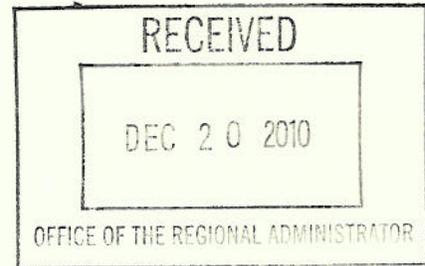


M. Jodi Rell
GOVERNOR
STATE OF CONNECTICUT



December 17, 2010

Mr. H. Curtis Spalding, Regional Administrator
USEPA REGION 1 - New England
5 Post Office Square
Mail Code: ORA01-4
Boston, MA 02109-3912

Re: Recommended Area Designations for the Revised NO₂ Air Quality Standard

Dear Administrator Spalding:

I am writing to provide you with Connecticut's recommended designations for the revised national ambient air quality standard (NAAQS) for nitrogen dioxide (NO₂) finalized by the U.S. Environmental Protection Agency (EPA) on January 22, 2010. Section 107(d)(1) of the Clean Air Act (CAA) provides up to one year after adoption of a new or revised NAAQS for states to submit recommendations identifying areas that comply with the standard or that violate or contribute to nearby violations of the standard.

Based on the attached review of data from Connecticut's ambient air quality monitoring network, all existing sites are in compliance with the revised NO₂ NAAQS; however, the EPA's new monitoring requirements scheduled to begin January 1, 2013 focus on the levels of NO₂ pollution near major roadways. The State of Connecticut does not currently have a near roadway monitoring.

Given the lack of near-road monitors and the likelihood that NO₂ levels may be elevated at high traffic locations, the state of Connecticut should be designated unclassifiable until sufficient near-road data are available from the expanded monitoring network.

Please contact Anne Gobin, Chief of CTDEP's Bureau of Air Management at 860-424-3026 with any questions regarding this recommendation.

Yours truly,

M. Jodi Rell
Governor

cc: D. Conroy (EPA Region I)
A. Marrella (CTDEP)
A. Gobin (CTDEP)

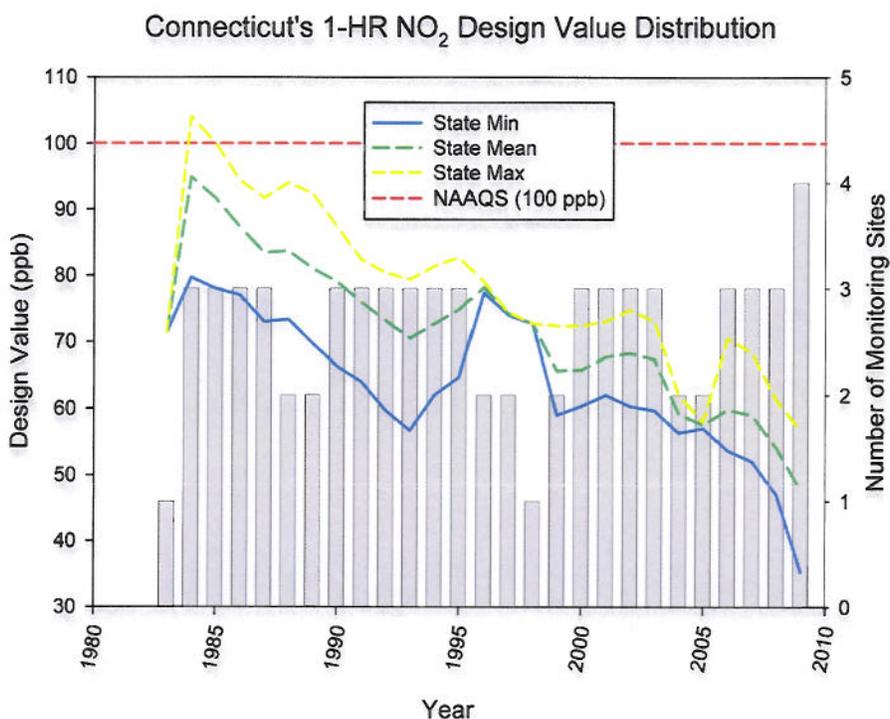
ATTACHMENT
Connecticut's NO₂ Ambient Data Summary
(December 2010)

On January 22, 2010, the U.S. Environmental Protection Agency (EPA) finalized revisions¹ to the national ambient air quality standards (NAAQS) for NO₂, adopting a 1-hour standard of 100 ppb² and retaining the existing annual standard of 53 ppb. Section 107(d)(1) of the Clean Air Act (CAA) provides up to one year after adoption of a new or revised NAAQS for states to submit recommendations identifying areas that comply with the standard or that violate or contribute to nearby violations of the standard. As summarized below, available NO₂ ambient monitoring data support a designation of unclassifiable for all of Connecticut for the revised NO₂ NAAQS.

Summary of Connecticut NO₂ Ambient Monitoring Data

CTDEP currently operates a network of three NO₂ monitors, located in Westport, East Hartford, and New Haven³. As depicted in Figures 1 and 2, hourly design values recorded at CTDEP sites last exceeded the 100 ppb 1-hour NAAQS in 1984, with current design values less than 60 ppb. Figures 3 and 4 show that annual NO₂ design values at Connecticut monitors have been well below the 53 ppb NAAQS going back to at least 1980.

Figure 1. The Distribution of 1-Hour NO₂ Design Values for Connecticut.



¹ The final rule was published in the Federal Register on February 9, 2010 (75 FR 6474).

² Design values for NO₂ are determined in accordance with Section 5 of Appendix S of 40CFR50. The 1-hour design value at each monitor is determined as the 3-year rolling average of the 98th percentile of maximum daily hourly values. The annual design value at each monitor is determined as the arithmetic average for all reported 1-hour values for the year.

³ CTDEP operated a special purpose site in Thomaston during 2007-2009, recently removed. As shown in Figures 1-4, NO₂ monitoring was also conducted at other locations during previous years.

Figure 2. Connecticut's 1-Hour NO₂ Design Value Trends

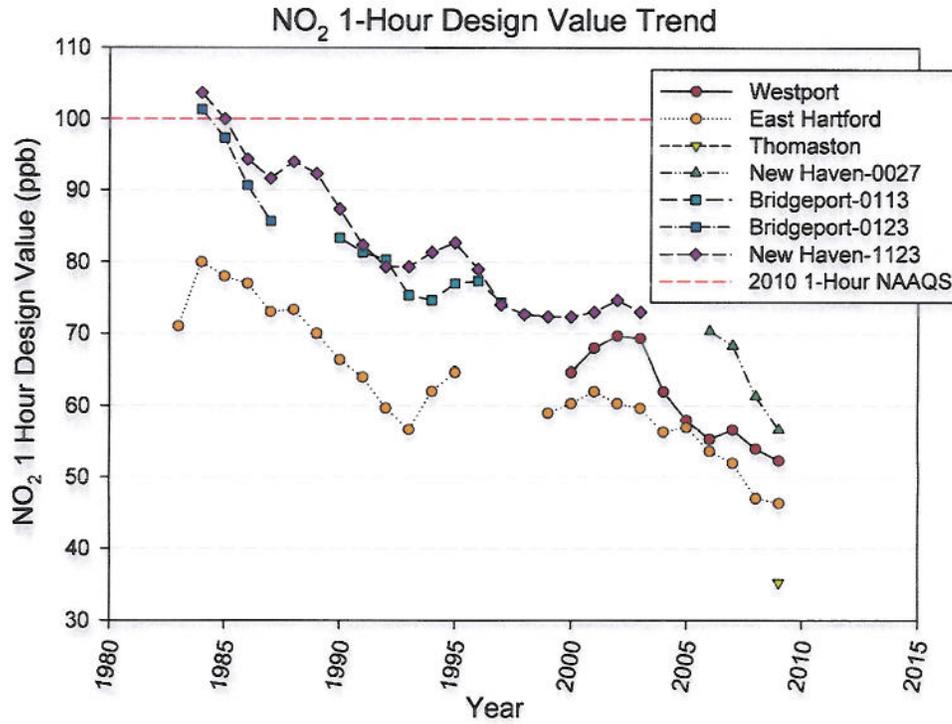


Figure 3. Connecticut's Annual NO₂ Design Value Distribution.

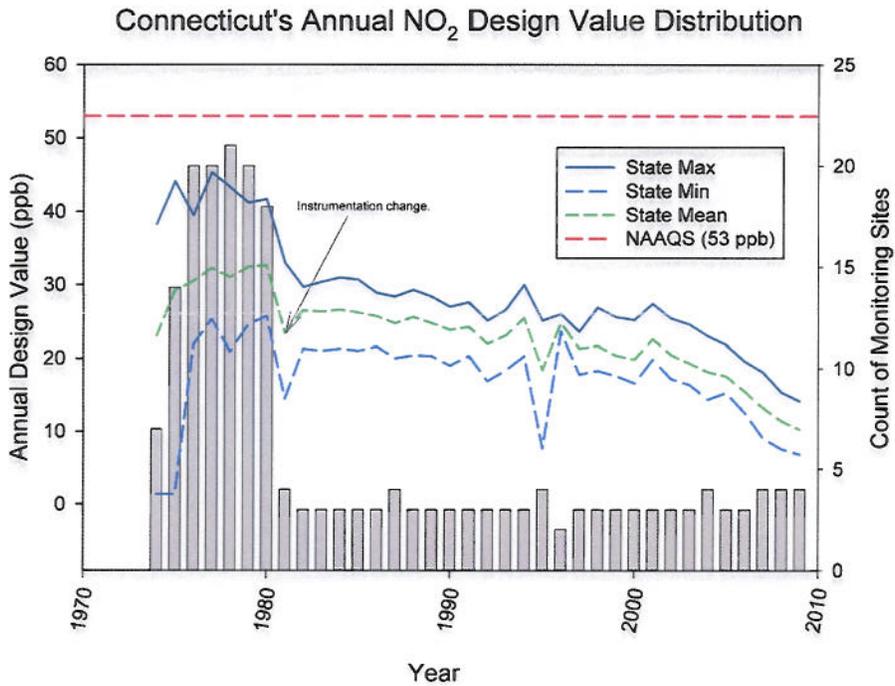
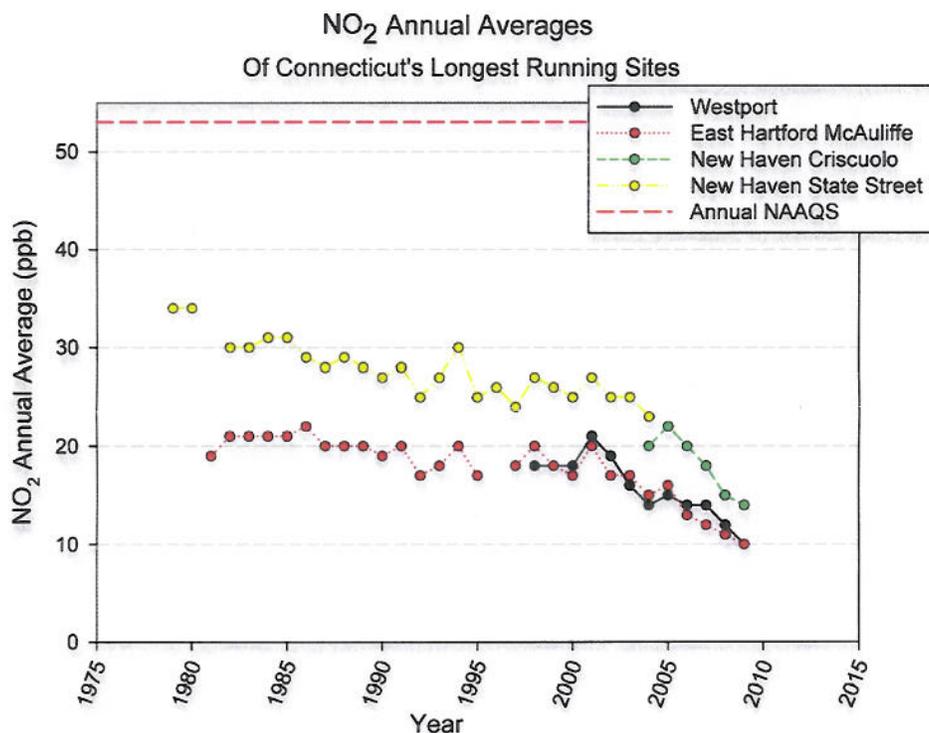


Figure 4. Connecticut's NO₂ Annual Average Trend



Summary of NO₂ Ambient Monitoring Data in the New York City Metropolitan Area

EPA often uses defined urban boundaries as the starting point for determining the geographic extent of potential nonattainment areas. The New York City Consolidated Statistical Area (CSA) includes the southwest portion of Connecticut along with several northern New Jersey and downstate New York counties. Figure 5 displays 2009 1-hour NO₂ design values for monitors located within the New York City CSA, as well as other NO₂ monitors located elsewhere in Connecticut. Design values at all monitoring sites are in compliance with the newly adopted 1-hour NAAQS.

Figure 5. Connecticut and New York City CSA 2009 1-Hour NO₂ Design Values.



Recommendation

As described above, all CTDEP sites currently measure compliance with both the 1-hour and annual NO₂ NAAQS. However, none of these monitors are located near high volume roadways, where car and truck exhaust can result in higher NO₂ levels, especially during peak traffic periods. Therefore, it is not possible at this time to make a determination of attainment status for all areas of Connecticut. Consistent with revised monitoring requirements finalized by EPA along with the NAAQS revisions⁴, CTDEP will establish an appropriate near-road monitoring network and begin data collection by January 1, 2013. Any necessary adjustments will also be made to the existing network in order to satisfy EPA's revised requirements for area-wide monitoring. As resources allow, CTDEP will develop the revised NO₂ network in consultation with EPA Region 1 and other stakeholders as part of the annual monitoring network planning process. With near-road monitoring commencing in January 2013, the three years of data required for design value calculations and subsequent attainment/nonattainment determinations will not be available until after 2015. In the interim, CTDEP is recommending that EPA designate all of Connecticut as "unclassifiable" under CAA Section 107(d)(1).

⁴ [75 FR 6502-6517](#).