

January 4, 2002

Jeffrey R. Holmstead  
Assistant Administrator  
U.S. Environmental Protection Agency  
Office of Air and Radiation  
Ariel Rios North  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Mr. Holmstead:

The Northeast States for Coordinated Air Use Management (NESCAUM) is writing to provide our comments on the U.S. Environmental Protection Agency's (EPA's) October 2001 "Nonroad Diesel Emission Standards Staff Technical Paper," as announced in the *Federal Register* on November 20, 2001 (66 FR 58085). NESCAUM is an association of the air pollution control programs in the eight states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. The Northeast states are pleased that EPA has confirmed the tier 3 NO<sub>x</sub> standards proposed in the 1998 rulemaking on nonroad land-based diesel engines in its Technical Paper. We are, however, extremely disappointed that the Technical Paper published in October did not establish tier 3 PM standards or a transient federal test procedure for nonroad diesel engines. The Agency outlined its commitment to establish these elements as part of the 2001 technology review in the 1998 rulemaking on nonroad land-based diesels.

Control of NO<sub>x</sub>, PM, and toxics emissions from nonroad heavy-duty diesel engines is a high priority for state air quality officials in the Northeast. NO<sub>x</sub>, PM, and toxic emissions from nonroad diesels represent a substantial portion of the mobile source inventory and thus pose a substantial threat to public health. Given current growth rates and the relatively uncontrolled emission standards for these engines, EPA estimates that nonroad diesel PM emissions will comprise 60% of the mobile source PM inventory in 2010. Commercially available technologies exist to greatly reduce PM emissions from nonroad engines which could be introduced today. EPA also estimates that nonroad diesels will account for more than one third of nationwide mobile source NO<sub>x</sub> emissions in 2010 without further controls. It is important to note that these inventory projections do not account for the enormous growth anticipated in the use of diesel generators to make up shortfalls in power in the Northeast and other parts of the U.S. This substantial

growth in the use of diesel generators (distributed generation) will mean that the relative contribution from nonroad diesel engines will be significantly greater than is currently expected and adds urgency to the need to control emissions from this source.

Health effects associated with exposure to nonroad diesel emissions are a major concern to air quality and public health officials in the northeast. Ozone can cause acute respiratory problems, aggravate asthma, cause inflammation of lung tissue, and impair the body's immune system. Particulate matter has been linked with a series of significant health problems, including premature death, aggravated asthma, acute respiratory symptoms, chronic bronchitis, and shortness of breath. In addition, EPA has labeled diesel exhaust a likely human carcinogen (draft 2000). States in the northeast are currently introducing retrofit programs for nonroad engines which will reduce emissions from existing machines. However, given that states are preempted from regulating diesel engine emissions, we are wholly reliant upon EPA to regulate emissions from this source. Thus, it is imperative that the Agency introduce protective federal standards for nonroad heavy-duty diesel engines and nonroad diesel fuel.

In the 1998 rulemaking referenced above and entitled *Control of Emissions from Nonroad Diesel Engines*, EPA established the 2001 technology review to confirm the technical feasibility of tier 3 NOx emission standards for nonroad land-based diesel engines. In addition, the preamble to the rule stated "The (2001) review will also include proposal and adoption of appropriate tier 3 standards for PM...Key among EPA activities directed toward completing the 2001 feasibility review are those related to adoption of a more effective PM control program for nonroad diesel engines." The preamble also noted the importance of establishing a transient test cycle for nonroad diesel engines. The preamble reads "EPA has concerns that the current test cycle does not adequately reflect transient operation and therefore will not lead to the level of average in-use emission control reflected by the PM standard." The Northeast states strongly concur with the Agency on the need for a more representative test cycle and the need for a more effective PM control program.

In our November 21, 1997 comments on the *Notice of Proposed Rulemaking for the Control of Emissions of Air Pollution from Nonroad Diesel Engines* (62 FR 50152), which preceded EPA's October 23, 1998 final rule, NESCAUM stated that EPA should seriously consider the viability of even more stringent nonroad diesel engine standards in the context of the technical feasibility review scheduled for 2001. "Compared to highway vehicles, emissions from nonroad equipment are relatively undercontrolled. Given the current inequity in emission control requirements and the availability of known control technologies and strategies, reducing emissions from this source sector could represent one of the more cost-effective available control options.... Once final, the nonroad diesel engine standards proposed by EPA will dictate the stringency of the controls for this sector well into the next millennium." Now, with the advances in fuel quality, engine technology and health research that have occurred over the past four years, the NESCAUM states believe that EPA is compelled to take swift action to bring parity to nonroad and onroad standards.

Subsequent to the publication of its 1998 rule, EPA expressed the intention to not limit its additional rulemaking efforts only to Tier 3 PM standards. Instead, the agency indicated that its 2001 technical review would include a complete discussion of a more comprehensive next phase of regulation for nonroad diesel engines, to include not only Tier 3 PM standards, but also Tier 4 NO<sub>x</sub> standards and low-sulfur nonroad diesel fuel. The NESCAUM states strongly supported this intention, in that it was consistent with previous recommendations made by the Northeast states the states long-held vision of an integrated systems-based approach for regulating nonroad diesel engines.

Accordingly, the NESCAUM states urge EPA to move forward as quickly as possible to develop a systems-based approach to address nonroad heavy-duty diesel emissions in a timeframe consistent with that established for regulating onroad heavy-duty diesels and fuel. Specifically, to achieve parity between nonroad and onroad standards, the NESCAUM states urge that future standards for nonroad diesel engines and fuel be based on the following key principles as outlined in a joint letter with STAPPA/ALAPCO of September 4, 2001 to the Nonroad Workgroup of the FACA:

- 1) Availability of 15-ppm low-sulfur nonroad diesel fuel beginning in June 2006, subject to the same flexibilities and schedules provided under the onroad low-sulfur diesel fuel program;
- 2) Promulgation of Tier 3 nonroad heavy-duty diesel standards for PM (for all horsepower engines covered by the rule), based on emission reductions of 90+ percent (similar to the PM reductions achieved by the onroad heavy-duty diesel rule) to be fully applicable in 2007;
- 3) Promulgation of Tier 4 nonroad heavy-duty diesel standards for NO<sub>x</sub> (for 50 to 750 hp engines), based on emission reductions of 95+ percent (similar to the reductions achieved by the onroad heavy-duty diesel rule), to be phased in between 2007 and 2010; and
- 4) Numerous areas across the country, particularly those with 2007 and 2010 attainment dates, are relying on the reductions from implementation of nonroad diesel NO<sub>x</sub> standards beginning in 2006 (including the consent decree pull-ahead to 2005 for 300 to 750 hp engines). To the extent that implementation of the aforementioned principles would result in any reduction in these anticipated NO<sub>x</sub> emission benefits in any year from 2006 through 2010, EPA should include a mechanism to ensure the achievement of these reductions on schedule.

Adoption of 15-ppm low-sulfur nonroad diesel fuel will not only yield substantial reductions in sulfates (over 30 percent for some nonroad engines) but it will also allow technologies used to comply with the onroad heavy-duty diesel engine standards, including aftertreatment devices, to be transferred to nonroad equipment. These aftertreatment devices can reduce NO<sub>x</sub> and PM emissions more than 90 percent. Significantly, although nonroad diesel fuel represents only a modest segment of all diesel fuel by volume, tremendous benefits can be achieved by extending the 15-ppm sulfur cap to the nonroad segment. The emission reductions that will result from this approach will be integral to a variety of critical air pollution control efforts – both current and future – including those related to the one-hour and eight-hour ozone standards, the PM<sub>2.5</sub>

standard, toxic air pollution and regional haze, and the resulting public health benefits will be enormous. The availability of low-sulfur fuel will also facilitate the use of particulate trap retrofits in many nonroad applications.

The Northeast states have consistently demonstrated our commitment to working cooperatively to ensure efficient, cost-effective mobile source and fuel control programs that will achieve meaningful and sustained improvements in air quality. We look forward to working with EPA as the agency takes steps to move forward with the regulation of nonroad HDDEs and fuel.

Sincerely,

A handwritten signature in cursive script that reads "Richard A. Valentinetti".

Richard A. Valentinetti  
Chairman

cc: Rob Brenner  
Margo Oge  
Chet France  
Margaret Borushko