concur with EPA that this date would not conform to the statutory deadline, and therefore we do not support this proposal. We support EPA’s alternative proposal to designate all areas “unclassifiable” by no later than December 2009 and subsequently redesignate areas to attainment or nonattainment when more complete data are available. Section 107(d)(3) of the Clean Air Act allows EPA at any time to redesignate areas on the basis of air quality data or other considerations deemed appropriate. In addition, Section 107(d)(3)(D) of the Clean Air Act states that “the Governor of any State may, on the Governor’s own motion, submit to the Administrator a revised designation of any area or portion thereof within the State.” EPA then has 18 months to approve or deny this redesignation. If EPA were to initially designate all areas “unclassifiable” by no later than December 2009 and establish a well-defined process for states to submit redesignation requests, we would generally support EPA’s proposed timeline for new PM-coarse standards (71 FR 6724) for redesignating areas under Clean Air Act section 107(d)(3) and requiring SIPs to be submitted. We urge EPA to consult and work closely with states on how best to implement the redesignation process, ensuring that states have the opportunity to submit a redesignation recommendation before EPA takes any action to redesignate areas from the unclassifiable designation. The redesignation process should be dependent on the date by which three years of collected data are available using reliable and accurate monitoring methods and equipment. EPA must propose or designate suitable monitoring methods for PM-coarse, and assist states by providing funds for purchase of PM-coarse monitoring equipment.

We disagree with EPA that designating areas as unclassifiable does not provide “useful information to the public about their area meeting new air quality standards” (71 FR 6724). This would provide an excellent opportunity to educate the public about the various issues that arise when government responds to new science and establishes new processes in response to a more stringent and better defined NAAQS. This would include explaining the unclassifiable designation, the need for timely deployment of a new PM-coarse monitoring network, and the importance of retaining the PM-10 standard as an interim public health protection measure.

In this section, EPA indicates that it prefers not to develop a classification scheme (71 FR 6724). It is premature to comment on a need for tiered classifications and their potential attainment dates until the standards have been finalized.

4. Control Measures

EPA requests comment on addressing issues that would arise by revoking the 24-hour PM10 standard in areas where it is proposed to be retained (71 FR 6725). EPA proposes to adopt an approach similar to the ozone implementation rule, whereby certain control measures must remain in place (e.g., moderate PM-10 nonattainment areas would continue to require Reasonably Available Control Measures (RACM), and serious PM-10 nonattainment areas would continue to require Best Available Control Measures (BACM)) and any changes to a SIP would be subject to the provisions of section 110(l).

¹ Assuming EPA promulgates revised PM NAAQS in December 2006.

NESCAUM's position is that the standards should be revoked only when the SIPs for the new PM standards for an area are approved, with control measures effective upon approval. If EPA were to adopt this approach, then all previously required control measures should remain in place. If EPA chose otherwise with respect to revocation, then NESCAUM would support EPA's approach to retain the programs, as these programs are necessary to reduce PM emissions. Removing these programs would be without reason, and would result in adverse air quality and public health impacts.

Under a more stringent PM standard, we would also urge EPA to reevaluate the effectiveness of its current national programs, including the Clean Air Interstate Rule (CAIR) and rules regulating other PM sources, and make whatever changes are necessary to ensure timely protection of public health. We believe that downward adjustments to the CAIR NO_x and SO₂ caps would be appropriate. We further urge EPA to carefully reassess the impacts of transport within the context of a more stringent standard, and take appropriate action to assist states in addressing transport and ensure there is no backsliding or adverse effects with respect to section 110(a)(2)(D) of the Clean Air Act.

5. Addressing Conformity

We have some concerns regarding previous conformity evaluations and determinations based on the current PM-10 standard. The general conformity regulation states that conformity determinations are good for five years if a continuous program has commenced to implement the action within a reasonable time. We recommend that, if a Statement of Conformity has been issued for a project but the project has not begun after a five-year period, then a new Statement of Conformity should be completed based upon the new standard. If a Statement of Conformity has been completed for a project and the project is underway, the project should be "grandfathered in" under the current standard. If a Statement of Conformity has been issued and the project is within the five-year period but a continuous program has not commenced, then a new Statement of Conformity should be completed for the new standard.

6. Addressing New Source Review and Prevention of Significant Deterioration

EPA requests comment on whether PM-10 should continue to be a regulated pollutant for Prevention of Significant Deterioration (PSD) in areas where the 24-hour PM-10 NAAQS would be revoked (71 FR 6726). We agree with Option 1's proposal that PM-10 continue to be a regulated New Source Review (NSR) pollutant for the PSD program. Therefore, in all areas of the country, even in those areas where EPA proposes to revoke the 24-hour PM-10 NAAQS, PM-10 would be a regulated NSR pollutant. This designation as a non-criteria regulated NSR pollutant would be similar to the current status of particulate (TSP) in the PSD rules, where the PSD Best Available Control Technology (BACT) requirements would apply. PM-10's designation as a regulated pollutant may also allow for a smoother transition to the new NSR programs for PM-2.5 and PM-coarse.

EPA requests comment on whether the Clean Air Act requires continued obligation for some form of PM PSD increment and, if so, what form it should take (71 FR 6727). Consistent with Congressional intent, we recommend Option 2. Under Sections 163 and 166(f) of the Clean Air Act, EPA has an obligation to maintain a PM increment by implementing PM-2.5 and PM-10-2.5 PSD increments. We would hope the new PM-2.5 PSD increments based on the current PM-2.5 NAAQS are promulgated in a timely fashion (i.e., by the end of 2006). We share EPA's concern about using the baseline dates currently being used for PM-10 in the PM-2.5 and PM-coarse PSD programs. In two of New Jersey's air quality control

regions, for example, the particulate baseline date was set in 1977. As a result, tracking emission increases and decreases since that baseline to determine PM-10 increment consumption can be difficult. The NESCAUM states support a proposal that would allow states the option of establishing new baseline and minor source trigger dates for PM-2.5 and PM-coarse. Such updated baseline data would be dependent on the state demonstrating that the air quality control region has experienced an improvement in PM air quality since the original baseline data. This demonstration must be supported with ambient monitoring and emissions inventory data. A suggested revised PM-2.5 and PM-coarse baseline and trigger date could be July 18, 1997, the date the final PM-2.5 NAAQS was published in the Federal Register. Updated baseline and trigger dates would make tracking of the PM-2.5 and PM-coarse PSD increment consumption more accurate and much less complex in some of the air quality control regions.

EPA requests comment on how permitting authorities should implement a PM-2.5 PSD program in the interim period upon revoking the PM-10 NAAQS (71 FR 6727). Notwithstanding NESCAUM's position regarding revocation, in this particular circumstance we would support Option 1. PM-10 emissions should be used as a surrogate for PM-2.5 in modeling analysis and the predicted impact compared against the PM-2.5 NAAQS. As discussed in EPA's proposal, there is the possibility that this approach may over-predict actual PM-2.5 concentrations when PM-10 emissions are used. The applicant, however, has the option of using PM-2.5 emissions in the analysis when there are data to support the proposed PM-2.5 emission rate. This option is described in EPA's April 5, 2005 guidance memorandum, signed by Stephen Page. Reasonable estimates of PM-2.5 emissions can be made by means of stack testing (as discussed in the memorandum) or through use of PM-2.5 emission factors available in documents such as AP-42. This option would encourage and require greater research into developing PM-2.5 emission factors that would prove beneficial in implementing a PM-2.5 NSR program.

We strongly disagree with the methodology proposed in Option 2. Modeling PM-10 emissions and comparing predicted PM-10 impacts to the former PM-10 NAAQS will not prevent a new or modified source from causing a violation of the PM-2.5 NAAQS. Two factors contribute to this concern. First, according to AP-42, PM-2.5 emissions from most combustion sources will comprise at least 70 percent of PM-10 emissions when condensables are included. Second, is the close proximity of the current ambient concentrations of PM-2.5 to its NAAQS compared to the current ambient concentrations of PM-10 to its NAAQS. In almost all areas of the country, a relatively small PM-2.5 impact could cause a PM-2.5 NAAQS violation compared to the magnitude of impact needed for a PM-10 NAAQS violation. By way of example, the lowest 3-year average (2002-2004) PM-2.5 concentration measured at New Jersey's monitors was $10.6 \mu\text{g}/\text{m}^3$. This value is $4.4 \mu\text{g}/\text{m}^3$ below the annual PM-2.5 NAAQS of $15 \mu\text{g}/\text{m}^3$, whereas during the same period, the values measured at New Jersey's PM-10 monitors were between $17 \mu\text{g}/\text{m}^3$ and $29 \mu\text{g}/\text{m}^3$ below the annual PM-10 NAAQS of $50 \mu\text{g}/\text{m}^3$. The same disparity can be found when comparing the measured 24-hour PM-2.5 and PM-10 concentrations to their respective NAAQS. As a result, many sources whose modeling demonstration indicates compliance with the PM-10 NAAQS would indicate violations if evaluated against the PM-2.5 NAAQS.

Furthermore, Option 2 does not reflect EPA's current surrogate PM-10 policy as outlined in the April 5, 2005 memorandum which gives the applicant the option of quantifying its PM-2.5 emissions instead of using PM-10. We question why an applicant would be given the option to model its PM-2.5 emissions if the impact was to be compared to the PM-10 NAAQS (as EPA proposes in Option 2). The only rational way to interpret EPA's current policy is to apply the offset requirements to PM-2.5 nonattainment areas – not PM-10 nonattainment areas – and the modeling requirements to the PM-2.5 NAAQS.

EPA requests comment on how permitting authorities should implement a PM-coarse PSD program in the interim period between revoking the PM-10 NAAQS and the effective date of the PM-coarse NAAQS (71 FR 6728). For reasons similar to those stated above, we recommend Option 1. PM-10 emissions should be used as a surrogate for PM-coarse in modeling analysis and the predicted impact compared to the PM-coarse NAAQS. Applicants should be encouraged to quantify their PM-coarse emission rates with appropriate supporting data and, in lieu of PM-10, use the PM-coarse emissions in the modeling analysis. Neither Option 2 (use of the PM-10 NAAQS as a surrogate for PM-coarse compliance) nor Option 3 (apply BACT to PM-coarse as a surrogate for PM-coarse compliance) would ensure PM-coarse NAAQS compliance.

7. Emissions Inventories

With regard to emissions inventories (71 FR 6728-6729), we urge EPA to develop guidance on how states can develop inventories for PM-coarse. If EPA creates additional inventory requirements for the new standards, it must provide the states with clear and timely guidance for incorporation, with ample opportunity for review and comment. In addition, we urge EPA to update its MOBILE and NONROAD models to better characterize PM emissions. At present, the models require more than one run to obtain numbers for PM-2.5 and PM-10, and there is no ability to obtain a PM-coarse estimate in the reporting utilities.

If you or your staff has any questions regarding the issues raised in this letter, please contact Leah Weiss at the NESCAUM office at 617-259-2000.

Sincerely,



Arthur N. Marin
Executive Director

Cc: NESCAUM Directors
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