



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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DEPT. OF ENVIRONMENTAL PROTECTION
OFFICE OF THE COMMISSIONER

THE ADMINISTRATOR

Gina McCarthy, Commissioner
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Dear Commissioner McCarthy:

This letter is in response to your February 15, 2005, letter requesting that the Environmental Protection Agency (EPA) reconsider its decision to designate Fairfield and New Haven counties in Connecticut as part of the New York-N. New Jersey-Long Island, CT-NJ-NY PM_{2.5} nonattainment area (herein referred to as the New York City nonattainment area). After careful review, EPA is denying your petition to exclude Fairfield and New Haven counties from this nonattainment area. The basis for this decision is set forth below.

EPA's Modeling for the Clean Air Interstate Rule

In the petition, the Connecticut Department of Environmental Protection (DEP) notes that modeling conducted by EPA in support of the Clean Air Interstate Rule (CAIR) showed that emissions from Connecticut do not significantly impact PM_{2.5} levels in either New York or New Jersey. Connecticut contends that a nonattainment designation for any Connecticut counties is inconsistent with these modeling results. EPA believes, however, that the designation of the Connecticut counties as nonattainment is consistent with the CAIR modeling.

EPA is denying this portion of your request for reconsideration because analyses for CAIR and those for PM_{2.5} nonattainment designations were performed for distinctly different purposes. Modeling for CAIR was done to assess the extent to which areas with violating PM_{2.5} monitors would be impacted by contributions from other states in 2010. This modeling was limited to consideration of only the two precursors of PM_{2.5} covered by CAIR (i.e., sulfur dioxide (SO₂) and nitrogen oxide (NO_x)). We have explained elsewhere in more detail why we determined that it was appropriate to evaluate only the emissions of SO₂ and NO_x in CAIR, for purposes of evaluating impacts of regional emissions that have effects due to interstate transport. See 70 FR 25,181-2 (May 12, 2005).

In the CAIR modeling, EPA performed state-by-state zero-out modeling to quantify the contribution from emissions in each State to future PM_{2.5} nonattainment in

other states and to determine whether that contribution meets the air quality prong (i.e., before considering cost) of the “contribute significantly” test. As part of the zero-out modeling technique, EPA removed the 2010 base case manmade emissions of SO₂ and NO_x from a variety of states (including Connecticut) on a state-by-state basis in different model runs. When projecting the 2010 base case emissions, EPA took into account the future emission reductions that would occur from adopted or soon-to-be adopted State and Federal regulations (e.g., mobile source rules, the NO_x SIP Call). In the CAIR modeling analyses, EPA did not assess the impacts of any State’s current precursor emissions on current ambient levels, and therefore, it is not appropriate to use for designation purposes.

Analyses performed for the PM_{2.5} designation process, on the other hand, focused on the potential of counties within or near a metropolitan area to contribute to elevated PM_{2.5} levels at a violating monitor in the metropolitan area, and considered all of the key pollutants contributing to PM_{2.5} concentrations (SO₂, NO_x, carbonaceous PM_{2.5}, and crustal PM_{2.5}). Rather than the regional impact of emissions across a broader area, the purpose of this evaluation was to determine the appropriate geographic scope for consideration of local controls to address the local emissions component of violations of the standards. Also, rather than assessing nonattainment in a future year such as 2010, the designation process focuses on the actual monitored ambient levels in either 2001-2003, or 2002-2004, and the relevant facts that concern contribution to nonattainment during that time.

EPA’s nine-factor analysis for the Connecticut counties included in or adjacent to the New York-Newark-Bridgeport, NY-NJ-CT Combined Statistical Area found that the counties of New Haven and Fairfield contribute to elevated levels of PM_{2.5} throughout the metropolitan area based on the magnitude of current emissions and traffic patterns in these counties. In particular, the analysis noted that New Haven and Fairfield counties are a conduit for a large percentage of the diesel truck traffic that flows out of New England into New York.

For large urban centers, such as New York City, mobile-source emissions can account for a significant portion of the local pollution present in ambient air. Diesel and gasoline vehicle exhaust is a major contributor to these emissions, and a major source of carbon (elemental and organic), which is the pollutant that comprises the largest percentage (about 67%) of the PM_{2.5} urban increment (i.e. the amount that the urban PM_{2.5} concentration exceeds the regional PM_{2.5} concentration) for the New York City nonattainment area. The CAIR modeling did not assess the impact of these carbon emissions, and therefore, does not bear on the primary basis for EPA designation of Fairfield and New Haven counties. EPA believes that measures to reduce diesel emissions along traffic corridors that cross the CT-NY border will help monitors in New York City to meet PM_{2.5} standards, and there is an opportunity for Connecticut to work with New York and New Jersey to identify such measures.

Air Quality Benefits Associated with Nonattainment Status

In the petition, the DEP notes that inclusion of New Haven and Fairfield counties in the New York City nonattainment area will require them to undertake extensive technical and administrative planning activities, such as developing a PM_{2.5} emissions inventory, assessing available control strategies, and developing transportation conformity budgets. The DEP claims that these planning activities will have little effect on the violating monitors in New York and New Jersey.

EPA is denying this portion of your request for reconsideration because we believe that the required planning activities are reasonable steps towards identifying and reducing the sources of PM_{2.5} emissions in Connecticut that contribute to elevated PM_{2.5} levels in the New York City nonattainment area. As noted above and as evidenced by the State's own initiatives to reduce diesel emissions, mobile-source emissions are believed to be a primary cause of elevated PM_{2.5} in the New York City nonattainment area. We believe that multi-state efforts to reduce mobile source emissions and to meet transportation conformity requirements have potential to produce significant PM_{2.5} reductions along traffic corridors and urban centers throughout the metropolitan area, and will help monitors in the nonattainment area to meet the PM_{2.5} standards.

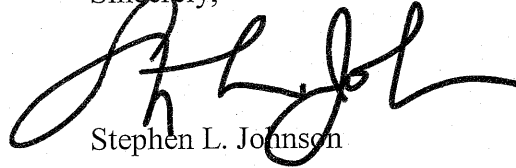
The DEP's Resources Directed Towards Improving In-State PM_{2.5} Air Quality

In the petition, the DEP highlights its considerable efforts to reduce pollutants contributing to elevated PM_{2.5} levels, including legislative and regulatory efforts to reduce diesel emissions through anti-idling and engine-retrofit programs, use of clean fuels in buses and construction equipment, and coordination with other states to tighten truck opacity standards. The DEP claims that more progress can be made towards improving air quality by focusing on these efforts than by using resources to perform tasks required by a nonattainment designation.

EPA is denying this portion of your request for reconsideration because we view the State's efforts to reduce diesel emissions as positive steps towards reducing the emissions in Connecticut that contribute to PM_{2.5} pollution in the New York City nonattainment area. These efforts are compatible with tasks that we encourage states to undertake to address RACM (reasonably available control measures) requirements and to meet PM_{2.5} attainment. EPA believes that local efforts to address diesel are especially effective in reducing the carbon fraction of the PM_{2.5} mass measured at urban monitors.

EPA believes that the tasks required of the DEP as a result of being included in the nonattainment area are reasonable, especially since the DEP is already undertaking many of the steps that will be necessary to mitigate the contribution that southwest Connecticut has to PM_{2.5} nonattainment in the New York City nonattainment area. These include the State's significant and noteworthy efforts to reduce SO₂ and NO_x emissions from major stationary sources and its current efforts to address diesel emission through the development a Clean Diesel Plan for the state.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Johnson', written over the printed name.

Stephen L. Johnson

cc: Anne Gobin, CT DEP