



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1  
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BOSTON, MA 02109-3912

June 29, 2011

The Honorable Deval Patrick  
Massachusetts State House  
Office of the Governor  
Room 360  
Boston, MA 02133

Dear Governor Patrick:

Thank you for your recommendations on air quality designations for the revised primary National Ambient Air Quality Standard (NAAQS) for nitrogen dioxide (NO<sub>2</sub>) throughout Massachusetts. This letter is to notify you of the U.S. Environmental Protection Agency's (EPA's) response to Massachusetts' designation recommendations, and to inform you of our approach for completing the designations for the revised NO<sub>2</sub> NAAQS.

On January 22, 2010, the EPA strengthened the health-based National Ambient Air Quality Standard (NAAQS) for NO<sub>2</sub> by setting a new 1-hour NO<sub>2</sub> standard at the level of 100 parts per billion (ppb). This new standard will protect against adverse health effects associated with short-term exposure to NO<sub>2</sub>, including respiratory effects that can result in admission to a hospital. The EPA also retained with no change, the annual average NO<sub>2</sub> standard of 53 ppb. This suite of standards will protect public health by limiting people's exposures to short-term peak concentrations of NO<sub>2</sub> and by limiting community-wide NO<sub>2</sub> concentrations to levels below those that have been linked to respiratory-related emergency department visits and hospital admissions in the United States. To determine compliance with the new standard, the EPA established new ambient air monitoring and reporting requirements for NO<sub>2</sub>. In urban areas, monitors are required near major roads as well as in other locations where maximum concentrations are expected. Additional monitors will be required in some large urban areas to measure the highest concentrations of NO<sub>2</sub> that occur more broadly across communities.

In the preamble to the 2010 NO<sub>2</sub> NAAQS and in the EPA's October 2010 letter to you requesting designation recommendations, the Agency stated that it expected to designate most areas of the country as "unclassifiable," indicating that there are insufficient data to determine whether or not an area is attaining the revised NO<sub>2</sub> NAAQS. This approach took into account that the new monitoring network requirements established with the revised NO<sub>2</sub> NAAQS will not be effective until January 2013 and that air quality data from these new monitors would not be available to inform these initial designations.

The Agency has reviewed your recommendations and others, and intends to designate all areas of Massachusetts, as well as the rest of the country, as "unclassifiable/attainment" rather than "unclassifiable." Based on air quality data from 2008-2010, all monitored areas in the country meet the 2010 NO<sub>2</sub> NAAQS. While the EPA acknowledges that the existing NO<sub>2</sub> monitoring network does not provide adequate evidence to determine whether or not the new NAAQS is met in all areas, there currently is no evidence of violations anywhere in the country. The "unclassifiable/attainment"

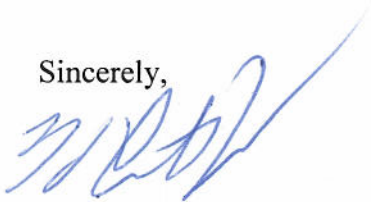
designation better reflects the current air quality conditions. The EPA intends to redesignate areas, as appropriate, after sufficient air quality data from the new monitoring network are available.

The EPA intends to designate Massachusetts unclassifiable/attainment using the boundaries Massachusetts recommended to the EPA or revised boundaries you may provide in response to this letter. In past designations for NO<sub>2</sub>, for the majority of states, the area of the state where the air quality could not be classified, or was better than the national standards, was given a statewide, or rest-of-state designation. However, the EPA recommends that your state carefully consider the implications for the Prevention of Significant Deterioration (PSD) permitting program of having the entire state designated as a single area rather than smaller areas (e.g., counties, groups of counties). To ensure that the size of designated areas is consistent with your state's objectives for managing air quality deterioration and economic growth, we recommend that your permitting staff be consulted on the area boundary issues.

If your state has additional information that you want the EPA to consider with respect to the EPA's designation, please submit it to us by August 29, 2011. We are also making the EPA's preliminary designation decisions and supporting documentation available to the general public for review. We are accepting public comments on our preliminary decisions for 30 days after a notice announcing the public comment period is published in the *Federal Register*. We will review any information we receive from the Commonwealth of Massachusetts and the general public by this date, and we plan to promulgate the final designations by October 31, 2011.

We look forward to a continued dialogue with you and your staff as we work together to implement the 2010 NO<sub>2</sub> NAAQS. Should you have any questions, please do not hesitate to call me, or have your staff contact Donald Dahl of my staff at (617) 918-1657.

Sincerely,



H. Curtis Spalding,  
Regional Administrator

cc: Richard K. Sullivan Jr., Secretary, Energy and Environmental Affairs  
Kenneth L. Kimmell, Commissioner, MassDEP  
Nancy Seidman, MassDEP