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September 11, 2009

Docket No. EPA-HQ-OAR-2006-0922  
Environmental Protection Agency  
Mail Code 6102T  
1200 Pennsylvania Ave, N.W.  
Washington, D.C. 20460

**Re: EPA's Notice of Proposed Rulemaking on the Primary National Ambient Air Quality Standard for Nitrogen Dioxide, Docket ID No. EPA-HQ-OAR-2006-0922, RIN 2060-AO19**

Dear Sir or Madam:

The American Association of State Highway and Transportation Officials (AASHTO) appreciates the opportunity to review and comment on the Environmental Protection Agency's (EPA) Notice of Proposed Rulemaking (NPRM) on revision to the Primary National Ambient Air Quality Standard (NAAQS) for Nitrogen Dioxide (NO<sub>2</sub>) as contained in the July 15, 2009 Federal Register.

In reviewing the NPRM, AASHTO has identified a number of areas that EPA should address in the Final Rulemaking. Having these issues addressed will allow AASHTO and other affected stakeholders to better understand EPA's rationale for setting the final NO<sub>2</sub> standard. In addition, AASHTO has included its position on several of the policy options contained in the NPRM.

**PRIMARY NO<sub>2</sub> STANDARD:**

1. AASHTO recognizes the need to protect human health and supports EPA's effort to set a primary NO<sub>2</sub> standard that protects human health with an adequate margin of safety, as required by the Clean Air Act (CAA). This standard, however, should be developed within the following principles:

- a. *EPA should set the standard at a level that is best supported by the science and preponderance of health related studies.*
- b. *EPA should consider appropriate background levels in establishing the standard. If the NO<sub>2</sub> standard is set below background levels, it would be impossible for nonattainment areas to attain the standard. AASHTO recommends that the standard be set at a level that is realistic and attainable since the standard will lose its meaning as background levels are approached.*

2. AASHTO members are concerned with the uncertainty implied by the fact that a wide range of ambient NO<sub>2</sub> standards remain under consideration in this NPRM, and particularly with the possibility that the primary standard could be set as low as 50 ppb. The studies and discussions cited and summarized in the NPRM do not seem to support setting the standard at this level. The NPRM, for example, on page 34422 indicates that no controlled human exposure studies to evaluate the possible NO<sub>2</sub> effects on airway responsiveness in asthmatics have been done below 100 ppb. Also on page 34437, the NPRM indicates that the Administrator concludes that the strongest support is for a NO<sub>2</sub> standard level set at or somewhat below 100 ppb.

If any new scientific information becomes available during the NPRM comment period that EPA believes would warrant setting the standard below 80 ppb level, AASHTO recommends that this new information be subject to additional scientific and public review and comment before setting the standard. AASHTO believes such additional review would be consistent with the Federal Administrative Procedure's Act (APA) (title 5 USC Chapter 5, section 552(a)(a)(E)).

3. EPA should provide the maximum time allowed under the CAA to implement and attain such standard. State and local air quality and transportation officials are already challenged with implementing the recent 8-hour ozone and PM 2.5 standards. Overlaying the requirements for the new NO<sub>2</sub> standard onto the existing requirements will present a significant challenge to State and local officials in terms of staffing and finding additional financial resources to meet the increased requirements.

4. AASHTO supports the alternative approach for setting the 1-hour NO<sub>2</sub> standard based on the maximum allowable NO<sub>2</sub> concentration level measured at an area-wide monitoring site, but only if the standard is supported by the preponderance of publicly noticed scientific data. (See comment #2 above). We note from our review of the NRPM that most of the epidemiologic studies are based on area-wide monitors and not near-road monitors. AASHTO does not believe based on the information in the NPRM and supporting documents, that the scientific evidence supports setting the standard at these levels; therefore, AASHTO does not support the alternative approach if the standard would be set within a range of 50 to 75 ppb.

#### **AMBIENT MONITORING REQUIREMENTS:**

1. AASHTO believes that roadside monitoring data provides a very poor representation of area- or community-wide conditions for which health effects have been established. For this reason, AASHTO recommends that: 1) the 1-hour NO<sub>2</sub> standard be based on area monitors for which cause and effect outcomes on health are established; and 2) roadside monitoring requirements be based on research studies that determine health effects of short term, highly spatially and temporally variable concentrations of NO<sub>2</sub>.

2. If roadside monitoring is required, it should be completed under separate rulemaking that will establish appropriate use of the data and sighting criteria (e.g. distance, height, monitor inlet, meteorological data, how to monitor peak traffic periods and fleet mixes for those periods). After data is collected, EPA would be able to evaluate such things as the causes and frequencies of extreme peak concentrations as compared to the current area-wide monitoring network, differences in micro-scale environments versus macro-scale environments, and evaluate the implications of roadside and/or other "hotspot" monitoring. EPA should consult with State and local air quality and transportation officials during the development of this separate rulemaking.

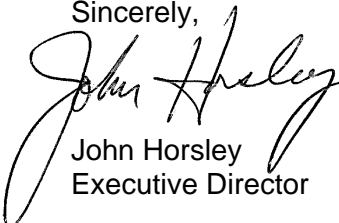
3. If the final rule retains near-road monitors AASHTO recommends that the distance be increased to within 200 meters, rather than within 50 meters, consistent with the Wisconsin Department of Natural Resources (DNR) docket comments. Placing monitors within 50 meters of a roadway presents significant sighting and safety challenges as Wisconsin DNR points out.
4. The NPRM proposes that State and local air monitoring agencies submit a monitoring plan by July 1, 2011, and that the NO<sub>2</sub> network be physically established by January 1, 2013. If roadside monitoring is required, AASHTO recommends this time frame be extended because of the large number of new monitors that would have to be put in place, existing resource restraints, and the need to have a transparent and participatory process for locating these new monitors. AASHTO also recommends that State and local air monitoring agencies be required to coordinate with State and local DOTs for near-road monitors during the establishment of the monitoring plan.
5. The NPRM allows the EPA Regional Administrator to require additional near-road and area-wide monitors. AASHTO recommends that EPA establish national guidance so there is reasonable uniformity between EPA regions in the implementation of these provisions. EPA should consult with State and local air quality and transportation officials during the development of this guidance.

#### **GENERAL COMMENTS:**

1. The proposal should provide more information on the impacts additional NO<sub>x</sub> controls may have on ozone levels. EPA's July 11, 2007 NPRM for the ozone standard recognized that NO<sub>x</sub> control mechanisms may actually increase ozone levels in some areas. Since the current NPRM proposes a new and significantly more stringent NO<sub>2</sub> standard, which will require additional NO<sub>x</sub> controls, the final rule should discuss the potential impacts on attaining the ozone standards and how areas can effectively overcome any negative effects. In addition, AASHTO recommends that the final rule include a discussion of whether specific control measures are needed for NO<sub>2</sub>, or whether the NO<sub>x</sub> control measures for ozone and PM are sufficient.
2. There is a serious void of information on the impacts additional NO<sub>x</sub> controls may have on Federal and State efforts to reduce CO<sub>2</sub> emissions. If some NO<sub>x</sub> control measures could reduce fuel efficiency and thus increase CO<sub>2</sub> emissions this information should be evaluated and included in the final proposal. The proposal should also discuss how additional NO<sub>x</sub> reductions may affect—or be affected by—other efforts to reduce CO<sub>2</sub> emissions, such as the proposed greenhouse gas emissions standards for light-duty vehicles that EPA will be developing to reduce such emissions through new technology and cleaner and/or alternative fuels.
3. AASHTO recommends that any adjustments to the Air Quality Index be based on community-wide NO<sub>2</sub> monitoring data, rather than near-roadway monitoring data, since the concentration levels at near-road monitors are localized and do not represent the air quality levels on a community-wide basis.

4. AASHTO recommends that construction activities located adjacent to near-road monitors be treated in the follow-up implementation rule as an exceptional event since they are short term in duration and once completed are unlikely to recur frequently at a particular location.
5. Consistent with the comments above, and given the potential major implications for transportation planning and project development, AASHTO recommends that EPA consult with transportation agencies early in the development of any subsequent changes to the conformity regulations and/or NEPA requirements resulting from the new NO<sub>2</sub> standard and monitoring requirements.
6. The final rule should explain the scientific basis for selecting the 350,000 and 2.5 million population thresholds for establishing near-road monitors. If such a basis does not exist, AASHTO recommends consideration of one of the following options through separate rulemaking. Separate rulemaking would serve to ensure that substantive issues such as those outlined in this comment and comment #2 above under "Ambient Monitoring Requirements" meet appropriate public participation and disclosure requirements under the APA.
  - a. Use a priority approach so that monitors are deployed where needed instead of in areas that may never exceed the standard. A priority approach, for example, could include deploying 1 near-road monitor with the first round of monitors deployed for populations at 1 to 2.5 million or more (consistent with the community-wide monitoring) with consideration of a lower threshold after three years of data are complete, or earlier if the first or second year of data identifies potential areas of concern. This would be especially beneficial if there is potential for the existence of a high background level due to transport or a large point source of NO<sub>2</sub>. AASHTO does not believe a roadway monitor should be required in an area that does not have a community-wide monitor. Alternatively,
  - b. Set a threshold of 140,000 AADT or greater (or the highest traffic volume roadway for the geographic area that has at least 1 roadway with 140,000 AADT) for requiring a near-road monitor, rather than use a population threshold. This threshold is consistent with the interim guidance FHWA prepared in consultation with EPA for when to conduct a quantitative MSAT analysis. A lower threshold could be considered after three years of data are complete, or earlier if the first or second year of data identifies potential areas of concern.

Thank you for the opportunity to comment on the NPRM. Should you have any questions, please contact Shannon Eggleston at 202-624-3649.

Sincerely,  
  
John Horsley  
Executive Director