6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R01-OAR-2013-0020; FRL-9834-7]

Approval and Promulgation of Air Quality Implementation Plans; Connecticut; Redesignation of Connecticut Portion of the New York-New Jersey-Connecticut Nonattainment Area to Attainment of the 1997 Annual and 2006 24-hour Standards for Fine Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve the State of Connecticut's June 22, 2012 request to redesignate the Connecticut portion of the New York-N. New Jersey-Long Island, NY-NJ-CT fine particle ($PM_{2.5}$) area (i.e., New Haven and Fairfield Counties; herein called the "Southwestern CT Area" or "the Area") from nonattainment to attainment for the 1997 annual National Ambient Air Quality Standards (NAAQS or standard), as well as for the 2006 24-hour $PM_{2.5}$ NAAQS. As part of these proposed approvals, EPA proposes to approve (1) a State Implementation Plan (SIP) revision containing a 10-year maintenance plan for the Area; (2) a 2007 base-year emissions inventory for the Area; and (3) new motor vehicle emissions budgets (MVEBs) for the years 2017 and 2025 that are contained in the 10-year $PM_{2.5}$ maintenance plan for the Area.

In addition, in the course of proposing to approve Connecticut's request to redesignate the Southwestern CT Area, EPA addresses a number of additional issues, including the effects of two decisions of the United States Court of Appeals for the District of Columbia (D.C. Circuit Court): (1) the Court's August 21, 2012 decision to vacate and remand to EPA the Cross-State

Air Pollution Control Rule (CSAPR), and (2) the Court's January 4, 2013 decision to remand to EPA two final rules implementing the 1997 $PM_{2.5}$ standard.

This action is being taken in accordance with the Clean Air Act (CAA).

DATES: Written comments must be received on or before [insert date 30 days after date of publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID Number EPA-R01-OAR-2013-0020 by one of the following methods:

1. **www.regulations.gov**: Follow the on-line instructions for submitting comments.
2. E-mail: arnold.anne@epa.gov
3. Fax: (617) 918-0047.
4. Mail: "Docket Identification Number EPA-R01-OAR-2013-0020," Anne Arnold, U.S. Environmental Protection Agency, EPA New England Regional Office, 5 Post Office Square, Suite 100 (mail code: OEP05-2), Boston, MA 02109-3912.
5. Hand Delivery or Courier. Deliver your comments to: Anne Arnold, Manager, Air Quality Planning Unit, Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA New England Regional Office, 5 Post Office Square, Suite 100, Boston, MA 02109-3912. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding legal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R01-OAR-2013-0020. EPA's policy is that all comments received will be included in the public docket without change and may be

made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through www.regulations.gov or e-mail, information that you consider to be CBI or otherwise protected. The www.regulations.gov website is an "anonymous access" systems, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at http://www.epa.gov/epahome/dockets.htm.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at Air Quality Planning Unit, Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square--Suite 100, Boston, MA. EPA requests that if at all

possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Alison C. Simcox, Air Quality Planning Unit, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square - Suite 100, (Mail code OEP05-2), Boston, MA 02109 - 3912, telephone number (617) 918-1684, fax number (617) 918-0684, email simcox.alison@epa.gov.

In addition to the publicly available docket materials available for inspection electronically in the Federal Docket Management System at www.regulations.gov, and the hard copy available at the Regional Office, which are identified in the **ADDRESSES** section of this Federal Register, copies of the state submittal are also available for public inspection during normal business hours, by appointment at the State Air Agency: Bureau of Air Management, Department of Energy and Environmental Protection, State Office Building, 79 Elm Street, Hartford, CT 06106-1630.

SUPPLEMENTARY INFORMATION:

Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA.

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I. What should I consider as I prepare my comments for EPA?

When submitting comments, remember to:

1. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date, and page number).
2. Follow directions - EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
3. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

4. Describe any assumptions and provide any technical information and/or data that you used.
5. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
6. Provide specific examples to illustrate your concerns, and suggest alternatives.
7. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
8. Make sure to submit your comments by the comment period deadline identified.

II. What is the background for the proposal?

A. General background.

On June 22, 2012, the Connecticut Department of Energy and Environmental Protection (CT DEEP) submitted a request to EPA to redesignate the Connecticut portion of the New York-N. New Jersey-Long Island, NY-NJ-CT fine particle ($PM_{2.5}$) area (the Southwestern CT Area comprising New Haven and Fairfield Counties) to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS, and for EPA approval of the state implementation plan (SIP) revision containing an emissions inventory and a maintenance plan for the area.

Fine particulate pollution is emitted directly from a source (primary $PM_{2.5}$) or is formed secondarily through chemical reactions in the atmosphere involving precursor pollutants (nitrogen oxides (NO_x), sulfur dioxides (SO_2), volatile organic compounds (VOC), and ammonia (NH_3)) emitted from a variety of sources. For example, sulfates are formed from SO_2 emissions

from power plants and industrial facilities. Nitrates are formed from combustion emissions of NO_X from power plants, mobile sources, and other combustion sources.

The CAA establishes a process for air-quality management through the NAAQS. The first air quality standards for $PM_{2.5}$ were promulgated on July 18, 1997 (62 FR 38652). EPA promulgated an annual standard at a level of 15 micrograms per cubic meter ($\mu g/m^3$) of ambient air, based on a three-year average of the annual mean $PM_{2.5}$ concentrations at each monitoring site. In the same rulemaking, EPA promulgated a 24-hour $PM_{2.5}$ standard of 65 $\mu g/m^3$, based on a three-year average of the annual 98th percentile of 24-hour concentrations at each monitoring site.

On January 5, 2005 (70 FR 944), EPA designated the New York-N. New Jersey-Long Island, NY-NJ-CT area (also referred to as the New York Metropolitan Area), which includes the Southwestern CT Area, as nonattainment for the 1997 $PM_{2.5}$ NAAQS. See 70 FR 944 for a listing of all counties included in the tri-state nonattainment area.

On October 17, 2006 (71 FR 61144), EPA issued the 2006 $PM_{2.5}$ NAAQS. The 2006 NAAQS retained the annual $PM_{2.5}$ standard at 15 $\mu g/m^3$, but revised the 24-hour standard to 35 $\mu g/m^3$, based on a three-year average of the annual 98^{th} percentile of the 24-hour $PM_{2.5}$ concentrations. However, petitioners challenged EPA's decision to retain the annual standard (but did not challenge the 2006 24-hour $PM_{2.5}$ standard). On February 24, 2009, the U.S. Court of Appeals for the D.C. Circuit remanded the annual $PM_{2.5}$ standard to the Agency for reconsideration. *See American Farm Bureau Federation and National Pork Producers Council, et al.* v. *EPA,* 559 F.3d 512 (D.C. Cir. 2009).

On November 13, 2009 (74 FR 58688), EPA published designations for the 24-hour standard established in 2006, designating the same New York Metropolitan Area (including the Southwestern CT Area) as nonattainment for this standard. In the November 2009 action, EPA clarified the designations for the NAAQS promulgated in 1997, stating that the New York Metropolitan Area remained designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS, but was designated attainment for the 1997 24-hour NAAQS. Therefore, today's action does not address attainment of the 1997 24-hour $PM_{2.5}$ NAAQS.

Today's action also does not address attainment of the remanded 2006 annual standard. However, given that the 1997 and 2006 annual standards are essentially identical, attainment of the 1997 annual standard would also indicate attainment of the remanded 2006 annual standard. Therefore, today's action addresses attainment of the 1997 annual standard and the 2006 24-hour standard.

On November 15, 2010, EPA determined that the entire New York Metropolitan Area had attained the 1997 annual $PM_{2.5}$ standard (75 FR 69589). This determination of attainment was based upon complete, quality-assured and certified ambient air-quality data for the 2007–2009 monitoring period. Subsequently, on December 31, 2012, EPA determined that the entire New York Metropolitan Area had also attained the 2006 24-hour $PM_{2.5}$ standard (77 FR 76867). This determination of attainment was based upon complete, quality-assured and certified ambient air-quality data for the 2007–2009, 2008–2010, and 2009–2011 monitoring periods. In addition, $PM_{2.5}$ monitoring data for 2012 indicate continued attainment of both standards. These determinations of attainment suspended the requirements for Connecticut to submit an attainment demonstration, associated reasonably available control measures, reasonable further progress (RFP), contingency measures, and other planning SIPs related to attainment of the 1997

annual or 2006 24-hour $PM_{2.5}$ NAAQS for as long as the Southwestern CT Area continues to attain these standards.

The CT DEEP redesignation request includes a maintenance plan designed to ensure continued compliance with both the 1997 annual and 2006 24-hour $PM_{2.5}$ standards through the year 2025. On December 14, 2012, EPA issued a new annual standard of 12 $\mu g/m^3$. Today's action does not address the 2012 standard.

B. Effect of the August 21, 2012 D.C. Circuit decision regarding EPA's CSAPR

On May 12, 2005, EPA published the Clean Air Interstate Rule (CAIR), which requires significant reductions in emissions of SO_2 and NO_X from electric generating units (EGUs) to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. *See* 76 FR 70093. The D.C. Circuit Court initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded that rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008).

The Cross State Air Pollution Rule (CSAPR) included regulatory changes to sunset (i.e., discontinue) CAIR and the CAIR Federal Implementation Plans (FIPs) for control periods in 2012 and beyond. *See* 76 FR 48322. On December 30, 2011, the D.C. Circuit issued an order addressing the status of CSAPR and CAIR in response to motions filed by numerous parties seeking a stay of CSAPR pending judicial review. In that order, the Court stayed CSAPR pending resolution of the petitions for review of that rule in *EME Homer City Generation, L.P.* v.

EPA (No. 11-1302 and consolidated cases). The Court also indicated that EPA was expected to continue to administer CAIR in the interim until judicial review of CSAPR was completed.

On August 21, 2012, the D.C. Circuit issued *EME Homer City Generation, L.P.* v. *EPA,* 696 F.3d 7 (D.C. Cir. 2012), which vacated and remanded CSAPR and ordered EPA to continue administering CAIR "pending . . . development of a valid replacement." *EME Homer City* at 38. The D.C. Circuit denied all petitions for rehearing on January 24, 2013. On March 29, 2013, the U.S. Solicitor General petitioned the Supreme Court to review the D.C. Circuit Court's decision on CSAPR. On June 24, 2013, the Supreme Court granted the petition to review the decision. The Supreme Court's decision to review the case does not alter the current status of CAIR or CSAPR.

Connecticut's submittal and EPA modeling demonstrate that attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards will be maintained with or without the implementation of CAIR or CSAPR. To the extent that attainment is due to emission reductions associated with CAIR, EPA is here determining that those reductions are sufficiently permanent and enforceable for purposes of CAA sections 107(d)(3)(E)(iii) and 175A.

As directed by the D.C. Circuit, CAIR remains in place and enforceable until EPA promulgates a valid replacement rule to substitute for CAIR. Connecticut's SIP revision lists CAIR as a control measure (Regulations of Connecticut State Agencies (RCSA) section 22a-174-22c) that was adopted by the State in September 2007 with an effective date of May 1, 2009. CAIR was, thus, in place and achieving emission reductions when the New York Metropolitan Area began monitoring attainment of the 1997 annual $PM_{2.5}$ standard during the 2007–2009 period, and of the 2006 24-hour $PM_{2.5}$ standards during the same period. The quality-assured, certified

monitoring data continues to show the area in attainment with the 1997 and 2006 $PM_{2.5}$ standards through 2012.

In addition, modeling conducted by EPA during the CSAPR rulemaking process also demonstrates that the Southwestern CT Area will have $PM_{2.5}$ levels below the 1997 annual and 2006 24-hour $PM_{2.5}$ standards in both 2012 and 2014 without taking into account emissions reductions from CAIR or CSAPR. See "Air Quality Modeling Final Rule Technical Support Document", App. B, B-18, B-19. This modeling is available in the docket for this proposed redesignation action.

In sum, neither the current status of CAIR nor the current status of CSAPR affects any of the criteria for proposed approval of this redesignation request for the Southwestern CT Area.

C. Effect of the January 4, 2013 D.C. Circuit decision regarding $PM_{2.5}$ implementation under Subpart 4

1. Background

As discussed above, on January 4, 2013, in *Natural Resources Defense Council v. EPA*, the D.C. Circuit remanded to EPA the "Final Clean Air Fine Particle Implementation Rule" (72 FR 20586, April 25, 2007) and the "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers ($PM_{2.5}$)" final rule (73 FR 28321, May 16, 2008) (collectively, "1997 $PM_{2.5}$ Implementation Rule"). 706 F.3d 428 (D.C. Cir. 2013). The Court found that EPA erred in implementing the 1997 $PM_{2.5}$ NAAQS pursuant to the general implementation provisions of subpart 1 of Part D of Title I of the CAA, rather than the

particulate-matter-specific provisions of subpart 4 of Part D of Title I. Although the Court's ruling did not directly address the 2006 $PM_{2.5}$ standard, EPA is taking into account the Court's position on subpart 4 and the 1997 $PM_{2.5}$ standard in evaluating redesignations for the 2006 standard.

2. Proposal on this issue

EPA is proposing to determine that the Court's January 4, 2013 decision does not prevent EPA from redesignating the Southwestern CT Area to attainment. Even in light of the Court's decision, redesignation for this area is appropriate under the CAA and EPA's longstanding interpretations of the CAA's provisions regarding redesignation. EPA first explains its longstanding interpretation that requirements that are imposed, or that become due, after a complete redesignation request is submitted for an area that is attaining the standard, are not applicable for purposes of evaluating a redesignation request. Second, EPA then shows that, even if EPA applies the subpart 4 requirements to Connecticut's redesignation request and disregards the provisions of its 1997 $PM_{2.5}$ implementation rule recently remanded by the Court, the state's request for redesignation of this area still qualifies for approval. EPA's discussion takes into account the effect of the Court's ruling on the area's maintenance plan, which EPA views as approvable when subpart 4 requirements are considered.

a. Applicable requirements for purposes of evaluating the redesignation request

With respect to the 1997 $PM_{2.5}$ Implementation Rule, the Court's January 4, 2013 ruling rejected EPA's reasons for implementing the $PM_{2.5}$ NAAQS solely in accordance with the provisions of subpart 1, and remanded that matter to EPA, so that it could address implementation of the 1997

$PM_{2.5}$ NAAQS under subpart 4 of Part D of the CAA, in addition to subpart 1. For the purposes of evaluating Connecticut's redesignation request for the Southwestern CT Area, to the extent that implementation under subpart 4 would impose additional requirements for areas designated nonattainment, EPA believes that those requirements are not "applicable" for the purposes of CAA section 107(d)(3)(E), and, thus, EPA is not required to consider subpart 4 requirements with respect to this redesignation request. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean, as a threshold matter, that the part D provisions which are "applicable" and which must be approved in order for EPA to redesignate an area include only those which came due prior to a state's submittal of a complete redesignation request. *See* "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (Calcagni memorandum). *See also* "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992," Memorandum from Michael Shapiro, Acting Assistant Administrator, Air and Radiation, September 17, 1993 (Shapiro memorandum); Final Redesignation of Detroit-Ann Arbor, (60 FR 12459, 12465-66, March 7, 1995); Final Redesignation of St. Louis, Missouri, (68 FR 25418, 25424-27, May 12, 2003); *Sierra Club v. EPA*, 375 F.3d 537, 541 (7th Cir. 2004) (upholding EPA's redesignation rulemaking applying this interpretation and expressly rejecting Sierra Club's view that the meaning of "applicable" under the statute is "whatever should have been in the plan at the time of attainment rather than whatever actually was in the plan and already implemented or due at the time of attainment").[1] In this case, at the time that

[1] Applicable requirements of the CAA that come due subsequent to the area's submittal of a complete redesignation request remain applicable until a redesignation is approved, but are not required as a prerequisite to redesignation. Section 175A(c) of the CAA.

Connecticut submitted its redesignation request, requirements under subpart 4 were not due.

EPA's view that, for purposes of evaluating the Southwestern CT Area redesignation, the subpart 4 requirements were not due at the time the State submitted the redesignation request is in keeping with the EPA's interpretation of subpart 2 requirements for subpart 1 ozone areas redesignated subsequent to the D.C. Circuit's decision in *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006). In *South Coast*, the Court found that EPA was not permitted to implement the 1997 8-hour ozone standard solely under subpart 1, and held that EPA was required under the statute to implement the standard under the ozone-specific requirements of subpart 2 as well. Subsequent to the *South Coast* decision, in evaluating and acting upon redesignation requests for the 1997 8-hour ozone standard that were submitted to EPA for areas under subpart 1, EPA applied its longstanding interpretation of the CAA that "applicable requirements," for purposes of evaluating a redesignation, are those that had been due at the time the redesignation request was submitted. *See, e.g.*, Proposed Redesignation of Manitowoc County and Door County Nonattainment Areas (75 FR 22047, 22050, April 27, 2010). In those actions, EPA therefore did not consider subpart 2 requirements to be "applicable" for the purposes of evaluating whether the area should be redesignated under section 107(d)(3)(E).

EPA's interpretation derives from the provisions of CAA Section 107(d)(3). Section 107(d)(3)(E)(v) states that, for an area to be redesignated, a state must meet "all requirements 'applicable' to the area under section 110 and part D." Section 107(d)(3)(E)(ii) provides that the EPA must have fully approved the "applicable" SIP for the area seeking redesignation. These two sections read together support EPA's interpretation of "applicable" as only those requirements that came due prior to submission of a complete redesignation request. First,

holding states to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request, in order to be redesignated, would make it problematic or impossible for EPA to act on redesignation requests in accordance with the 18-month deadline Congress set for EPA action in section 107(d)(3)(D). If "applicable requirements" were interpreted to be a continuing flow of requirements with no reasonable limitation, states, after submitting a redesignation request, would be forced continuously to make additional SIP submissions that in turn would require EPA to undertake further notice-and-comment rulemaking actions to act on those submissions. This would create a regime of unceasing rulemaking that would delay action on the redesignation request beyond the 18-month timeframe provided by the Act for this purpose.

Second, a fundamental premise for redesignating a nonattainment area to attainment is that the area has attained the relevant NAAQS due to emission reductions from existing controls. Thus, an area for which a redesignation request has been submitted would have already attained the NAAQS as a result of satisfying statutory requirements that came due prior to the submission of the request. Absent a showing that unadopted and unimplemented requirements are necessary for future maintenance, it is reasonable to view the requirements applicable for purposes of evaluating the redesignation request as including only those SIP requirements that have already come due. These are the requirements that led to attainment of the NAAQS. To require, for redesignation approval, that a state also satisfy additional SIP requirements coming due after the state submits its complete redesignation request, and while EPA is reviewing it, would compel the state to do more than is necessary to attain the NAAQS, without a showing that the additional requirements are necessary for maintenance.

In the context of this redesignation, the timing and nature of the Court's January 4, 2013 decision

in *NRDC v. EPA* compound the consequences of imposing requirements that come due after the redesignation request is submitted. The State submitted its redesignation request on June 22, 2012, but the Court did not issue its decision remanding EPA's 1997 $PM_{2.5}$ implementation rule concerning the applicability of the provisions of subpart 4 until January 2013.

To require the State's fully-completed and pending redesignation request for the 2006 $PM_{2.5}$ standard to comply now with requirements of subpart 4 that the Court announced only in its January, 2013 decision on the 1997 $PM_{2.5}$ implementation rule, would be to give retroactive effect to such requirements when the State had no notice that it was required to meet them. The D.C. Circuit recognized the inequity of this type of retroactive impact in *Sierra Club v. Whitman*, 285 F.3d 63 (D.C. Cir. 2002),[2] where it upheld the District Court's ruling refusing to make retroactive EPA's determination that the St. Louis area did not meet its attainment deadline. In that case, petitioners urged the Court to make EPA's nonattainment determination effective as of the date that the statute required, rather than the later date on which EPA actually made the determination. The Court rejected this view, stating that applying it "would likely impose large costs on States, which would face fines and suits for not implementing air pollution prevention plans . . . even though they were not on notice at the time." *Id.* at 68. Similarly, it would be unreasonable to penalize the State of Connecticut by rejecting its redesignation request for an area that is already attaining the 1997 and 2006 $PM_{2.5}$ standards and that met all applicable requirements known to be in effect at the time of the request. For EPA now to reject the redesignation request solely because the state did not expressly address subpart 4 requirements of which it had no notice, would inflict the same unfairness condemned by the Court in *Sierra Club*

[2] *Sierra Club v. Whitman* was discussed and distinguished in a recent D.C. Circuit decision that addressed retroactivity in a quite different context, where, unlike the situation here, EPA sought to give its regulations retroactive effect. *National Petrochemical and Refiners Ass'n v. EPA*. 630 F.3d 145, 163 (D.C. Cir. 2010), rehearing denied 643 F.3d 958 (D.C. Cir. 2011), cert denied 132 S. Ct. 571 (2011).

v. Whitman.

b. Subpart 4 requirements and Connecticut's redesignation request

Even if EPA were to take the view that the Court's January 4, 2013 decision requires that, in the context of a pending redesignation for the 1997 and 2006 $PM_{2.5}$ standards, subpart 4 requirements were due and in effect at the time the State submitted its redesignation request, EPA proposes to determine that the Southwestern CT Area still qualifies for redesignation to attainment. As explained below, EPA believes that the redesignation request for the Southwestern CT Area, though not expressed in terms of subpart 4 requirements, substantively meets the requirements of that subpart for purposes of redesignating the area to attainment.

With respect to evaluating the relevant substantive requirements of subpart 4 for purposes of redesignating the Southwestern CT Area, EPA notes that subpart 4 incorporates components of subpart 1 of part D, which contains general air quality planning requirements for areas designated as nonattainment. *See* Section 172(c). Subpart 4 itself contains specific planning and scheduling requirements for PM_{10}[3] nonattainment areas, and under the Court's January 4, 2013 decision in *NRDC v. EPA*, these same statutory requirements also apply for $PM_{2.5}$ nonattainment areas. EPA has longstanding general guidance that interprets the 1990 amendments to the CAA, making recommendations to states for meeting the statutory requirements for SIPs for nonattainment areas. *See* "State Implementation Plans; General Preamble for the Implementation of Title I of the Clear Air Act Amendments of 1990," 57 FR 13498 (April 16, 1992) (the "General Preamble"). In the General Preamble, EPA discussed the relationship of

[3] PM_{10} refers to particulates nominally 10 micrometers in diameter or smaller.

subpart 1 and subpart 4 SIP requirements, and pointed out that subpart 1 requirements were to an extent "subsumed by, or integrally related to, the more specific PM-10 requirements." 57 FR 13538 (April 16, 1992). The subpart 1 requirements include, among other things, provisions for attainment demonstrations, reasonably available control measures (RACM), reasonable further progress (RFP), emissions inventories, and contingency measures.

For the purposes of this redesignation, in order to identify any additional requirements which would apply under subpart 4, we are considering the Southwestern CT Area to be a "moderate" $PM_{2.5}$ nonattainment area. Under section 188 of the CAA, all areas designated nonattainment areas under subpart 4 would initially be classified by operation of law as "moderate" nonattainment areas, and would remain moderate nonattainment areas unless and until EPA reclassifies the area as a "serious" nonattainment area. Accordingly, EPA believes that it is appropriate to limit the evaluation of the potential impact of subpart 4 requirements to those that would be applicable to moderate nonattainment areas. Sections 189(a) and (c) of subpart 4 apply to moderate nonattainment areas and include the following: (1) an approved permit program for construction of new and modified major stationary sources (section 189(a)(1)(A)); (2) an attainment demonstration (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); and (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date (section 189(c)).

The permit requirements of subpart 4, as contained in section 189(a)(1)(A), refer to and apply the subpart 1 permit provisions requirements of sections 172 and 173 to PM_{10}, without adding to them. Consequently, EPA believes that section 189(a)(1)(A) does not itself impose for redesignation purposes any additional requirements for moderate areas beyond those contained

in subpart 1.[4] In any event, in the context of redesignation, EPA has long relied on the interpretation that a fully approved nonattainment new source review program is not considered an applicable requirement for redesignation, provided the area can maintain the standard with a prevention of significant deterioration (PSD) program after redesignation. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." *See also* rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

With respect to the specific attainment planning requirements under subpart 4,[5] when EPA evaluates a redesignation request under either subpart 1 and/or 4, any area that is attaining the $PM_{2.5}$ standard is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-linked requirements as not applicable for areas attaining the standard. In the General Preamble, EPA stated that:

> The requirements for RFP will not apply in evaluating a request for redesignation to attainment since, at a minimum, the air quality data for the area must show that the area has already attained. Showing that the State will make RFP towards attainment will, therefore, have no meaning at that point.

"General Preamble for the Interpretation of Title I of the Clean Air Act Amendments of

[4] The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.

[5] I.e., attainment demonstration, RFP, RACM, milestone requirements, and contingency measures.

1990"; (57 FR 13498, 13564, April 16, 1992).

The General Preamble also explained that

> [t]he section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date. These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans . . . provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas.

Id.

EPA similarly stated in its 1992 Calcagni memorandum that, "The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard."

It is evident that even if we were to consider the Court's January 4, 2013 decision in *NRDC v. EPA* to mean that attainment-related requirements specific to subpart 4 should be imposed retroactively[6] and, thus, are now past due, those requirements do not apply to an area that is attaining the 1997 and 2006 $PM_{2.5}$ standards, for the purpose of evaluating a pending request to redesignate the area to attainment. EPA has consistently enunciated this interpretation of applicable requirements under section 107(d)(3)(E) since the General Preamble was published more than twenty years ago. Courts have recognized the scope of EPA's authority to interpret "applicable requirements" in the redesignation context. *See Sierra Club* v. *EPA,* 375 F.3d 537 (7th Cir. 2004).

[6] As EPA has explained above, we do not believe that the Court's January 4, 2013 decision should be interpreted so as to impose these requirements on the states retroactively. *Sierra Club v. Whitman*, *supra.*

Moreover, even outside the context of redesignations, EPA has viewed the obligations to submit attainment-related SIP planning requirements of subpart 4 as inapplicable for areas that EPA determines are attaining the standard. EPA's prior "Clean Data Policy" rulemakings for the PM_{10} NAAQS, also governed by the requirements of subpart 4, explain EPA's reasoning. They describe the effects of a determination of attainment on the attainment-related SIP planning requirements of subpart 4. *See* "Determination of Attainment for Coso Junction Nonattainment Area," (75 FR 27944, May 19, 2010). *See also* Coso Junction proposed PM_{10} redesignation, (75 FR 36023, 36027, June 24, 2010); Proposed and Final Determinations of Attainment for San Joaquin Nonattainment Area (71 FR 40952, 40954–55, July 19, 2006; and 71 FR 63641, 63643–47 October 30, 2006). In short, EPA in this context has also long concluded that to require states to meet superfluous SIP planning requirements is not necessary and not required by the CAA, so long as those areas continue to attain the relevant NAAQS.

Elsewhere in this notice, EPA proposes to determine that the Southwestern CT Area has attained the 1997 and 2006 $PM_{2.5}$ standards. Under its longstanding interpretation, EPA is proposing to determine here that the area meets the attainment-related plan requirements of subparts 1 and 4.

Thus, EPA is proposing to conclude that the requirements to submit an attainment demonstration under 189(a)(1)(B), a RACM determination under section 172(c)(1) and section 189(a)(1)(c), a RFP demonstration under 189(c)(1), and contingency measure requirements under section 172(c)(9) are satisfied for purposes of evaluating the redesignation request.

c. Subpart 4 and control of $PM_{2.5}$ precursors

The D.C. Circuit in *NRDC v. EPA* remanded to EPA the two rules at issue in the case with instructions to EPA to re-promulgate them consistent with the requirements of subpart 4. EPA in this section addresses the Court's opinion with respect to $PM_{2.5}$ precursors. While past implementation of subpart 4 for PM_{10} has allowed for control of PM_{10} precursors such as NO_X from major stationary, mobile, and area sources in order to attain the standard as expeditiously as practicable, CAA section 189(e) specifically provides that control requirements for major stationary sources of direct PM_{10} shall also apply to PM_{10} precursors from those sources, except where EPA determines that major stationary sources of such precursors "do not contribute significantly to PM_{10} levels which exceed the standard in the area."

EPA's 1997 $PM_{2.5}$ implementation rule, remanded by the D.C. Circuit, contained rebuttable presumptions concerning certain $PM_{2.5}$ precursors applicable to attainment plans and control measures related to those plans. Specifically, in 40 CFR 51.1002, EPA provided, among other things, that a state was "not required to address VOC [and ammonia] as . . . $PM_{2.5}$ attainment plan precursor[s] and to evaluate sources of VOC [and ammonia] emissions in the State for control measures." EPA intended these to be rebuttable presumptions. EPA established these presumptions at the time because of uncertainties regarding the emission inventories for these pollutants and the effectiveness of specific control measures in various regions of the country in reducing $PM_{2.5}$ concentrations. EPA also left open the possibility for such regulation of VOC and ammonia in specific areas where that was necessary.

The Court in its January 4, 2013 decision made reference to both section 189(e) and 40 CFR 51. 1002, and stated that, "In light of our disposition, we need not address the petitioners' challenge to the presumptions in [40 CFR 51.1002] that volatile organic compounds and ammonia are not $PM_{2.5}$ precursors, as subpart 4 expressly governs precursor presumptions." *NRDC v. EPA*, at 27,

n.10.

Elsewhere in the Court's opinion, however, the Court observed:

> Ammonia is a precursor to fine particulate matter, making it a precursor to both $PM_{2.5}$ and PM_{10}. For a PM_{10} nonattainment area governed by subpart 4, a precursor is presumptively regulated. See 42 U.S.C. § 7513a(e) [section 189(e)].

Id. at 21, n.7. For a number of reasons, EPA believes that its proposed redesignation of the Southwestern CT Area is consistent with the Court's decision on this aspect of subpart 4. First, while the Court, citing section 189(e), stated that "for a PM_{10} area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's 1997 $PM_{2.5}$ implementation rule provisions regarding ammonia and VOC as precursors. The Court had no occasion to reach whether and how it was substantively necessary to regulate any specific precursor in a particular $PM_{2.5}$ nonattainment area, and did not address what might be necessary for purposes of acting upon a redesignation request.

However, even if EPA takes the view that the requirements of subpart 4 were deemed applicable at the time the state submitted the redesignation request, and disregards the implementation rule's rebuttable presumptions regarding ammonia and VOC as $PM_{2.5}$ precursors (and any similar provisions reflected in the guidance for the 2006 $PM_{2.5}$ standard), the regulatory consequence would be to consider the need for regulation of all precursors from any sources in the area to demonstrate attainment and to apply the section 189(e) provisions to major stationary sources of precursors. In the case of the Southwestern CT Area, EPA believes that doing so is consistent with proposing redesignation of the area for the 1997 and 2006 $PM_{2.5}$ standards. The Southwestern CT Area has attained the standard without any specific additional controls of VOC

and ammonia emissions from any sources in the area.

Precursors in subpart 4 are specifically regulated under the provisions of section 189(e), which requires, with important exceptions, control requirements for major stationary sources of PM_{10} precursors.[7] Under subpart 1 and EPA's prior implementation rule, all major stationary sources of $PM_{2.5}$ precursors were subject to regulation, with the exception of ammonia and VOC. Thus, we must address here whether additional controls of ammonia and VOC from major stationary sources are required under section 189(e) of subpart 4 in order to redesignate the area for the 1997 $PM_{2.5}$ standard. As explained below, we do not believe that any additional controls of ammonia and VOC are required in the context of this redesignation.

In the General Preamble, EPA discusses its approach to implementing section 189(e). *See* 57 FR 13538-13542. With regard to precursor regulation under section 189(e), the General Preamble explicitly stated that control of VOCs under other Act requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e). 57 FR 13542. In this proposal, EPA proposes to determine that the SIP has met the provisions of section 189(e) with respect to ammonia and VOCs as precursors. This proposed determination is based on our findings that (1) the Southwestern CT Area contains no major stationary sources of ammonia, and (2) existing major stationary sources of VOC are adequately controlled under other provisions of the CAA regulating the ozone NAAQS.[8] In the alternative, EPA proposes to determine that, under the express exception provisions of section 189(e), and in the context of the redesignation of the

[7] Under either subpart 1 or subpart 4, for purposes of demonstrating attainment as expeditiously as practicable, a state is required to evaluate all economically and technologically feasible control measures for direct PM emissions and precursor emissions, and adopt those measures that are deemed reasonably available.

[8] The Southwestern CT area has reduced VOC emissions through the implementation of various control programs including VOC Reasonably Available Control Technology regulations and various on-road and non-road motor vehicle control programs.

area, which is attaining the 1997 and 2006 $PM_{2.5}$ standards, at present ammonia and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 1997 and 2006 $PM_{2.5}$ standards in the Southwestern CT Area.

EPA notes that its 1997 $PM_{2.5}$ implementation rule provisions in 40 CFR 51.1002 were not directed at evaluation of $PM_{2.5}$ precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 $PM_{2.5}$ NAAQS. By contrast, redesignation to attainment primarily requires the area to have already attained due to permanent and enforceable emission reductions, and to demonstrate that controls in place can continue to maintain the standard. Thus, even if we regard the Court's January 4, 2013 decision as calling for "presumptive regulation" of ammonia and VOC for $PM_{2.5}$ under the attainment planning provisions of subpart 4, those provisions in and of themselves do not require additional controls of these precursors for an area that already qualifies for redesignation. Nor does EPA believe that requiring Connecticut to address precursors differently than they have already would result in a substantively different outcome.

Although, as EPA has emphasized, its consideration here of precursor requirements under subpart 4 is in the context of a redesignation to attainment, EPA's existing interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM_{10} contemplates that states may develop attainment plans that regulate only those precursors that are necessary for purposes of attainment in the area in question, i.e., states may determine that only certain

precursors need be regulated for attainment and control purposes.[9] Courts have upheld this approach to the requirements of subpart 4 for PM_{10}.[10] EPA believes that application of this approach to $PM_{2.5}$ precursors under subpart 4 is reasonable. Because the Southwestern CT Area has already attained the 1997 and 2006 $PM_{2.5}$ NAAQS with its current approach to regulation of $PM_{2.5}$ precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that there is no need to revisit the attainment control strategy with respect to the treatment of precursors. Even if the Court's decision is construed to impose an obligation, in evaluating this redesignation request, to consider additional precursors under subpart 4, it would not affect EPA's approval here of Connecticut's request for redesignation of the Southwestern CT Area. In the context of a redesignation, the area has shown that it has attained the standard. Moreover, the state has shown and EPA is proposing to determine that attainment in this area is due to permanent and enforceable emissions reductions on all precursors necessary to provide for continued attainment. It follows logically that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013 decision of the Court as precluding redesignation of the Southwestern CT Area to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS at this time.

In sum, even if Connecticut were required to address precursors for the Southwestern CT Area under subpart 4 rather than under subpart 1, as interpreted in EPA's remanded $PM_{2.5}$ implementation rule, EPA would still conclude that the area had met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v).

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[9] *See*, *e.g.*, "Approval and Promulgation of Implementation Plans for California – San Joaquin Valley PM-10 Nonattainment Area; Serious Area Plan for Nonattainment of the 24-Hour and Annual PM-10 Standards," 69 FR 30006 (May 26, 2004) (approving a PM10 attainment plan that impose controls on direct PM10 and NO_X emissions and did not impose controls on SO_2, VOC, or ammonia emissions).

[10] *See*, *e.g.*, *Assoc. of Irritated Residents v. EPA et al.*, 423 F.3d 989 (9th Cir. 2005).

d. Maintenance plan and evaluation of precursors

With regard to the redesignation of Southwestern CT Area, in evaluating the effect of the Court's remand of EPA's implementation rule, which included presumptions against consideration of VOC and ammonia as $PM_{2.5}$ precursors, EPA in this proposal is also considering the impact of the decision on the maintenance plan required under sections 175A and 107(d)(3)(E)(iv). To begin with, EPA notes that the area has attained the 1997 annual and 2006 24-hour $PM_{2.5}$ standards and that the state has shown that attainment of those standards is due to permanent and enforceable emission reductions.

EPA proposes to determine that the State's maintenance plan shows continued maintenance of the standards by tracking the levels of the precursors whose control brought about attainment of the 1997 and 2006 $PM_{2.5}$ standards in the Southwestern CT Area. EPA, therefore, believes that the only additional consideration related to the maintenance plan requirements that results from the Court's January 4, 2013 decision is that of assessing the potential role of VOC and ammonia in demonstrating continued maintenance in this area. As explained below, based upon documentation provided by the State and supporting information, EPA believes that the maintenance plan for the Southwestern CT Area need not include any additional emission reductions of VOC or ammonia in order to provide for continued maintenance of the 1997 and 2006 $PM_{2.5}$ standards.

III. What are the criteria for redesignation to attainment?

The CAA sets forth the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided that: (1) EPA determines that the area has attained the applicable NAAQS; (2) EPA has fully approved the applicable state implementation plan for the area under CAA section 110(k); (3) air-quality improvements are due to permanent and enforceable emission reductions; and (4) EPA has fully approved a maintenance plan for the area meeting the requirements of CAA section 175A; and (5) the state containing such area has met all requirements applicable to the area under CAA section 110 and part D.

EPA has provided guidance on redesignation in the General Preamble for the Implementation of Title I of the CAA Amendments of 1990 (April 16, 1992, 57 FR 13498) (supplemented on April 28, 1992, 57 FR 18070) and has provided further guidance on processing redesignation requests in the following documents:

1. "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (hereafter referred to as the "Calcagni Memorandum");
2. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992; and
3. "Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment," Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994.

IV. What is EPA's analysis of the State's request?

EPA is proposing to determine that the Southwestern CT Area has met all applicable redesignation criteria under CAA section 107(d)(3)(E). The basis for EPA's proposed approval of the redesignation request is discussed below.

A. Has the Southwestern CT Area attained the 1997 $PM_{2.5}$ NAAQS?

On November 15, 2010 (75 FR 69589), EPA determined that the New York Metropolitan Area, which includes the Southwestern CT Area, attained the 1997 annual $PM_{2.5}$ NAAQS. EPA determines that an area has attained the 1997 annual $PM_{2.5}$ NAAQS based on three complete, consecutive calendar years of quality-assured air quality data. To attain the annual standard, the three-year average of the annual mean $PM_{2.5}$ concentrations for designated monitoring sites in an area must not exceed 15.0 $\mu g/m^3$. The data must be collected and quality-assured in accordance with 40 CFR part 58, and recorded in EPA's Air Quality System (AQS). The monitors generally should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

Specifically, on November 15, 2010 (75 FR 69589), EPA determined that the New York Metropolitan Area attained the 1997 annual $PM_{2.5}$ NAAQS based on complete, quality-assured monitoring data for 2007-2009, and that it had attained this standard as of April 5, 2010, its applicable attainment date. Further discussion of pertinent air quality issues underlying this determination was provided in the notice of proposed rulemaking for EPA's determination of attainment for this Area, published on August 2, 2010 (75 FR 45076).

In addition, as discussed below with respect to the maintenance plan, the CT DEEP has committed to continue to operate an EPA-approved monitoring network in the area as necessary

to demonstrate maintenance of the NAAQS. Connecticut remains obligated to continue to ensure the quality of monitoring data in accordance with 40 CFR part 58, and to enter all data into the AQS in accordance with Federal guidelines. In summary, the area has attained the 1997 annual $PM_{2.5}$ NAAQS.

B. Has the Southwestern CT Area attained the 2006 $PM_{2.5}$ NAAQS?

On December 31, 2012 (77 FR 76867), EPA determined that the New York Metropolitan Area, which includes the Southwestern CT Area, attained the 2006 24-hour $PM_{2.5}$ NAAQS. EPA determines that an area has attained the 2006 24-hour $PM_{2.5}$ NAAQS based on three complete, consecutive calendar years of quality-assured air quality data. The 24-hour standard is met when the 98th percentile 24-hour concentration, as determined in accordance with 40 CFR part 50, Appendix N, is less than or equal to 35.0 $\mu g/m^3$. The data must be collected and quality-assured in accordance with 40 CFR part 58, and recorded in EPA's AQS. The monitors generally should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

Specifically, on December 31, 2012 (77 FR 76867), EPA determined that the New York Metropolitan Area attained the 2006 24-hour $PM_{2.5}$ NAAQS based on complete, quality-assured monitoring data for 2007–2009, 2008–2010, and 2009–2011, and that it had attained this standard ahead of December 14, 2014, its applicable attainment date. Further discussion of pertinent air quality issues underlying this determination was provided in the notice of proposed rulemaking for EPA's determination of attainment for this Area, published on August 30, 2012 (77 FR 52626).

In addition, as discussed below with respect to the maintenance plan, the CT DEEP has committed to continue to operate an EPA-approved monitoring network in the area as necessary to demonstrate maintenance of the NAAQS. Connecticut remains obligated to continue to ensure the quality of monitoring data in accordance with 40 CFR part 58, and to enter all data into the AQS in accordance with Federal guidelines. In summary, the area has attained the 2006 24-hour $PM_{2.5}$ NAAQS.

C. Has the State of Connecticut met all applicable requirements of Section 110 and Part D and does the Southwestern CT Area have a fully approved SIP under Section 110(k) of the CAA for purposes of redesignation to attainment?

EPA is proposing to determine that the Southwestern CT Area has met all SIP requirements applicable for purposes of this redesignation under section 110 of the CAA (General SIP Requirements) and that, upon final approval of the 2007 base-year emissions inventory, as discussed below in this proposed rulemaking, it will have met all applicable SIP requirements under part D of Title I of the CAA, in accordance with CAA section 107(d)(3)(E)(v). In addition, EPA is proposing to find that all applicable requirements of the Connecticut SIP for purposes of redesignation have been approved in accordance with CAA section 107(d)(3)(E)(ii). In making these proposed determinations, EPA ascertained which SIP requirements are applicable for purposes of redesignation of this Area, and concluded that the applicable portions of the SIP meeting these requirements are fully approved under section 110(k) of the CAA.

1. Section 110 and general SIP requirements.

Section 110(a)(2) of Title I of the CAA delineates the general requirements for a SIP, which include enforceable emissions limitations and other control measures, means, or techniques, provisions for the establishment and operation of appropriate devices necessary to collect data on ambient air quality, and programs to enforce the limitations. The general SIP elements and requirements set forth in CAA section 110(a)(2) include, but are not limited to the following:

- Submittal of a SIP that has been adopted by the state after reasonable public notice and hearing;
- Provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality;
- Implementation of a source permit program; provisions for the implementation of Part C requirements (Prevention of Significant Deterioration (PSD));
- Provisions for the implementation of Part D requirements for New Source Review (NSR) permit programs;
- Provisions for air pollution modeling; and
- Provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants in accordance with the NOx SIP Call, October 27, 1998 (63 FR 57356), amendments to the NOx SIP Call, May 14, 1999 (64 FR 26298) and March 2, 2000 (65 FR 11222), and CAIR, May 12, 2005 (70 FR 25162). However, the CAA section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and

classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that these requirements are applicable requirements for purposes of redesignation.

Further, we conclude the other section 110 elements described above that are not connected with nonattainment plan submissions and not linked with an area's attainment status are also not applicable requirements for purposes of redesignation. A state remains subject to these requirements after an area is redesignated to attainment. We conclude that only the section 110 and part D requirements that are linked with a particular area's designation are the relevant measures which we may consider in evaluating a redesignation request. This approach is consistent with EPA's existing policy on applicability of conformity and oxygenated fuels requirements for redesignation purposes, as well as with section 184 ozone transport requirements. *See* Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174, October 10, 1996), (62 FR 24826, May 7, 1997); Cleveland-Akron-Lorain, Ohio final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida final rulemaking (60 FR 62748, December 7, 1995). *See also* the discussion on this issue in the Cincinnati, Ohio redesignation (65 FR at 37890, June 19, 2000) and in the Pittsburgh, Pennsylvania redesignation (66 FR at 53099, October 19, 2001).

We have reviewed Connecticut's SIP and have concluded that it meets the general SIP requirements under section 110 of the CAA, to the extent they are applicable for purposes of redesignation. EPA has previously approved provisions of the Connecticut SIP addressing

section 110 requirements (including provisions addressing particulate matter). On September 4, 2008 and September 18, 2009, Connecticut made submittals for the 1997 annual and 2006 24-hour $PM_{2.5}$ standards, respectively, addressing "infrastructure SIP" elements required by section 110(a)(2) of the CAA. EPA approved or conditionally approved all elements of Connecticut's submittals on October 16, 2012, at 77 FR 63228. The requirements of section 110(a)(2), however, are statewide requirements that are not linked to the $PM_{2.5}$ nonattainment status of the Southwestern CT Area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of the State's $PM_{2.5}$ redesignation request.

EPA also has previously approved $PM_{2.5}$ and $PM_{2.5}$ precursor control measures that are permanent and enforceable controls that will remain in place following redesignation (see Table 1).

TABLE 1. List of Connecticut Control Measures for $PM_{2.5}$ and $PM_{2.5}$ Precursors

Name of Control Measure	Type of Measure	Approval Citation
Tier 2 Vehicle Standards and Gasoline Sulfur Standards	federal rule	Promulgated at 40 CFR part 86
Heavy-Duty Diesel and Gasoline Highway Vehicle Standards	federal rule	Promulgated at 40 CFR part 86
Motorcycle Exhaust Standards	federal rule	Promulgated at 40 CFR part 86
Large Non-road Diesel Engine Standards	federal rule	Promulgated at 40 CFR part 89
Non-road Spark-Ignition Engines and Recreational Engine Standards	federal rule	Promulgated at 40 CFR part 90
NOx SIP Call	federal rule	63 FR 57356 (10/27/1998)
CAIR	federal rule	70 FR 25162 (5/12/2005)
Control of Sulfur Compound Emissions 19-508-19	SIP-approved state regulation	46 FR 56612 (11/18/1981)

Control of SO_2 emissions from power plants and other large stationary sources 22a-174-19a	SIP-approved state regulation	Approval signed 4/26/2013, not yet published. See CT Regional Haze SIP docket (EPA-R01-OAR-2009-0919)
Control of NOx Emissions 22a-174-22	SIP-approved state regulation	62 FR 52016 (10/06/1997)
Post-2002 NOx Budget Program 22a-174-22b	SIP-approved state regulation	65 FR 81743 (12/27/2000); superseded by CAIR (22a-174-22c)
CAIR NOx Ozone Season Trading Program 22a-174-22c	SIP-approved state regulation	73 FR 4105 (01/24/2008)
Control of Particulate Emissions 19-508-18	SIP-approved state regulation	47 FR 41958 (09/23/1982)
Emission Standards and On-Board Diagnostic II Test Requirements for Periodic Motor Vehicle Inspection and Maintenance 22a-174-27	SIP-approved state regulation	73 FR 74019 (12/05/2008)
Low Emission Vehicles 22a-174-36b	SIP-approved state regulation	64 FR 44411 (08/16/1999)
Municipal Waste Combustors 22a-174-38	SIP-approved state regulation	66 FR 63311 (12/06/2001)
Permit to Construct and Operate Stationary Sources 22a-174-3a	SIP-approved state regulation	76 FR 26933 (05/10/2011)

2. Part D SIP requirements

EPA has determined that, upon approval of the base-year emissions inventories discussed below, the Connecticut SIP will meet the applicable SIP requirements for the Southwestern CT Area applicable for purposes of redesignation under part D of the CAA. Subpart 1 of part D, found in sections 172–176 of the CAA, sets forth the basic nonattainment requirements applicable to all nonattainment areas.

Subpart 1 Section 172 Requirements.

On November 15, 2010 (75 FR 69589) and December 31, 2012 (77 FR 76867), EPA made determinations that the New York Metropolitan Area, including the Southwestern CT Area, is attaining the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS, respectively. These determinations of attainment were based on quality-assured and certified air-quality data for the 2007-2009 monitoring period (1997 NAAQS) and for the 2007–2009, 2008–2010, and 2009–2011 monitoring periods (2006 NAAQS) showing that the Southwestern CT Area had attained the applicable NAAQS. Monitoring data for 2012 are also consistent with continued attainment of the standards. Under EPA's Clean Data Policy and pursuant to 40 CFR 51.1004(c), upon determination by EPA that an area designated nonattainment of the $PM_{2.5}$ NAAQS has attained the standard, the requirement for such an area to submit an attainment demonstration and associated reasonably achievable control technology (RACT)/RACM, RFP, contingency measures, and other planning SIPs related to the attainment of the $PM_{2.5}$ NAAQS are suspended until EPA determines that the area has again violated the $PM_{2.5}$ NAAQS, at which time such plans are required to be submitted.[11] As a result of the determinations of attainment for the Southwestern CT Area, the only remaining requirement under CAA section 172 to be considered is the emissions inventory required under CAA section 172(c)(3).

In this rulemaking action, EPA is proposing to approve Connecticut's 2007 base-year emissions inventory in accordance with section 172(c)(3) of the CAA. Final approval of the 2007 base-year emissions inventory will satisfy the emissions inventory requirement under section 172(c)(3) of the CAA.

[11] Nevertheless, CT DEEP did submit a SIP on November 18, 2008, which included an attainment demonstration for the 1997 annual $PM_{2.5}$ standard for the Southwestern CT Area. In its June 22, 2012 redesignation request, CT DEEP states that it will withdraw the attainment demonstration SIP, effective one day after EPA signs the final rule approving Connecticut's redesignation request and maintenance plans.

The General Preamble for Implementation of Title I also discusses the evaluation of these requirements in the context of EPA's consideration of a redesignation request. The General Preamble sets forth EPA's view of applicable requirements for purposes of evaluating redesignation requests when an area is attaining the standard. *See* General Preamble for Implementation of Title I (57 FR 13498, April 16, 1992).

Because attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards has been reached for the Southwestern CT Area, no additional measures are needed to provide for attainment, and CAA section 172(c)(1) requirements for an attainment demonstration and RACT/RACM are no longer considered to be applicable for purposes of redesignation as long as the area continues to attain the standards until redesignation. *See* 40 CFR 51.1004(c). The RFP requirement under CAA section 172(c)(2) and contingency measures requirement under CAA section 172(c)(9) are similarly not relevant for purposes of redesignation.

Section 172(c)(3) of the CAA requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. The maintenance plan submitted by CT DEEP includes a 2007 base-year emissions inventory that meets this requirement. The 2007 base-year emissions inventory for the Southwestern CT Area, compiled jointly by CT DEEP and the Mid-Atlantic Regional Air Management Association (MARAMA), contains $PM_{2.5}$ (including condensables), and $PM_{2.5}$ precursors, SO_2 and NOx. MARAMA emissions inventories also include the $PM_{2.5}$ precursors ammonia (NH_3) and volatile organic compounds (VOC). *See* Appendix C of Connecticut's June 22, 2012 redesignation request. The emissions inventories cover the general source categories of EGU point sources, non-EGU point sources (i.e., individual industrial, commercial, and institutional facilities), area sources (i.e., aggregated small, non-permitted sources such as small industrial/commercial facilities, residential heating

furnaces, and road dust re-entrainment), on-road mobile sources (i.e., cars, trucks, buses, and other vehicles on public roadways), and nonroad mobile sources (e.g., marine vessels, airplanes, railroad locomotives, forklifts, lawn and garden equipment, portable generators (non-road MAR). However, there is one exception to the source category coverage mentioned above. MARAMA's VOC and NH_3 emission estimates did not include estimates for the on-road mobile sector, and so the emission values in Table 4 below represent values taken from EPA's regulatory impact analysis for the PM NAAQS.

A summary of the inventory development process is given below under "EPA's analysis of the Southwestern CT Area maintenance plan." Connecticut provided detailed descriptions of the derivation of emission estimates in Appendices A-I of their June 22, 2012 submittal.

Tables 2 and 3 show the 2007 base-year emissions for $PM_{2.5}$ and $PM_{2.5}$ precursors, SO_2 and NOx, which are the principal $PM_{2.5}$ precursors in the Southwestern CT Area. Table 4 shows the other $PM_{2.5}$ precursors, ammonia and VOC, for the entire state of Connecticut. VOC emission levels in Connecticut, including the Southwestern CT Area, have historically been well-controlled under SIP requirements related to ozone and other pollutants. Total ammonia emissions throughout the state are very low, estimated for 2007 to be 5,765 tons per year. This amount of statewide ammonia emissions is small compared to the total amounts of SO_2 and NO_X, and even direct $PM_{2.5}$ emissions from sources within just the two-county Southwestern CT Area. Moreover, available information shows that no precursor, including VOC and ammonia, is expected to increase over the maintenance period so as to interfere with or undermine the State's maintenance demonstration, as further discussed below under "EPA's analysis of the Southwestern CT Area maintenance plan." The proposed approval of the 2007 base-year

emissions inventory in this rulemaking action will, when finalized, meet the requirements of CAA section 172(c)(3).

Table 2. New Haven County, CT: $PM_{2.5}$, SO_2 and NOx Emissions (tpy) for Base-Year 2007 by Source Sector.

Sector	SO_2	NOx	$PM_{2.5}$
Point (EGU)	822.7	639.6	88.1
Point (Non-EGU)	55.6	822.7	40.4
Area	3,707.7	2,936.1	1,900.3
Marine Vessels, Airplanes, RR Locomotives (MAR)	727.4	3,945.9	168.5
Nonroad (NMIM)	174.1	3,688.1	279.1
Onroad (MOVES)	91.8	11,502.7	389.6
Total	5,579.2	23,535.1	2,866.0

Note: Primary $PM_{2.5}$ includes filterables and condensables

Table 3. Fairfield County, CT: $PM_{2.5}$, SO_2 and NOx Emissions (tpy) for Base-Year 2007 by Source Sector.

Sector	SO_2	NOx	$PM_{2.5}$
Point (EGU)	3,311.2	2,268.5	283.5
Point (Non-EGU)	154.8	1,875.4	44.7
Area	3,917.3	3,088.8	1,991.5
Marine Vessels, Airplanes, RR Locomotives (MAR)	353.4	3,034.2	119.9
Nonroad (NMIM)	215.8	4,648.1	403.0
Onroad (MOVES)	84.3	11,888.9	404.4
Total	8,036.7	26,804.0	3,247.0

Table 4. Connecticut: Ammonia and VOC Emissions (tpy) for Base-Year 2007 by Source Sector.

Sector	VOC	Ammonia (NH_3)
Point (EGU)	143	0
Point (nonEGU)	1,447	0
Area	57,253	4,421
Non-road mobile	20,721	16
Commercial Marine Vessels	161	3
Airports	509	0
Railroad Locomotives	73	1
On-road mobile	28,967	1,324
Total	109,274	5,765

Section 172(c)(4) of the CAA requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and CAA section 172(c)(5) requires new source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has determined that, since the PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a nonattainment NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994 entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." Nevertheless, Connecticut currently has an approved NSR program, established in RCSA section 22a-174-2a with amendments in 22a-174-3a. *See* 68 FR 9009 (February 27, 2003) and 76 FR 26933 (May

10, 2011). However, Connecticut's PSD program for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS will become effective in Southwestern CT Area (i.e., New Haven and Fairfield Counties) upon redesignation to attainment.

Section 172(c)(6) of the CAA requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached for the Southwestern CT Area, no additional measures are needed to provide for attainment.

Section 172(c)(7) of the CAA requires the SIP to meet the applicable provisions of CAA section 110(a)(2). As noted previously, we believe the Connecticut SIP meets the requirements of CAA section 110(a)(2) that are applicable for purposes of redesignation.

Subpart 1, Section 176 Conformity Requirements.

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally-supported or funded activities, including highway projects, conform to the air quality planning goals in the applicable SIPs. The requirement to determine conformity applies to transportation plans, programs, and projects developed, funded or approved under title 23 of the U.S. Code and the Federal Transit Act (transportation conformity) as well as to all other federally-supported or funded projects (general conformity). State conformity revisions must be consistent with federal conformity regulations relating to consultation, enforcement and enforceability, which EPA promulgated pursuant to CAA requirements.

EPA interprets the conformity SIP requirements as not applying for purposes of evaluating the redesignation request under section 107(d) for two reasons. First, the requirement to submit SIP

revisions to comply with the conformity provisions of the CAA continues to apply to areas after redesignation to attainment, since such areas would be subject to a section 175A maintenance plan. Second, EPA's federal conformity rules require the performance of conformity analyses in the absence of federally-approved state rules. Therefore, because areas are subject to the conformity requirements regardless of whether they are redesignated to attainment and, because they must implement conformity under federal rules if state rules are not yet approved, it is reasonable to view these requirements as not applying for purposes of evaluating a redesignation request. See *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), upholding this interpretation. *See* also 60 FR 62748, 62749-62750 (December 7, 1995) (Tampa, Florida).

Connecticut's June 22, 2012 redesignation request included new fine particle motor vehicle emissions budgets (MVEBs) as part of their maintenance plan. The SIP establishes annual direct $PM_{2.5}$ and annual NOx transportation conformity budgets for 2017 and 2025 to ensure that future emissions from on-road mobile sources provide for continuing attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. Connecticut submitted on-road MVEBs for the Southwestern CT Area of 575.8 tpy direct $PM_{2.5}$ and 12,791.8 tpy NOx for 2017, and 516 tpy direct $PM_{2.5}$ and 9,728.1 tpy NOx for 2025.

EPA New England sent a letter to CT DEEP on January 8, 2013, stating that the 2017 and 2025 MOVES2010 MVEBs in the June 22, 2012 SIP submittal are adequate for transportation conformity purposes. On February 5, 2013, (78 FR 8122) EPA notified the public through a Federal Register notice of adequacy that EPA has found that the 2017 and 2025 MVEBs adequate for transportation conformity purposes. These MVEBs became effective on February 20, 2013. For the Southwestern CT Area, Connecticut must use the MVEBs in any future

conformity determination on or after the effective date of the notice of adequacy. MVEBs are discussed further in section V.

3. Does the Southwestern CT Area have a fully approved applicable SIP under Section 110(k) of the CAA?

Upon final approval of the 2007 base-year emissions inventory, EPA will have fully approved the Connecticut portion of the New York-N. New Jersey-Long Island, NY-NJ-CT Area under section 110(k) of the CAA for all requirements applicable for purposes of redesignation to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. As noted above, in this rulemaking action, EPA is proposing to approve the Southwestern CT Area's 2007 base-year emissions inventory (submitted as part of its maintenance plan) as meeting the requirement of section 172(c)(3) of the CAA for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. Therefore, upon final approval of the 2007 base-year emissions inventory, Connecticut will have satisfied all applicable requirements under part D of Title I of the CAA for the Southwestern CT Area.

D. Are the air quality improvements in the Southwestern CT Area due to permanent and enforceable reductions in emissions?

EPA proposes to find that the state has demonstrated that the observed air quality improvement in the Southwestern CT Area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, federal measures, and other state-adopted measures, listed in Table 1 above. As shown in the state's submittal and supported by EPA rulemaking (see 75 FR 69589, November 15, 2010 and 77 FR 76867, December 31, 2012), the Area came into attainment with the 1997 annual $PM_{2.5}$ standard based on $PM_{2.5}$ data for 2007–2009, and into

attainment with the 2006 24-hour standard based on $PM_{2.5}$ data for the 2007–2009, 2008–2010, and 2009–2011 monitoring periods. The Area has remained in attainment and the air quality has improved in the area. Attainment is the direct result of permanent and enforceable emission reductions and not favorable meteorology or economic downturn.

Connecticut's redesignation request documents substantial emission reductions in $PM_{2.5}$ and $PM_{2.5}$ precursors both in upwind states and within Connecticut. For example, the state's request notes that due to federal programs including EPA's acid rain program, Ozone Transport Commission's NOx budget program, and EPA's NOx SIP Call, emissions from EGUs from states impacting Connecticut declined by 66 percent for NOx and by 48 percent for SO_2 between 2002 and 2009.

1. Federal Measures Implemented

Reductions in $PM_{2.5}$ and $PM_{2.5}$ precursor emissions (e.g., NO_x and SO_2) have occurred statewide and in upwind states as a result of federal measures with additional emission reductions expected to occur in the future. The maintenance plan for the Southwestern CT Area lists post-2002 federal measures (as well as state measures) that have reduced $PM_{2.5}$ and $PM_{2.5}$ precursor emissions from stationary and mobile sources. These measures include the following:

(a) Tier 2 Emission Standards for Vehicles and Gasoline Sulfur Standards

These emission control requirements, which were published on February 10, 2000 (65 FR 6698), result in lower NOx, and SO_2 emissions from new cars and light duty trucks, including sport utility vehicles. The Federal rules were phased in between 2004 and 2009. EPA has estimated that, after phasing in the new requirements, new vehicles emit less NOx in the following percentages: Passenger cars (light duty vehicles) – 77 percent; light duty trucks, minivans, and

sports utility vehicles – 86 percent; and larger sports utility vehicles, vans, and heavier trucks – 69-95 percent. EPA expects fleet-wide average emissions to decline by similar percentages as new vehicles replace older vehicles. The Tier 2 standards also reduced the sulfur content of gasoline to 30 parts per million (ppm) beginning in January 2006, which reflects up to a 90 percent reduction in sulfur content.

(b) Heavy-Duty Diesel Rule and Gasoline Highway Vehicle Standards

EPA published the heavy-duty diesel rule on January 18, 2001 (66 FR 5002). This rule, designed to reduce NOx and VOC emissions from heavy-duty diesel and from gasoline highway vehicles, took effect in 2004 and 2005, respectively. A second phase, which took effect in 2007, reduced $PM_{2.5}$ emissions from heavy-duty highway engines and further reduced the highway diesel fuel sulfur content to 15 ppm. The program is estimated to achieve a 90-percent reduction in direct $PM_{2.5}$ emissions and a 95-percent reduction in NOx emissions for these new engines using low-sulfur diesel fuel when compared to engines using higher sulfur diesel. The reduction in fuel sulfur content also yielded an immediate reduction in particulate sulfate emissions from all diesel vehicles.

(c) Motorcycle Exhaust Standards

In 2004, EPA published a final rule to implement improved exhaust emission standards on new highway motorcycles (69 FR 2398). These standards apply to model-year 1978 and newer gasoline-fuels motorcycles, and to later model-year motorcycles that use other fuel types (1990 model year for methanol; 1997 model year for natural gas or liquefied petroleum gas). For 2006 and later model-year new motorcycles, the standards apply regardless of fuel. Starting with the 2006 model year, EPA re-defined Class I to include motorcycles with engines smaller than 50

cubic centimeters. In addition, motorcycles with the largest engines are subject to more stringent NOx and hydrocarbon standards beginning with the 2010 model year.

(d) Non-road Diesel Rule

In June 2004, EPA published a new rule for large nonroad diesel engines, such as those used in construction, agriculture, and mining, to be phased in from 2008 to 2014 (69 FR 38958). The rule also reduced the sulfur content in nonroad diesel fuel by over 99 percent. Prior to 2006, nonroad diesel fuel averaged approximately 3,400 ppm sulfur. This rule limited nonroad diesel sulfur content to 500 ppm by 2006, with a further reduction to 15 ppm by 2010. Because of the timing of the new requirements, most reductions will occur during the maintenance period for the Southwestern CT Area as the fleet of older non-road diesel engines is gradually replaced with newer, lower-emitting engines. However, the required reduction in fuel sulfur content yielded an immediate reduction in sulfate particle emissions from all non-road diesel vehicles.

(e) Non-road Spark-Ignition Engines and Recreational Engine Standards

On November 8, 2002, EPA promulgated emission standards for groups of previously unregulated non-road engines (67 FR 68242). These emission standards for several groups of nonroad engines, including large spark-ignition engines, such as those used in forklifts and airport ground-service equipment; recreational vehicles using spark-ignition engines, such as off-highway motorcycles, all-terrain vehicles, and snowmobiles; and recreational marine diesel engines. Emission standards from large spark-ignition engines were implemented in two tiers, with Tier 1 starting in 2004 and Tier 2 in 2007. Recreational-vehicle emission standards were phased in from 2006 through 2012. Marine diesel engine standards were phased in from 2006 through 2009. With full implementation of the entire non-road spark-ignition engine and

recreational engine standards, an 80 percent reduction in NOx is expected by 2020, as affected fleets are gradually replaced.

(f) NOx SIP Call

In October 1998, EPA issued the NOx SIP Call pursuant to the CAA. This required 22 states (including Connecticut) and the District of Columbia to reduce NOx emissions from EGUs (i.e., power plants) and non-EGUs, such as industrial boilers, internal combustion engines, and cement kilns. (63 FR 57356, October 27, 1998). The program was intended to reduce emissions in states determined to be significantly contributing to violations of the 1-hour ozone NAAQS in downwind states. Affected states were required to comply with Phase I of the SIP Call beginning in 2003/2004 and with Phase II beginning in 2007. EPA approved Connecticut's NOx SIP Call rule (NOx Budget Program) on September 28, 1999 (64 FR 52233). This program was incorporated into Connecticut's CAIR program (see below) in September 2007. Emission reductions resulting from regulations developed in response to the NOx SIP Call are permanent and enforceable.

(g) CAIR and CSAPR

EPA approved Connecticut's CAIR rules in 2007 (73 FR 4105, September 4, 2007) as a control measure for reducing NOx emissions from EGUs. As previously discussed, the Court's 2008 remand of CAIR left the rule in place to "temporarily preserve the environmental values covered by CAIR" until EPA replaced it with a rule consistent with the Court's opinion, and the Court's August 2012 decision on CSAPR also left CAIR in effect until the legal challenges to CSAPR are resolved. As noted, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable pending a valid replacement rule, for purposes such as redesignation.

Furthermore, as previously discussed, the air quality modeling analysis conducted for CSAPR demonstrates that the Southwestern CT Area would be able to attain the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS even in the absence of either CAIR or CSAPR. EPA's modeling projections show that all ambient monitors in the Southwestern CT Area are expected to continue to maintain compliance in the 2012 and 2014 "no CAIR" base cases. Therefore, none of the ambient monitoring sites in the Southwestern CT Area are "receptors" that EPA projects will have future nonattainment problems or difficulty maintaining the NAAQS.

2. SIP-approved state measures

In addition to the federal control measures described above, Connecticut is implementing several state programs that have contributed to significant reductions in ambient levels of direct $PM_{2.5}$ and $PM_{2.5}$ precursors. These are listed on Table 1 and include, for example, regulations to reduce emissions of SO_2 and NOx from major stationary sources, including power plants; low-sulfur fuel requirements; addition of a non-ozone season NOx limit to all sources subject to the NOx Budget Program; the addition of PM standards to certain fuel-burning equipment and stationary reciprocating internal-combustion engines; updates to the state's motor-vehicle emissions testing and Inspection and Maintenance (I/M) programs; adoption of Low Emission Vehicle (LEV) standards; and limits on NOx emissions from Municipal Waste Combustors. As noted in Table 1, all of the regulations have been approved by EPA into the CT SIP.

Based on the information summarized above, Connecticut has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions. EPA

concludes that significant reductions result from federal requirements and regulation of precursors under the NOx SIP Call and CAIR, which are expected to continue into the future.

E. Does the Southwestern CT Area have a fully approved maintenance plan pursuant to Section 175a of the CAA?

In conjunction with its request to redesignate the Southwestern CT Area to attainment status, Connecticut submitted a SIP revision to provide for the maintenance of the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS in the Southwestern CT Area until 2025.

1. Maintenance Plan Requirements

Section 175 of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under CAA section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after EPA approves an area's redesignation. Eight years after the redesignation, Connecticut must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures, with a schedule for implementation, as EPA deems necessary, to assure prompt correction of any violations of the 1997 annual or 2006 24-hour $PM_{2.5}$ NAAQS that occur after redesignation of the Area to attainment. The Calcagni Memorandum dated September 4, 1992, provides additional guidance on the content of a maintenance plan. This memorandum states that a $PM_{2.5}$ maintenance plan should include the following: (1) an emissions inventory sufficient to ensure attainment; (2) a demonstration that the plan ensures maintenance of the NAAQS for 10 years following approval

of the redesignation request; (3) a commitment to maintain an appropriate monitoring network; (4) a method to verify continued attainment; and (5) a contingency plan to be implemented if NAAQS violations occur during the maintenance period.

2. EPA's analysis of the Southwestern CT Area maintenance plan

a. Attainment emissions inventory

An attainment emissions inventory is a comprehensive inventory of the actual emissions from sources within a nonattainment area for a time period used to show that the area has come into attainment with the NAAQS. Inventories used for Connecticut's $PM_{2.5}$ redesignation request were developed as an extension to regional efforts in the Mid-Atlantic/Northeast Visibility Union (MANE-VU) area to create inventories for use in photochemical modeling for the 2008 ozone NAAQS and Regional Haze SIPs. For $PM_{2.5}$ redesignation efforts, MARAMA took the lead in coordinating with several states (including Connecticut) to develop an inventory for 2025 to supplement those already under development (2007, 2017 and 2020 inventories), as well as to modify the 2007 inventory for $PM_{2.5}$ redesignation. A summary of the inventory development process is given below. For more information about how the inventories were developed, as well as quality-assurance procedures, see Appendices in Connecticut's $PM_{2.5}$ Redesignation Request at *http://www.regulations.gov*: Docket number EPA-R01-OAR-2013-0020.

In the Southwestern CT Area, compliance with the 1997 annual $PM_{2.5}$ NAAQS was achieved in 2001 and compliance with the 24-hour NAAQS was achieved in 2008. Therefore, Connecticut chose 2007 as the initial year for the attainment inventory. The end of the maintenance period was established as 2025, with an interim year of 2017, which is consistent with the CAA section

175A(a) requirement that the maintenance plan provide for maintenance of the NAAQS for at least 10 years after EPA approval of the redesignation request.

Emission estimates were developed for EGU point sources, non-EGU point sources, area sources, non-road mobile sources, and on-road mobile sources. The MANE-VU $PM_{2.5}$ redesignation inventories were prepared only for the area classified as nonattainment for the annual and 24-hour $PM_{2.5}$ NAAQS (i.e., in Connecticut, Fairfield County and New Haven Counties). The inventories were developed at the county level for the area-source and mobile-source categories and at the process level for point-source categories, then summed to the county level. EPA concurs with Connecticut that the use of annual inventories was also appropriate for demonstrating continued compliance with the 24-hour $PM_{2.5}$ NAAQS during the maintenance period as analysis of monitoring data for the Southwestern CT Area showed that elevated 24-hour $PM_{2.5}$ levels occur in multiple seasons (primarily summer and winter).

Point source emissions - For the 2007 point-source inventory, CT DEEP provided MARAMA with actual 2007 emissions for all EGU and non-EGU point sources. EGU sources were considered to be only those sources that report hourly emissions to EPA's Clean Air Markets Division (CAMD) database. All other point sources (including non-EGUs in CAMD, small non-CAMD EGUs and all other non-EGUs) were grouped as non-EGU point sources. The 2007 inventory also included banked continuous emission reduction credits (CERCs) for potential use as offsets in new source review permits. MARAMA calculated components of PM emissions (i.e., PM-primary, PM-filterable, and PM-condensable) that were missing from the point-source inventory provided by Connecticut. For EGUs, MARAMA used updated condensable emission factors; for non-EGUs, MARAMA used a similar process to that used in developing the 2002 MANE-VU Version 3 inventory. For information on $PM_{2.5}$ augmentation processes, see

Appendix A of Connecticut's $PM_{2.5}$ Redesignation Request at *http://www.regulations.gov*: Docket number EPA-R01-OAR-2013-0020.

To estimate EGU emissions for future years, MARAMA extrapolated the 2007 EGU emissions based on Annual Energy Outlook (AEO) electricity generation projections. The appropriate AEO 2011 growth factor was applied to the 2007 emissions to calculate a "growth only" emission value for 2017 and 2025.

MARAMA developed non-EGU point-source growth factors for Connecticut using employment or fuel consumption projections, depending on the source category. MARAMA extrapolated 2006-2016 employment forecasts from the Connecticut Department of Labor through 2025 to develop emission estimates for non-fuel burning sources such as manufacturing operations. AEO fuel-use projections published in 2010 by the U.S. Energy Information Administration were used to develop growth factors for fuel-consuming sources.

MARAMA examined adopted federal and regional control strategies to determine those that would result in post-2007 emission reductions of $PM_{2.5}$ or $PM_{2.5}$ precursors from non-EGU point sources. They determined that the maximum achievable control technology (MACT) standards for reciprocating internal combustion engines (RICE) and for industrial/commercial/institutional (ICI) boilers and process heaters will provide NOx or $PM_{2.5}$ emission reductions from several non-EGU source categories during the maintenance period.

Area source emissions - CT DEEP initially instructed MARAMA to use EPA's 2008 National Emissions Inventory (NEI) emission values for all area-source categories for the attainment year inventory. However, during the quality-assurance effort, a number of categories were discovered

to be either missing from the 2008 NEI or to have used incorrect emission-factor assumptions for Connecticut. Therefore, substitutions were made from the 2005 NEI or from CT DEEP's draft 2005 periodic emission inventory (PEI). For residential wood combustion (RWC), MARAMA's contractor used EPA's RWC tool with updated 2007 data to produce emission estimates.

MARAMA applied growth factors to the 2007 MANE-VU area-source inventory to account for anticipated changes in fuel use, population and economic activity during the maintenance period. For Connecticut, growth factors were developed using the following sets of data: (1) AEO New England region fuel consumption forecasts; (2) county-level population projections; (3) state-level employment projections; (4) county-level vehicle miles traveled (VMT) projections; and (5) EPA projections for RWC.

On-road mobile sources – EPA's MOVES2010 (MOtor Vehicle Emission Simulator) is now the official model for estimating air-pollution emissions from on-road mobile sources including buses, cars, trucks and motorcycles for SIP purposes. This model replaces MOBILE6.2, EPA's previous mobile source model. To assist in the transition to the new model, EPA developed software tools to convert certain MOBILE6.2 inputs for MOVES.

CT DEEP assembled updated MOVES data sets and performed MOVES runs with updated data for 2009, 2017 and 2025. Instead of developing updated 2007 emission estimates, Connecticut used 2009 MOVES on-road emission estimates in the $PM_{2.5}$ attainment year inventory because (1) EPA had previously approved 2009 transportation conformity MVEBs for Connecticut that were determined using MOBILE6.2, and (2) the use of the lower 2009 on-road emission estimates for 2007 ensured that the total attainment year inventory across all source sectors will be more conservative (i.e., lower) than if 2007 on-road emissions were used. Since emissions

through the end of the maintenance period must be no higher than the attainment-year inventory, this approach provides additional assurance that NAAQS compliance will continue through the maintenance period.

Nonroad mobile emissions - Non-road sources include internal combustion engines used to propel marine vessels, airplanes, and locomotives, or to operate equipment such as forklifts, lawn and garden equipment, portable generators, etc. For activities other than marine vessels, airplanes, and railroad locomotives (MAR), the inventory was developed using the most current version of EPA's NONROAD model as embedded in the National Mobile Inventory Model (NMIM). Because the NONROAD model does not include emissions from MAR sources, these emissions were estimated based on data and methodologies used in recent EPA regulatory impact analyses.

The emission inventories for Connecticut show that between 2002 (one of the years for which the Area's nonattainment designation was based) and 2009, an attainment year, in-state emissions were reduced by 679 tons per year (4%) for direct $PM_{2.5}$, 36,166 tons per year (30%) for NOx, and 9,233 tons per year (29%) for SO_2.

The emission inventories show that emissions of direct $PM_{2.5}$, SO_2, and NO_X are projected to decrease by 1,371 tpy, 5,832 tpy, and 26,147 tpy, respectively, within the 2-county Southwestern CT Area from the 2007 base year to the end of the maintenance period in 2025. *See* Tables 5 and 6 below. In addition, emissions inventories developed by MARAMA for addressing the 2012 $PM_{2.5}$ NAAQS show that VOC emissions are projected to decrease by about 32,695 tpy and ammonia emissions are projected to decrease by 637 tpy statewide between 2007 and 2020. *See* Table 7 below. While the MARAMA emissions inventories for VOC and ammonia are only

projected out to 2020, there is no reason to believe that this downward trend will not continue through 2025. Given that the Southwestern CT Area is already attaining the 1997 annual and 2006 24-hour $PM_{2.5}$ standards with the current level of source emissions, the downward trend in the emissions inventories is consistent with continued attainment. Indeed, projected emissions reductions for the precursors that the state is addressing for purposes of the 1997 and 2006 $PM_{2.5}$ NAAQS indicate that the area should continue to attain both the annual and 24-hour NAAQS following the control strategies that the state has already elected to pursue. Even if VOC and ammonia emissions were to increase unexpectedly between 2020 and 2025, the overall emissions reductions projected in direct $PM_{2.5}$, SO_2, and NO_X would be sufficient to offset any increases. For these reasons, EPA believes that local emissions of all of the potential $PM_{2.5}$ precursors will not increase to the extent that they will cause monitored $PM_{2.5}$ levels to violate the 1997 annual or 2006 24-hour $PM_{2.5}$ standards during the maintenance period.

Table 5. New Haven County, CT, Change in Emissions Between 2007 and 2025 in Tons Per Year (tpy)

Sector	SO_2 2007-2025	NOx 2007-2025	$PM_{2.5}$ 2007-2025
Point (EGU)	-424.3	-255.	-4.2
Point (Non-EGU)	3.9	128.9	6.2
Area	-1,030.6	-328.0	-153.9
Marine Vessels, Airplanes, RR Locomotives (MAR)	-691.6	-2,209.7	-117.0
Nonroad (NMIM)	-166.5	-2,084.3	-142.3
Onroad (MOVES)	-17.2	-7,962.6	-203.4
Total	-2,326.3	-12,710.7	-614.7

Table 6. Fairfield County, CT, Change in Emissions Between 2007 and 2025 in Tons Per Year (tpy)

Sector	SO_2 2007-2025	NOx 2007-2025	$PM_{2.5}$ 2007-2025
Point (EGU)	-1,889.9	-1,160.3	-152.0
Point (Non-EGU)	25.2	668.1	4.9

Area	-1,082.1	-348.7	-163.9
Marine Vessels, Airplanes, RR Locomotives (MAR)	-334.9	-1,688.8	-74.8
Nonroad (NMIM)	-206.4	-2,590.8	-158.9
Onroad (MOVES)	-17.9	-8,315.7	-211.7
Total	-3,505.9	-13,436.2	-756.5

Table 7. Connecticut, Change in Emissions Between 2007 and 2020 in Tons Per Year (tpy)[12]

Sector	VOC 2007-2020	Ammonia (NH_3) 2007-2020
Point (nonEGU)	127	0
Point (EGU)[13]	-58	-39
Area	-2,396	55
Non-road mobile	-9,736	5
Commercial Marine Vessels	1	0
Airports	-40	0
Railroad Locomotives	9	0
On-road mobile[13]	-20,602	-658
Total	-32,695	-637

EPA concludes that Connecticut has adequately derived and documented the 2007 attainment year and 2017 and 2025 projected-year emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors, including $PM_{2.5}$, SO_2, NOx, VOC, and ammonia for the Southwestern CT Area.

b. Maintenance demonstration

As mentioned above, as required by section 175A of the CAA, Connecticut's June 22, 2012 redesignation request included a 10-year maintenance plan for the Southwestern CT Area. This

[12] These emissions estimates are from the emissions inventories developed by MARAMA for use in part in addressing NAAQS requirements for the 2012 $PM_{2.5}$ standards. See Appendix C of Connecticut's June 22, 2012 redesignation request, which is available in the docket for today's rulemaking action.

[13] MARAMA's VOC and NH_3 emission estimates did not include estimates for the EGU and on-road mobile sectors. Emission values in this table represent values taken from EPA's regulatory impact analysis for the PM NAAQS.

plan demonstrates maintenance by showing that future emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors remain at or below attainment-year emission levels for both the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. A maintenance demonstration need not be based on modeling. *See Wall v. EPA*, *supra*; *Sierra Club v. EPA*, *supra*. *See also* 66 FR at 53099-53100; 68 FR at 25430-32.

Connecticut used 2007 as the base year, 2017 as the interim year, and 2025 as the last year of the maintenance plan. (In addition, per 40 CFR Part 93, a MVEB must be established for the last year of the maintenance plan. MVEBs are discussed in Section V below.) Table 8 shows the emissions inventories for 2007, 2017, and 2025 from Connecticut's June 22, 2012 submittal for the Southwestern CT Area for direct $PM_{2.5}$ and the Area's principal $PM_{2.5}$ precursors, SO_2, and NOx. The emissions inventory shows a downward trend in $PM_{2.5}$ and $PM_{2.5}$ precursor emissions from 2007 through 2017, and continuing on until 2025. Between 2007 and 2025, emissions are expected to decrease by 43 percent for SO_2, 55 percent for NO_x, and 22 percent for $PM_{2.5}$. As discussed above in the section on "attainment emissions inventory," MARAMA's emissions inventories show that VOC emissions are projected to decrease by about 32,695 tpy and ammonia emissions are projected to decrease by 637 tpy statewide between 2007 and 2020. *See* Table 7 above. While the MARAMA emissions inventories for VOC and ammonia are only projected out to 2020, there is no reason to believe that this downward trend will not continue through 2025.

Table 8. Comparison of 2007, 2017, and 2025 SO_2, NOx, and Direct $PM_{2.5}$ Emission Totals for the Southwestern CT Area (in tpy)

	SO_2	NOx	$PM_{2.5}$
2007 (attainment)	13,615.9	50,339.1	6,113.0
2017 (interim)	7,909.0	29,501.3	5,029.1
2025 (maintenance)	7,783.7	24,192.2	4,741.7

2007 to 2025 (change)	-5,832.2 (-43%)	-26,146.9 (-55%)	-1,371.2 (-22%)

In addition, current air-quality design values (DVs) and air-quality modeling show continued maintenance of both the 1997 annual and 2006 24-hour $PM_{2.5}$ standards during the maintenance period. As shown in Table 9 below, the most recent DVs for the Southwestern CT Area are well below the 1997 annual $PM_{2.5}$ NAAQS of 15 $\mu g/m^3$ and the 2006 24-hour $PM_{2.5}$ NAAQS of 35 $\mu g/m^3$.

Table 9. Air-Quality ($PM_{2.5}$) Design Values ($\mu g/m^3$) for Fairfield and New Haven Counties.

County	1997 annual NAAQS 2007-2009	1997 annual NAAQS 2008-2010	1997 annual NAAQS 2009-2011	2006 24-hr NAAQS 2007-2009	2006 24-hr NAAQS 2008-2010	2006 24-hr NAAQS 2009-2011
Fairfield	11.3	10.0	9.4	31	28	26
New Haven	11.4	10.3	9.6	31	29	28

The modeling analysis conducted for the Regulatory Impact Analysis for the 2012 $PM_{2.5}$ NAAQS[14] indicates that DVs for the Southwestern CT Area are expected to continue to decline through 2020. In the RIA for the 2012 $PM_{2.5}$ NAAQS, the highest annual DV projected for 2020 is 8.79 $\mu g/m^3$ for Fairfield County and 8.62 $\mu g/m^3$ for New Haven County. The highest 24-hour DV projected for 2020 is 22.27 $\mu g/m^3$ for Fairfield County and 21.78 $\mu g/m^3$ for New Haven County. Given that precursor emissions are projected to decrease through 2025, it is reasonable to conclude that monitored $PM_{2.5}$ levels in this area will also continue to decrease through 2025.

[14] The "Regulatory Impact Analysis for the Proposed Revisions to the National Ambient Air Quality Standards for Particulate Matter" is available in the docket for today's rulemaking action.

Thus, EPA believes that there is ample justification to conclude that the Southwestern CT Area should be redesignated, even taking into consideration the emissions of other precursors potentially relevant to $PM_{2.5}$. After consideration of the D.C. Circuit's January 4, 2013 decision, and for the reasons set forth in this notice, EPA proposes to approve the State's maintenance plan and its request to redesignate the Southwestern CT Area to attainment for the 1997 annual $PM_{2.5}$ standard and for the 2006 24-hour $PM_{2.5}$ standard.

c. Monitoring network

Connecticut currently operates seven $PM_{2.5}$ monitors in the Connecticut portion of the NY-NJ-CT $PM_{2.5}$ nonattainment area. Three are located in New Haven County, and four are in Fairfield County. In its June 22, 2012 SIP submittal, Connecticut committed to continue to operate all seven of its monitors in accordance with 40 CFR part 58 and to enter all data into the AQS in accordance with federal guidelines. Connecticut has, therefore, addressed the requirement for continued $PM_{2.5}$ monitoring in the Southwestern CT Area.

d. Verification of continued attainment

The state has the legal authority to enforce and implement the requirements of the $PM_{2.5}$ maintenance plan. This includes the authority to adopt, implement, and enforce any subsequent emission-control contingency measures determined to be necessary to correct future $PM_{2.5}$ attainment problems. To implement the $PM_{2.5}$ maintenance plan, the state will continue to monitor $PM_{2.5}$ levels in the Southwestern CT Area. Connecticut has also committed to track the progress of the maintenance demonstration by periodically updating its emission inventory. The

update will be based, in part, on the annual update of the National Emissions Inventory (NEI), and will indicate new source growth and other changes from the attainment inventory, including any changes in vehicle miles traveled or in traffic patterns.

e. The maintenance plan's contingency measures

The contingency plan provisions for maintenance plans are designed to promptly correct a violation of the NAAQS that occurs after redesignation. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to ensure that a state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the events that would "trigger" the adoption and implementation of a contingency measure(s), the contingency measure(s) that would be adopted and implemented, and the schedule indicating the time frame by which the state would adopt and implement the measure(s).

As required by section 175A of the CAA, Connecticut's maintenance plan outlines the procedures for the adoption and implementation of contingency measures to further reduce emissions should a violation occur. Connecticut's contingency measures include a Warning Level Response and an Action Level Response. For a Warning Level Response, CT DEEP will track air-quality monitoring data and emission inventories to identify when the Area is at risk of violating either the 1997 annual or 2006 24-hour $PM_{2.5}$ NAAQS. The Warning Level Response will be triggered if either a single year's 98th percentile daily value exceeds 35 $\mu g/m^3$ or a single year's annual average exceeds 15 $\mu g/m^3$ at any CT DEEP site in the maintenance area and is verified. CT DEEP will examine available information to identify contributing factors such as

atypical meteorological conditions, exceptional events, local changes in source activity, or source malfunctions or noncompliance.

An Action Level Response will be triggered if a verified violation of either $PM_{2.5}$ NAAQS occurs. If an Action Level Response is triggered, as required by CAA 175A(d), CT DEEP commits to implementing all measures that were contained in the SIP before the Southwestern CT Area was redesignated to attainment. CT DEEP also commits to pursuing adoption (and submittal to EPA) and implementation of any appropriate regulatory revisions within 18 to 24 months after the verified violation. See letter to EPA dated June 6, 2013, available in the docket for today's action.

CT DEEP will select contingency measures based on cost effectiveness, emission reduction potential, economic and social considerations, or other appropriate factors. Stakeholder input will be solicited before final selection of any contingency measures. Connecticut's candidate contingency measures include, but are not limited to, the following:

- Control measures already adopted, but designed to produce additional reductions after the verified violation occurred (e.g., mobile source measures that involve fleet turnover);
- New control measures that may be adopted for other purposes (e.g., Tier 3 or CALEV3);
- Alternative fuel and/or diesel retrofit programs for fleet vehicle operations;
- New or more stringent $PM_{2.5}$, NOx or SO_2 controls on stationary sources;
- Wood stove change out program;
- "No burn" days during cold weather inversion events;
- Enhanced idle restrictions; and

- Transportation control measures, selected in consultation with Connecticut Department of Transportation (CT DOT) and affected local metropolitan planning organizations (e.g., traffic flow improvements, transit improvements, trip reduction programs, other new or innovative transportation measures).

In addition, NOx reductions from fleet turnover are happening each year automatically, without any additional rulemaking.

It is unlikely, however, that Connecticut will violate either $PM_{2.5}$ standard. As shown in Table 9 above, the design values in both Fairfield and New Haven Counties are decreasing. The design values for these counties are 9.4 and 9.6 $\mu g/m^3$, respectively, compared to an annual standard of 15.0 $\mu g/m^3$; they are 26 and 28 $\mu g/m^3$, respectively, compared to a 24-hour standard of 35.0 $\mu g/m^3$. If either county were to violate one of the $PM_{2.5}$ standards, we would negotiate a timeline and schedule through our regular annual grant negotiations for which we develop priority and commitment (P&C) lists each year.

For the reasons discussed above, EPA believes that the Southwestern CT Area maintenance plan adequately addresses the five basic components of a maintenance plan: attainment inventory; maintenance demonstration; monitoring network; verification of continued attainment; and a contingency plan. Therefore, EPA is proposing to approve the maintenance plan SIP revision submitted by Connecticut for the Southwestern CT Area as meeting the requirements of CAA section 175A.

V. MVEBs

1. How are MVEBs developed and what are the MVEBs for the Southwestern CT Area?

As part of its June 22, 2012 redesignation request, CT DEEP requested withdrawal of the SIP-approved 2009 motor vehicle emissions budgets (MVEBs) prepared using MOBILE6.2 and approval of 2017 and 2025 MVEBs prepared using MOVES2010. Under the CAA, states are required to submit, at various times, control strategy SIP revisions and maintenance plans for nonattainment areas and for areas seeking redesignation to attainment for a given NAAQS. These emission-control-strategy SIP revisions (*e.g.*, RFP and attainment demonstration SIP revisions) and maintenance plans create MVEBs based on on-road mobile source emissions for the relevant criteria pollutants and/or their precursors, where appropriate, to address pollution from on-road transportation sources. The MVEBs are the portions of the total allowable emissions that are allocated to on-road vehicle use that, together with emissions from all other sources in the area, will provide for attainment, RFP, or maintenance, as applicable. The budget serves as a ceiling on emissions from an area's planned transportation system. Under 40 CFR part 93, a MVEB for an area seeking a redesignation to attainment is established for the last year of the maintenance plan. See the September 27, 2011 notice of direct final approval for a more complete discussion of MVEBs (76 FR 59512).

EPA's substantive criteria for determining the adequacy of MVEBs are set out in 40 CFR 93.118(e)(4). Additionally, to approve a MVEB, EPA must complete a thorough review of the SIP, in this case the $PM_{2.5}$ maintenance plan, and conclude that with the projected level of motor vehicle and all other emissions, the SIP will achieve its overall purpose, in this case providing for maintenance of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards.

EPA's process for determining adequacy of a MVEB consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to comment on

the MVEB during a public comment period; and, (3) EPA taking action on the MVEB. The process for determining the adequacy of submitted SIP MVEBs is codified at 40 CFR 93.118.

The availability of the SIP submission with these 2017 and 2025 MVEBs was announced for public comment on EPA's adequacy web page on November 27, 2012 at: http://www.epa.gov/otaq/stateresources/transconf/currsips.htm. The EPA public comment period on adequacy of the 2017 and 2025 MVEBs for the Southwestern CT Area closed on December 27, 2012. EPA did not receive any comments. EPA sent a letter to CT DEEP on January 8, 2013, stating that the 2017 and 2025 MOVES2010 motor vehicle emissions budgets in the June 22, 2012 SIP are adequate for transportation conformity purposes. On February 5, 2013 (78 FR 8122), EPA notified the public through a Federal Register notice of adequacy that EPA has found that the 2017 and 2025 MVEBs adequate for transportation conformity purposes. These MVEBs became effective on February 20, 2013. For the Southwestern CT Area, Connecticut must use the MVEBs in any future conformity determination on or after the effective date of the notice of adequacy.

Table 10. Transportation Conformity Budgets for the Southwestern CT Area in Tons Per Year (tpy)

Year	Direct $PM_{2.5}$	NOx
2017	575.8	12,791.8
2025	516	9,728.1

As shown in Table 10, CT DEEP has determined the 2017 MVEBs for the Southwestern CT Area to be 575.8 tpy for direct $PM_{2.5}$ and 12,791.8 tpy for NO_X. CT DEEP has determined the 2025 MVEBs for the Southwestern CT Area to be 516 tpy for direct $PM_{2.5}$ and 9,728.1 tpy for

NO_X. CT DEEP did not provide emission budgets for SO_2, VOC, and ammonia because it concluded, consistent with the presumptions regarding these precursors in the conformity rule at 40 CFR 93.102(b)(2)(v), which predated and was not disturbed by the litigation on the $PM_{2.5}$ implementation rule, that emissions of these precursors from motor vehicles are not significant contributors to the area's $PM_{2.5}$ air quality problem.

EPA issued conformity regulations to implement the 1997 $PM_{2.5}$ NAAQS in July 2004 and May 2005 (69 FR 40004, July 1, 2004 and 70 FR 24280, May 6, 2005, respectively). Those actions were not part of the final rule recently remanded to EPA by the Court of Appeals for the District of Columbia in *NRDC v. EPA*, No. 08-1250 (Jan. 4, 2013), in which the Court remanded to EPA the implementation rule for the $PM_{2.5}$ NAAQS because it concluded that EPA must implement that NAAQS pursuant to the PM-specific implementation provisions of subpart 4 of Part D of Title I of the CAA, rather than solely under the general provisions of subpart 1. That decision does not affect EPA's proposed approval of the Southwestern CT Area MVEBs.

First, as noted above, EPA's conformity rule implementing the 1997 $PM_{2.5}$ NAAQS was a separate action from the overall $PM_{2.5}$ implementation rule addressed by the Court and was not considered or disturbed by the decision. Therefore, the conformity regulations were not at issue in *NRDC v. EPA*.[15] In addition, as discussed in section IV.A. the New York Metropolitan Area is attaining the 1997 annual $PM_{2.5}$ NAAQS with a 2007-2009 design value of 14.0 $\mu g/m^3$. As shown on Table 9, for the Connecticut portion of this area (i.e., the Southwestern CT Area), the 2007-2009 and 2009-11 design values (DVs) for Fairfield County were 11.3 $\mu g/m^3$ and 9.4

[15] The 2004 rulemaking addressed most of the transportation conformity requirements that apply in $PM_{2.5}$ nonattainment and maintenance areas. The 2005 conformity rule included provisions addressing treatment of $PM_{2.5}$ precursors in MVEBs. *See* 40 CFR 93.102(b)(2). While none of these provisions were challenged in the NRDC case, EPA also notes that the Court declined to address challenges to EPA's presumptions regarding $PM_{2.5}$ precursors in the $PM_{2.5}$ implementation rule. *NRDC v. EPA*, at 27, n. 10.

$\mu g/m^3$, respectively. For New Haven County, these values were 11.4 $\mu g/m^3$ and 9.6 $\mu g/m^3$ (see Table 9). All these DVs are well below the annual $PM_{2.5}$ NAAQS of 15 $\mu g/m^3$. The modeling analysis conducted for the RIA for the 2012 PM NAAQS indicates that the DVs for the Southwestern CT Area are expected to continue to decline through 2020. Further, the State's maintenance plan shows continued maintenance through 2025 by demonstrating that NO_X, SO_2, and direct $PM_{2.5}$ emissions continue to decrease through the maintenance period. For VOC and ammonia, RIA inventories for 2007 and 2020 show that both on-road and total emissions for these pollutants are expected to decrease, supporting the state's conclusion, consistent with the presumptions regarding these precursors in the conformity rule, that emissions of these precursors from motor vehicles are not significant contributors to the Area's $PM_{2.5}$ air quality problem and the MVEBs for these precursors are unnecessary. With regard to SO_2, the 2005 final conformity rule (70 FR 24280) based its presumption concerning on-road SO_2 motor vehicle emissions budgets on emissions inventories that show that SO_2 emissions from on-road sources constitute a "de minimis" portion of total SO_2 emissions.

2. What Are Safety Margins?

A "safety margin" is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. The on-road MVEBs for direct $PM_{2.5}$ emissions given in Table 10 above do not include either re-entrained road dust or construction dust from transportation projects. The on-road mobile source emissions when added to emissions from all other inventory sources (stationary, other mobile (e.g., non-road, marine vessels, airplanes, locomotives) and area sources) result in annual emissions inventories lower than the year 2007 attainment emissions inventory. Hence both the 2017 and 2025 projected emission levels provide a "safety margin" relative to total emissions in

the 2007 attainment year. CT DEEP has allocated a small portion (i.e., 10%) of the safety margin to both the 2017 and 2025 MVEBs. Even if emissions reached the full level of the safety margin, the area would still demonstrate maintenance since emission levels would equal those in the attainment year.

The transportation conformity rule allows areas to allocate all or a portion of a "safety margin" to the area's MVEBs (40 CFR 92.124(a)). The MVEBs requested by CT DEEP contain NO_X and direct $PM_{2.5}$ safety margins for mobile sources in 2017 and 2025 smaller than the allowable safety margins reflected in the total emissions inventory for the Southwestern CT Area. *See* Table 11.

Table 11. Transportation Conformity Budgets for the Southwestern CT Area.

Year		**$PM_{2.5}$ (tpy)**	**NO_x (tpy)**
2017	On-Road Inventory	467.4	10,708.0
	Safety Margin vs. 2007	1083.9	20,837.8
	10% of Safety Margin	108.4	2,083.8
	2017 Conformity Budget	**575.8**	**12,791.8**
2025	On-Road Inventory	378.9	7,113.4
	Safety Margin vs. 2007	1371.3	26,146.9
	10% of Safety Margin	137.1	2,614.7
	2025 Conformity Budget	**516.0**	**9,728.1**

Thus, the State is not requesting allocation to the MVEBs of the entire available safety margins reflected in the demonstration of maintenance. Therefore, even though the State has submitted MVEBs that exceed the projected on-road mobile source emissions for 2017 and 2025 contained in the demonstration of maintenance, the differences between the MVEBs and the projected on-road mobile source emissions are well within the safety margins of the $PM_{2.5}$ maintenance

demonstration. Further, once allocated to mobile sources, these safety margins will not be available for use by other sources.

EPA has reviewed the submitted budgets for 2017 and 2025, including the added safety margins using the conformity rule's adequacy criteria found at 40 CFR 93.118(e)(4) and the conformity rule's requirements for safety margins found at 40 CFR 93.124(a). EPA has determined that the area can maintain attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards for the relevant maintenance period with on-road mobile source emissions at the levels of the MVEBs since total emissions will still remain under attainment year emission levels. EPA is, therefore, proposing to approve the MOVES-based MVEBs submitted by Connecticut for use in determining transportation conformity in the Southwestern CT Area.

VI. Proposed Actions.

After fully considering the D.C. Circuit's decisions in *EME Homer City* on EPA's CSAPR rule, and *NRDC v. EPA* on EPA's 1997 $PM_{2.5}$ Implementation rule, EPA is proposing to approve Connecticut's June 22, 2012 request to redesignate the Connecticut portion of the New York-N. New Jersey-Long Island, NY-NJ-CT Area (i.e., the Southwestern CT Area) from nonattainment to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS and of the associated maintenance plan, including the 2017 and 2025 MVEBs. EPA is proposing to withdraw the SIP-approved 2009 MVEBs prepared using MOBILE6.2.

EPA is also proposing to approve the base-year emissions inventory for the Southwestern CT Area included in Connecticut's June 22, 2012 submittal as meeting the comprehensive emissions inventory requirements of section 172(c)(3) of the CAA.

VII. Statutory and Executive Order Reviews.

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions do not impose additional requirements beyond those imposed by state law and the CAA. For that reason, these proposed actions:

- are not "significant regulatory actions" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq*.);
- do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because a determination of attainment is an action that affects the status of a geographical area and does not impose any new regulatory requirements on tribes, impact any existing sources of air pollution on tribal lands, nor impair the maintenance of ozone national ambient air quality standards in tribal lands.

List of Subjects:

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter.

40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

AUTHORITY: 42 U.S.C. 7401 et seq.

Dated: July 9, 2013.

H. Curtis Spalding,
Regional Administrator,
EPA New England.

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