to the private sector. This Federal action approves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

Sections 202 and 205 do not apply to the proposed disapproval because the proposed disapproval of the SIP submittal would not, in and of itself, constitute a Federal mandate because it would not impose an enforceable duty on any entity. In addition, the Act does not permit EPA to consider types of analyses described in section 202 in determining whether a SIP submittal meets the CAA. Finally, section 203 does not apply to the proposed disapproval because it would affect only the Commonwealth of Massachusetts, which is not a small government.

*G. National Technology Transfer and Advancement Act*

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing new regulations. To comply with NTTAA, the EPA must consider and use ''voluntary consensus standards'' (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Hydrocarbons, Intergovernmental relations, Nitrogen dioxide, Ozone.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: November 30, 1999.

**Mindy S. Lubber,**

*Deputy Regional Administrator, Region I.*

[FR Doc. 99–31709 Filed 12–15–99; 8:45 am]

**BILLING CODE 6560–50–P**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[CT056–7215–FRL–6501–9]**

## Approval and Promulgation of Implementation Plans; Connecticut; One-Hour Ozone Attainment Demonstration; Greater Connecticut Ozone Nonattainment Area

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The EPA is proposing to approve the ground-level one-hour ozone attainment demonstration State Implementation Plan (SIP) for the Greater Connecticut ozone nonattainment area submitted by the Commissioner of the Connecticut Department of Environmental Protection (CT DEP) on September 16, 1998. We are also proposing, in the alternative, to disapprove this demonstration if Connecticut does not submit an adequate motor vehicle emissions budget consistent with attainment. EPA is also proposing approval of an attainment date extension until November 15, 2007 for the Greater Connecticut nonattainment area.

**DATES:** Comments must be received on or before February 14, 2000.

**ADDRESSES:** Written comments (in duplicate if possible) should be sent to: David B. Conroy at the EPA Region I (New England) Office, One Congress Street, Suite 1100–CAQ, Boston, Massachusetts 02114–2023.

Copies of the State submittal and EPA's technical support document are available for public inspection during normal business hours at the following address: U.S. Environmental Protection Agency, Region 1 (New England), One Congress St., 11th Floor, Boston, Massachusetts. Telephone (617) 918–1664, an at the Bureau of Air Management, Department of Environmental Protection, State Office Building, 79 Elm Street, Hartford, CT 06106. Please telephone in advance before visiting.

**FOR FURTHER INFORMATION CONTACT:** Richard Burkhart (617) 918–1664.

**SUPPLEMENTARY INFORMATION:** This document provides background information on attainment demonstration SIPs for the one-hour ozone national ambient air quality standard (NAAQS) and an analysis of the one-hour ozone attainment demonstration SIP submitted by the CT DEP for the Greater Connecticut nonattainment area. This document addresses the following questions:



### I. Background

*A. What Is the Basis for the State's Attainment Demonstration SIP?*

1. CAA Requirements

The Clean Air Act (CAA) requires EPA to establish national ambient air quality standards (NAAQS or standards) for certain widespread pollutants that cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. CAA sections 108 and 109. In 1979, EPA promulgated the one-hour 0.12 parts per million (ppm) ground-level ozone standard. 44 FR 8202 (Feb. 8, 1979). Ground-level ozone is not emitted directly by sources. Rather, emissions of nitrogen oxides ($NO_X$) and volatile organic compounds (VOCs) react in the presence of sunlight to form ground-level ozone. $NO_X$ and VOC are referred to as precursors of ozone.

An area exceeds the one-hour ozone standard each time an ambient air quality monitor records a one-hour average ozone concentration above 0.124 ppm. An area is violating the standard if, over a consecutive three-year period, more than three exceedances are expected to occur at any one monitor. The CAA, as amended in 1990, required EPA to designate as nonattainment any area that was violating the one-hour ozone standard, generally based on air quality monitoring data from the three-year period from 1987–1989. CAA section 107(d)(4); 56 FR 56694 (Nov. 6, 1991). The CAA further classified these areas, based on the area's design value, as marginal, moderate, serious, severe or extreme. CAA section 181(a). Marginal areas were suffering the least significant air pollution problems while the areas classified as severe and extreme had the most significant air pollution problems.

The control requirements and dates by which attainment needs to be achieved vary with the area's classification. Marginal areas are subject to the fewest mandated control

requirements and have the earliest attainment date. Severe and extreme areas are subject to more stringent planning requirements but are provided more time to attain the standard. Serious areas are required to attain the one-hour standard by November 15, 1999 and severe areas are required to attain by November 15, 2005 or November 15, 2007. The Greater Connecticut area is classified as serious and its attainment date is November 15, 1999.

Under section 182(c)(2) and (d) of the CAA, serious and severe areas were required to submit by November 15, 1994 demonstrations of how they would attain the one-hour standard and how they would achieve reductions in VOC emissions of 9 percent for each three-year period until the attainment year (rate-of-progress or ROP). (In some cases, $NO_X$ emission reduction can be substituted for the required VOC emission reductions.) Today, in this proposed rule, EPA is proposing action on the attainment demonstration SIP submitted by the CT DEP for Greater Connecticut nonattainment area. EPA will take action on the Connecticut's 9% ROP plan for reductions from 1996–1999 in a separate rulemaking action. (The 9% ROP plan was submitted to EPA on December 31, 1997, with minor revisions on January 7, 1998.) In addition, elsewhere in this **Federal Register**, EPA is today proposing to take action on nine other serious or severe one-hour ozone attainment demonstration and, in some cases ROP SIPs. The additional nine areas are, Springfield (Western Massachusetts), New York-North New Jersey-Long Island (NY–NJ–CT), Baltimore (MD), Philadelphia-Wilmington-Trenton (PA–NJ–DE–MD), Metropolitan Washington, D.C. (DC–MD–VA), Atlanta (GA), Milwaukee-Racine (WI), Chicago-Gary-Lake County (IL–IN), and Houston-Galveston-Brazoria (TX).

In general, an attainment demonstration SIP includes a modeling analysis component showing how the area will achieve the standard by its attainment date and the control measures necessary to achieve those reductions. Another component of the attainment demonstration SIP is a motor vehicle emissions budget for transportation conformity purposes. Transportation conformity is a process for ensuring that States consider the effects of emissions associated with new or improved federally-funded roadways on attainment of the standard. As described in section 176(c)(2)(A), attainment demonstrations necessarily include the estimates of motor vehicle emissions that are consistent with attainment, which then act as a budget or ceiling for the purposes of determining whether transportation plans and projects conform to the attainment SIP.

2. History and Time Frame for the State's Attainment Demonstration SIP

Notwithstanding significant efforts by the States, in 1995 EPA recognized that many States in the eastern half of the United States could not meet the November 1994 time frame for submitting an attainment demonstration SIP because emissions of $NO_X$ and VOCs in upwind States (and the ozone formed by these emissions) affected these nonattainment areas and the full impact of this effect had not yet been determined. This phenomenon is called ozone transport.

On March 2, 1995, Mary D. Nichols, EPA's then Assistant Administrator for Air and Radiation, issued a memorandum to EPA's Regional Administrators acknowledging the efforts made by States but noting the remaining difficulties in making attainment demonstration SIP submittals.[1] Recognizing the problems created by ozone transport, the March 2, 1995 memorandum called for a collaborative process among the States in the eastern half of the country to evaluate and address transport of ozone and its precursors. This memorandum led to the formation of the Ozone Transport Assessment Group (OTAG)[2] and provided for the States to submit the attainment demonstration SIPs based on the expected time frames for OTAG to complete its evaluation of ozone transport.

In June 1997, OTAG concluded and provided EPA with recommendations regarding ozone transport. The OTAG generally concluded that transport of ozone and the precursor $NO_X$ is significant and should be reduced regionally to enable States in the eastern half of the country to attain the ozone NAAQS.

In recognition of the length of the OTAG process, in a December 29, 1997 memorandum, Richard Wilson, EPA's then Acting Assistant Administrator for Air and Radiation, provided until April 1998 for States to submit the following elements of their attainment demonstration SIPs for serious and severe areas: (1) evidence that the applicable control measures in subpart 2 of part D of title I of the CAA were adopted and implemented or were on an expeditious course to being adopted and implemented; (2) a list of measures needed to meet the remaining ROP emissions reduction requirement and to reach attainment; (3) for severe areas only, a commitment to adopt and submit target calculations for post-1999 ROP and the control measures necessary for attainment and ROP plans through the attainment year by the end of 2000; (4) a commitment to implement the SIP control programs in a timely manner and to meet ROP emissions reductions and attainment; and (5) evidence of a public hearing on the State submittal.[3] This submission is sometimes referred to as the Phase 2 submission. Motor vehicle emissions budgets can be established based on a commitment to adopt the measures needed for attainment and identification of the measures needed. Thus, State submissions due in April 1998 under the Wilson policy should have included a motor vehicle emissions budget.

Building upon the OTAG recommendations and technical analyses, in November 1997, EPA proposed action addressing the ozone transport problem. In its proposal, the EPA found that current SIPs in 22 States and the District of Columbia (23 jurisdictions) were insufficient to provide for attainment and maintenance of the one-hour standard because they did not regulate $NO_X$ emissions that significantly contribute to ozone transport. 62 FR 60318 (Nov. 7, 1997). The EPA finalized that rule in September 1998, calling on the 23 jurisdictions to revise their SIPs to require $NO_X$ emissions reductions within the State to a level consistent with a $NO_X$ emissions budget identified in the final rule. 63 FR 57356 (Oct. 27, 1998). This final rule is commonly referred to as the $NO_X$ SIP Call.

3. Attainment Date Delays Due to Transport

On July 16, 1998, EPA's then Acting Assistant Administrator, Richard Wilson, issued a guidance memorandum intended to provide further relief to areas affected by ozone transport.[4] The memorandum

[1] Memorandum, ''Ozone Attainment Demonstrations,'' issued March 2, 1995. A copy of the memorandum may be found on EPA's web site at http://www.epa.gov/ttn/oarpg/t1pgm.html.

[2] Letter from Mary A. Gade, Director, State of Illinois Environmental Protection Agency to Environmental Council of States (ECOS) Members, dated April 13, 1995.

[3] Memorandum, ''Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM 10 NAAQS,'' issued December 29, 1997. A copy of this memorandum may be found on EPA's web site at http://www.epa.gov/ttn/oarpg/t1pgm.html.

[4] Memorandum, ''Extension of Attainment Dates for Downwind Transport Areas,'' issued July 16, 1998. This memorandum is applicable to both moderate and serious ozone nonattainment areas. A

Continued

recognized that many moderate and serious areas are affected by transported pollution from either an upwind area in the same State with a higher classification and later attainment date, and/or from an upwind area in another State that is significantly contributing to the downwind area's nonattainment problem. The policy recognized that some downwind areas may be unable to meet their own attainment dates, despite doing all that was required in their local area, because an upwind area may not have adopted and implemented all of the controls that would benefit the downwind area through control of transported ozone before the downwind area's attainment date. Thus, the policy provided that upon a successful demonstration that an upwind area has interfered with attainment and that the downwind area is adopting all measures required for its local area [5] for attainment but for this interference, EPA may grant an extension of the downwind area's attainment date.[6] Once an area receives an extension of its attainment date based on transport, the area would no longer be subject to reclassification to a higher classification and subject to additional requirements for failure to attain by its original attainment date provided it was doing all that was necessary locally.

A request from the CT DEP for such an extension of the attainment date for the Greater Connecticut nonattainment area and EPA's proposed response is discussed in this action.

4. Time Frame for Taking Action on Attainment Demonstration SIPs for 10 Serious and Severe Areas

The States generally submitted the SIPs between April and October of 1998; some States are still submitting additional revisions as described below. Under the CAA, EPA is required to approve or disapprove a State's submission no later than 18 months following submission. (The statute provides up to 6 months for a completeness determination and an additional 12 months for approval or disapproval.) The EPA believes that it is important to keep the process moving forward in evaluating these plans and, as appropriate, approving them. Thus, in today's **Federal Register**, EPA is proposing to take action on the 10 serious and severe one-hour ozone attainment demonstration SIPs (located in 13 States and the District of Columbia) and intends to take final action on these submissions over the next 6–12 months. The reader is referred to individual dates in this document for specific information on actions leading to EPA's final rulemaking on these plans.

5. Options for Action on a State's Attainment Demonstration SIP

Depending on the circumstances unique to each of the 10 area SIP submissions on which EPA is proposing action today, EPA is proposing one or more of these types of approval or disapproval in the alternative. In addition, these proposals may identify additional action that will be necessary from the State.

The CAA provides for EPA to approve, disapprove, partially approve or conditionally approve a State's plan submission. CAA section 110(k). The EPA must fully approve the submission if it meets the attainment demonstration requirement of the CAA. If the submission is deficient in some way, EPA may disapprove the submission. In the alternative, if portions of the submission are approvable, EPA may partially approve and partially disapprove, or may conditionally approve based on a commitment to correct the deficiency by a date certain, which can be no later than one year from the date of EPA's final conditional approval.

The EPA may partially approve a submission if separable parts of the submission, standing alone, are consistent with the CAA. For example, if a State submits a modeled attainment demonstration, including control measures, but the modeling does not demonstrate attainment, EPA could approve the control measures and disapprove the modeling for failing to demonstrate attainment.

The EPA may issue a conditional approval based on a State's commitment to expeditiously correct a deficiency by a date certain that can be no later than one year following EPA's conditional approval. Such commitments do not need to be independently enforceable because, if the State does not fulfill its commitment, the conditional approval is converted to a disapproval. For example, if a State commits to submit additional control measures and fails to submit them or EPA determines the State's submission of the control measures is incomplete, the EPA will notify the State by letter that the conditional approval has been converted to a disapproval. If the State submits control measures that EPA determines are complete or that are deemed complete, EPA will determine through rulemaking whether the State's attainment demonstration is fully approvable or whether the conditional approval of the attainment demonstration should be converted to a disapproval.

Finally, EPA has recognized that in some limited circumstances, it may be appropriate to issue a full approval for a submission that consists, in part, of an enforceable commitment. Unlike the commitment for conditional approval, such an enforceable commitment can be enforced in court by EPA or citizens. In addition, this type of commitment may extend beyond one year following EPA's approval action. Thus, EPA may accept such an enforceable commitment where it is infeasible for the State to accomplish the necessary action in the short term.

*B. What are the Components of a Modeled Attainment Demonstration?*

The EPA provides that States may rely on a modeled attainment demonstration supplemented with additional evidence to demonstrate attainment.[7] In order to have a complete modeling demonstration submission, States should have submitted the required modeling analysis and identified any additional evidence that EPA should consider in evaluating whether the area will attain the standard.

1. Modeling Requirements

For purposes of demonstrating attainment, the CAA requires serious and severe areas to use photochemical grid modeling or an analytical method EPA determines to be as effective. The

copy of this policy may be found on EPA's web site at http://www.epa.gov/ttn/oarpg/t1pgm.html.

[5] Local area measures would include all of the measures within the local modeling domain that were relied on for purposes of the modeled attainment demonstration.

[6] The policy provides that the area must meet four criteria to receive an attainment date extension. In summary, the area must: (1) be identified as a downwind area affected by transport from either an upwind area in the same State with a later attainment date or an upwind area in another State that significantly contributes to downwind nonattainment; (2) submit an approvable attainment demonstration with any necessary, adopted local measures and with an attainment date that reflects when the upwind reductions will occur; (3) adopt all local measures required under the area's current classification and any additional measures necessary to demonstrate attainment; and (4) provide that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved.

[7] The EPA issued guidance on the air quality modeling that is used to demonstrate attainment with the one-hour ozone NAAQS. See U.S. EPA, (1991), Guideline for Regulatory Application of the Urban Airshed Model, EPA–450/4–91–013, (July 1991). A copy may be found on EPA's web site at http://www.epa.gov/ttn/scram/ (file name: ''UAMREG''). See also U.S. EPA, (1996), Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS, EPA–454/B–95–007, (June 1996). A copy may be found on EPA's web site at http://www.epa.gov/ttn/scram/ (file name: ''O3TEST'').

photochemical grid model is set up using meteorological conditions conducive to the formation of ozone. Emissions for a base year are used to evaluate the model's ability to reproduce actual monitored air quality values and to predict air quality changes in the attainment year due to the emission changes which include growth up to and controls implemented by the attainment year. A modeling domain is chosen that encompasses the nonattainment area. Attainment is demonstrated when all predicted concentrations inside the modeling domain are at or below the NAAQS or at an acceptable upper limit above the NAAQS permitted under certain conditions by EPA's guidance. When the predicted concentrations are above the NAAQS, an optional weight of evidence determination which incorporates, but is not limited to, other analyses such as air quality and emissions trends, may be used to address uncertainty inherent in the application of photochemical grid models.

The EPA guidance identifies the features of a modeling analysis that are essential to obtain credible results. First, the State must develop and implement a modeling protocol. The modeling protocol describes the methods and procedures to be used in conducting the modeling analyses and provides for policy oversight and technical review by individuals responsible for developing or assessing the attainment demonstration (State and local agencies, EPA Regional offices, the regulated community, and public interest groups). Second, for purposes of developing the information to put into the model, the State must select air pollution days, i.e., days in the past with bad air quality, that are representative of the ozone pollution problem for the nonattainment area. Third, the State needs to identify the appropriate dimensions of the area to be modeled, *i.e.,* the domain size. The domain should be larger than the designated nonattainment area to reduce uncertainty in the boundary conditions and should include large upwind sources just outside the nonattainment area. In general, the domain is considered the local area where control measures are most beneficial to bring the area into attainment. Fourth, the State needs to determine the grid resolution. The horizontal and vertical resolutions in the model affect the dispersion and transport of emission plumes. Artificially large grid cells (too few vertical layers and horizontal grids) may dilute concentrations and may not properly consider impacts of complex terrain, complex meteorology, and land/water interfaces. Fifth, the State needs to generate meteorological data that describe atmospheric conditions and emissions inputs. Finally, the State needs to verify that the model is properly simulating the chemistry and atmospheric conditions through diagnostic analyses and model performance tests. Once these steps are satisfactorily completed, the model is ready to be used to generate air quality estimates to support an attainment demonstration.

The modeled attainment test compares model predicted one-hour daily maximum concentrations in all grid cells for the attainment year to the level of the NAAQS. A predicted concentration above 0.124 ppm ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to attain the standard. This type of test is often referred to as an exceedance test. The EPA's guidance recommends that States use either of two modeled attainment or exceedance tests for the one-hour ozone NAAQS: a deterministic test or a statistical test.

The deterministic test requires the State to compare predicted one-hour daily maximum ozone concentrations for each modeled day [8] to the attainment level of 0.124 ppm. If none of the predictions exceed 0.124 ppm, the test is passed.

The statistical test takes into account the fact that the form of the one-hour ozone standard allows exceedances. If, over a three-year period, the area has an average of one or fewer exceedances per year, the area is not violating the standard. Thus, if the State models a very extreme day, the statistical test provides that a prediction above 0.124 ppm up to a certain upper limit may be consistent with attainment of the standard. (The form of the one-hour standard allows for up to three readings above the standard over a three-year period before an area is considered to be in violation.)

The acceptable upper limit above 0.124 ppm is determined by examining the size of exceedances at monitoring sites which meet the one-hour NAAQS. For example, a monitoring site for which the four highest one-hour average concentrations over a three-year period are 0.136 ppm, 0.130 ppm, 0.128 ppm and 0.122 ppm is attaining the standard. To identify an acceptable upper limit, the statistical likelihood of observing ozone air quality exceedances of the standard of various concentrations is equated to the severity of the modeled day. The upper limit generally represents the maximum ozone concentration observed at a location on a single day and it would be the only reading above the standard that would be expected to occur no more than an average of once a year over a three-year period. Therefore, if the maximum ozone concentration predicted by the model is below the acceptable upper limit, in this case 0.136 ppm, then EPA might conclude that the modeled attainment test is passed. Generally, exceedances well above 0.124 ppm are very unusual at monitoring sites meeting the NAAQS. Thus, these upper limits are rarely substantially higher than the attainment level of 0.124 ppm.

2. Additional Analyses Where Modeling Fails To Show Attainment

When the modeling does not conclusively demonstrate attainment, additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with modeling and its results. For example, there are uncertainties in some of the modeling inputs, such as the meteorological and emissions data bases for individual days and in the methodology used to assess the severity of an exceedance at individual sites. The EPA's guidance recognizes these limitations, and provides a means for considering other evidence to help assess whether attainment of the NAAQS is likely. The process by which this is done is called a weight of evidence (WOE) determination.

Under a WOE determination, the State can rely on and EPA will consider factors such as other modeled attainment tests, e.g., a rollback analysis; other modeled outputs, e.g., changes in the predicted frequency and pervasiveness of exceedances and predicted changes in the design value; actual observed air quality trends; estimated emissions trends; analyses of air quality monitored data; the responsiveness of the model predictions to further controls; and, whether there are additional control measures that are or will be approved into the SIP but were not included in the modeling analysis. This list is not an exclusive list of factors that may be considered and these factors could vary from case to case. The EPA's guidance contains no limit on how close a modeled attainment test must be to passing to conclude that other evidence besides an attainment test is sufficiently compelling to suggest attainment.

[8] The initial, ''ramp-up'' days for each episode are excluded from this determination.

However, the further a modeled attainment test is from being passed, the more compelling the WOE needs to be.

The EPA's 1996 modeling guidance also recognizes a need to perform a mid-course review as a means for addressing uncertainty in the modeling results. Because of the uncertainty in long term projections, EPA believes a viable attainment demonstration that relies on WOE needs to contain provisions for periodic review of monitoring, emissions, and modeling data to assess the extent to which refinements to emission control measures are needed. The mid-course review is discussed in Section C.6.

*C. What Is the Frame Work for Proposing Action on the Attainment Demonstration SIPs?*

In addition to the modeling analysis and WOE support demonstrating attainment, the EPA has identified the following key elements which must be present in order for EPA to approve or conditionally approve the one-hour attainment demonstration SIPs. These elements are listed below and then described in detail.

—CAA measures and measures relied on in the modeled attainment demonstration SIP. This includes adopted and submitted rules for all previously required CAA mandated measures for the specific area classification. This also includes measures that may not be required for the area classification but that the State relied on in the SIP submission for attainment and ROP plans on which EPA is proposing to take action on today.

—$NO_X$ reductions affecting boundary conditions.

—Motor vehicle emissions budget. A motor vehicle emissions budget which can be determined by EPA to be adequate for conformity purposes.

—Tier 2/Sulfur program benefits where needed to demonstrate attainment. Inclusion of reductions expected from EPA's Tier 2 tailpipe and low sulfur-in-fuel standards in the attainment demonstration and the motor vehicle emissions budget.

—In certain areas, additional measures to further reduce emissions to support the attainment test. Additional measures, may be measures adopted regionally such as in the Ozone Transport Region (OTR), or locally (intrastate) in individual States.

—Mid-course review. An enforceable commitment to conduct a mid-course review and evaluation based on air quality and emission trends. The mid-course review would show whether the adopted control measures are sufficient to reach attainment by the area's attainment date, or that additional control measures are necessary.

1. CAA Measures and Measures Relied On in the Modeled Attainment Demonstration SIP

The States should have adopted the control measures already required under the CAA for the area classification. Since these 10 serious and severe areas need to achieve substantial reductions from their 1990 emissions levels in order to attain, EPA anticipates that these areas need all of the measures required under the CAA to attain the one-hour ozone NAAQS.

In addition, a state may have included more control measures in its attainment strategy that are in addition to measures required in the CAA. (For serious areas, these should have already been identified and adopted, whereas severe areas have until December 2000 to submit measures necessary to achieve ROP through the attainment year and to attain.) For purposes of fully approving the State's SIP, the State will need to adopt and submit all VOC and $NO_X$ controls within the local modeling domain that were relied on for purposes of the modeled attainment demonstration

The information in Table 1 is a summary of the CAA requirements that need to be met for each serious area for the one-hour ozone NAAQS. These requirements are specified in section 182 of the CAA. Information on more measures that States may have adopted or relied on in their current SIP submissions is not shown in the table. EPA will need to take final action approving all measures relied on for attainment, including the required ROP control measures and target calculations, before EPA can issue a final full approval of the attainment demonstration as meeting CAA section 182(c)(2).

TABLE 1.—CAA REQUIREMENTS FOR SERIOUS AREAS

| |
|---|
| —NSR for VOC and $NO_X$,[1] including an offset ratio of 1.2:1 and a major VOC and $NO_X$ source cutoff of 50 tons per year (tpy). |
| —Reasonable Available Control Technology (RACT) for VOC and $NO_X$.[1] |
| —Enhanced Inspection and Maintenance (I/M) program. |
| —15% volatile organic compound (VOC) plans. |
| —Emissions inventory. |
| —Emission statements. |
| —Periodic inventories. |
| —Attainment demonstration. |
| —9 percent ROP plan through 1999. |
| —Clean fuels program or substitute. |
| —Enhanced monitoring Photochemical Assessment Monitoring stations (PAMS). |
| —Stage II vapor recovery. |

[1] Unless the area has in effect a $NO_X$ waiver under section 182(f). The Greater Connecticut area is not such an area.

2. $NO_X$ Reductions Consistent With the Modeling Demonstration

The EPA completed final rulemaking on the $NO_X$ SIP call on October 27, 1998, which required States to address transport of $NO_X$ and ozone to other States. To address transport, the $NO_X$ SIP call established emissions budgets for $NO_X$ that 23 jurisdictions were required to show they would meet through enforceable SIP measures adopted and submitted by September 30, 1999. The $NO_X$ SIP call is intended to reduce emissions in upwind States that significantly contribute to nonattainment problems. The EPA did not identify specific sources that the States must regulate nor did EPA limit the States' choices regarding where to achieve the emission reductions. Subsequently, a three-judge panel of the Court of Appeals for the District of Columbia Circuit issued an order staying the portion of the $NO_X$ SIP call rule requiring States to submit rules by September 30, 1999.

The $NO_X$ SIP call rule establishes budgets for the States in which 9 of the nonattainment areas for which EPA is proposing action today are located. The 9 areas are: Greater Connecticut, Springfield MA, New York-North New Jersey-Long Island (NY–NJ–CT), Baltimore MD, Philadelphia-Wilmington-Trenton (PA–NJ–DE–MD), Metropolitan Washington, D.C. (DC–MD–VA), Atlanta GA, Milwaukee-Racine WI, and Chicago-Gary-Lake County (IL–IN).

Emission reductions that will be achieved through EPA's $NO_X$ SIP call will reduce the levels of ozone and ozone precursors entering nonattainment areas at their boundaries. For purposes of developing attainment demonstrations, States define local modeling domains that include both the nonattainment area and nearby surrounding areas. The ozone levels at the boundary of the local modeling domain are reflected in modeled attainment demonstrations and are referred to as boundary conditions. With the exception of Houston, the one-hour attainment demonstrations on which EPA is proposing action have relied, in part, on the $NO_X$ SIP Call reductions for purposes of determining the boundary

conditions of the modeling domain. Emission reductions assumed in the attainment demonstrations are modeled to occur both within the State and in upwind States; thus, intrastate reductions as well as reductions in other States impact the boundary conditions. Although the court has indefinitely stayed the SIP submission deadline, the $NO_X$ SIP Call rule remains in effect. Therefore, EPA believes it is appropriate to allow States to continue to assume the reductions from the $NO_X$ SIP call in areas outside the local one-hour modeling domains. If States assume control levels and emission reductions other than those of the $NO_X$ SIP call within their State but outside of the modeling domain, States must also adopt control measures to achieve those reductions in order to have an approvable plan.

Accordingly, States in which the nonattainment areas are located will not be required to adopt measures outside the modeling domain to achieve the $NO_X$ SIP call budgets prior to the time that all States are required to comply with the $NO_X$ SIP call. If the reductions from the $NO_X$ SIP call do not occur as planned, States will need to revise their SIPs to add additional local measures or obtain interstate reductions, or both, in order to provide sufficient reductions needed for attainment.

As provided in section 1 above, any controls assumed by the State inside the local modeling domain [9] for purposes of the modeled attainment demonstration must be adopted and submitted as part of the State's one-hour attainment demonstration SIP. It is only for reductions occurring outside the local modeling domain that States may assume implementation of $NO_X$ SIP call measures and the resulting boundary conditions.

3. Motor Vehicle Emissions Budget

The EPA believes that attainment demonstration SIPs must necessarily estimate the motor vehicle emissions that will be produced in the attainment year and demonstrate that this emissions level, when considered with emissions from all other sources, is consistent with attainment. The estimate of motor vehicle emissions is used to determine the conformity of transportation plans and programs to the SIP, as described by CAA section 176(c)(2)(A). For transportation conformity purposes, the estimate of motor vehicle emissions is known as the motor vehicle emissions budget. The EPA believes that appropriately identified motor vehicle emissions budgets are a necessary part of an attainment demonstration SIP. A SIP cannot effectively demonstrate attainment unless it identifies the level of motor vehicle emissions that can be produced while still demonstrating attainment.

The EPA has determined that except for the Western MA (Springfield) attainment demonstration SIP, the motor vehicle emission budgets for all areas in today's proposals are inadequate or missing from the attainment demonstration. Therefore, EPA is proposing to disapprove the attainment demonstration SIPs for those nine areas if the States do not submit motor vehicle emissions budgets that EPA can find adequate by May 31, 2000. In order for EPA to complete the adequacy process by the end of May, States should submit a budget no later than December 31, 1999.[10] If an area does not have a motor vehicle emissions budget that EPA can determine adequate for conformity purposes by May 31, 2000, EPA plans to take final action at that time disapproving in full or in part the area's attainment demonstration. The emissions budget should reflect all the motor vehicle control measures contained in the attainment demonstration, i.e., measures already adopted for the nonattainment area as well as those yet to be adopted.

4. Tier 2/Sulfur Program Benefits

On May 13, 1999, EPA published a Notice of Proposed Rulemaking (NPRM) proposing a major, comprehensive program designed to significantly reduce emissions from passenger cars and light trucks (including sport-utility vehicles, minivans, and pickup trucks) and to reduce sulfur in gasoline. Under the proposed program, automakers would produce vehicles designed to have very low emissions when operated on low-sulfur gasoline, and oil refiners would provide that cleaner gasoline nationwide. The EPA subsequently issued two supplemental notices. 64 FR 35112 (June 30, 1999); 64 FR 57827 (October 27, 1999).

These notices provide one-hour ozone modeling and monitoring information that support EPA's belief that the Tier 2/Sulfur program is necessary to help areas attain the one-hour NAAQS. Under the proposed rule, $NO_X$ and VOC emission reductions (as well as other reductions not directly relevant for attainment of the one-hour ozone standard) would occur beginning in the 2004 ozone season although incentives for early compliance by vehicle manufacturers and refiners will likely result in some reductions prior to 2004. Nationwide, the Tier 2/Sulfur program is projected to result in reductions of approximately 800,000 tons of $NO_X$ per year by 2007 and 1,200,000 tons by 2010.

In the October 27, 1999 supplemental notice, EPA reported in Table 1 that EPA's regional ozone modeling indicated that 17 metropolitan areas for which the one-hour standard applies need the Tier 2/Sulfur program reductions to help attain the one-hour ozone standard. The Greater Connecticut area whose attainment demonstration EPA is proposing action on today is included on that list.

The EPA issued a memorandum that provides estimates of the emissions reductions associated with the Tier 2/Sulfur program proposal.[11] The memorandum provides the tonnage benefits for the Tier 2/Sulfur program in 2007 on a county-by-county basis for all counties within the 10 serious and severe nonattainment areas for which EPA is proposing to take action today and the 2005 tonnage benefits for the Tier 2/Sulfur program for each county for three areas.

The EPA also issued a memorandum which explains the connection between the Tier 2/Sulfur program, motor vehicle emissions budgets for conformity determinations, and timing for SIP revisions to account for the Tier 2/Sulfur program benefit.[12] This memorandum explains that conformity analyses in serious and severe ozone nonattainment areas can begin

[9] For the purposes of this document, ''local modeling domain'' is typically an urban scale domain with horizontal dimensions less than about 300 km on a side, horizontal grid resolution less than or equal to $5 \times 5$ km or finer. The domain is large enough to ensure that emissions occurring at 8 am in the domain's center are still within the domain at 8 pm the same day. If recirculation of the nonattainment area's previous day's emissions is believed to contribute to an observed problem, the domain is large enough to characterize this.

[10] A final budget is preferred; but, if the State public hearing process is not yet complete, then the draft budget for public hearing may be submitted. The adequacy process generally takes at least 90 days. Therefore, in order for EPA to complete the adequacy process no later than the end of May, EPA must have by February 15, 2000, the final budget or a draft that is substantially similar to what the final budget will be. The State must submit the final budget by April 15, 2000.

[11] Memorandum, ''1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking'' from Lydia Wegman, Office of Air Quality Planning and Standards and Merrylin Zaw-Mon, Office of Mobile Sources to the Air Division Directors, Regions I–VI, issued November 8, 1999. A copy of this memorandum may be found on EPA's web site at http://www.epa.gov/oms/transp/traqconf.htm.

[12] Memorandum, ''Guidance on Motor Vehicle emissions Budgets in One-Hour Ozone Attainment Demonstrations'', from Merrylin Zaw-Mon, Office of Mobile Sources, to Air Division Directors, Regions I–VI, issued November 3, 1999. A copy of this memorandum may be found on EPA's web site at http://www.epa.gov/oms/transp/traqconf.htm.

including Tier 2/Sulfur program benefits once EPA's Tier 2 rule is promulgated, provided that the attainment demonstration SIPs and associated motor vehicle emissions budgets include the Tier 2 benefits. For areas that require all or some portion of the Tier 2 benefits to demonstrate attainment but have not yet included the benefits in the motor vehicle emissions budgets, EPA's adequacy finding will include a condition that conformity determinations may not take credit for Tier 2 until the SIP budgets are revised to reflect Tier 2 benefits. See EPA's memorandum for more information.

For the New York-North New Jersey-Long Island, Philadelphia-Wilmington-Trenton, Baltimore, Houston-Galveston-Brazoria and Atlanta nonattainment areas, the EPA is proposing to determine that additional emission reduction beyond those provided by the SIP submission are necessary for attainment. With the exception of the Atlanta nonattainment area, a portion of that reduction will be achieved by EPA's Tier 2/Sulfur program, which EPA expects to finalize shortly. States that need to rely in whole or in part on the Tier 2 benefits to help demonstrate attainment will need to adjust the demonstration for their SIP submission, emission inventories and motor vehicle emissions budgets to include the Tier 2/Sulfur program reductions in order for EPA to approve the SIP submittal. The submittal requirement including the analysis to make that submission is described in the two memoranda cited. States may use the tonnage benefits and guidance in these memoranda to make these adjustments to the SIP submission and motor vehicle emission budgets. The EPA encourages States to submit these SIP revisions by December 31, 1999 to allow EPA to include them in the motor vehicle emissions budget adequacy determinations which need to be completed by May 31, 2000. Alternatively, these revisions should be submitted by July 2000 for serious nonattainment areas, as EPA anticipates completing rulemaking on these SIPs in the fall of 2000. For severe nonattainment areas, these revisions should be submitted by December 31, 2000.

A number of areas for which the EPA is not proposing to determine that additional emission reduction beyond those provided by the SIP submission are necessary for attainment will be taking a partial credit for Tier 2 when they use credit from national low emissions vehicles (NLEV) in their attainment demonstration. These nonattainment areas are the Milwaukee-Racine, Chicago-Gary-Lake County and Metropolitan Washington, D.C. areas. By regulation, the NLEV standards do not extend beyond the 2003 model year unless EPA promulgates Tier 2 vehicle standards at least as stringent as the NLEV standards. See 40 CFR 86.1701–99(c). Thus, the emission reductions relied upon from 2004 and later model year NLEV vehicles will actually be due to the promulgation of the Tier 2 standards, either through the extension of the NLEV program or a portion of the reduction from vehicles meeting the Tier 2 standards.

Like all the other SIPs that rely on Tier 2 reductions in order to demonstrate attainment, the attainment demonstrations for the Milwaukee-Racine, Chicago-Gary-Lake County and Metropolitan Washington, D.C. areas must be revised to estimate the effects of Tier 2 according to our policy before EPA can take final action approving such attainment demonstrations. Until the SIPs are revised to include full Tier 2 credit, EPA can determine by May 31, 2000 that a motor vehicle emissions budget is adequate if the budget would be otherwise adequate. No conditions need be placed on such adequacy determinations since the budgets in such SIPs already include reductions equivalent to the amount of emission reductions the areas will be relying on from Tier 2 by virtue of the NLEV reductions included in the budgets.

a. *Revisions to the Motor Vehicle Emissions Budget and the Attainment Demonstration When EPA Issues the MOBILE6 Model.* Within one year of when EPA issues the MOBILE6 model for estimating mobile source emissions which takes into account the emissions benefit of EPA's Tier 2/Sulfur program, States will need to revise their motor vehicle emissions budgets in their attainment demonstration SIPs if the Tier 2/Sulfur program is necessary for attainment. In addition, the budgets will need to be revised using MOBILE6 in those areas that do not need the Tier 2/Sulfur program for attainment but decide to include its benefits in the motor vehicle emissions budget anyway. The EPA will work with States on a case-by-case basis if the new emission estimates raise issues about the sufficiency of the attainment demonstration.

States described in the paragraph above will need to submit an enforceable commitment in the near term to revise their motor vehicle emissions budget within one year after EPA's release of MOBILE6. This commitment should be submitted to EPA along with the other commitments discussed elsewhere in this notice, or alternatively, as part of the SIP revision that modifies the motor vehicle emission inventories and budgets to include the Tier 2/Sulfur program benefits needed in order for EPA to approve the SIP submittal.[13]

5. Additional Measures To Further Reduce Emissions

The EPA is proposing to find that the attainment demonstrations for New York-North New Jersey-Long Island; Baltimore; Philadelphia-Wilmington-Trenton; Atlanta and Houston-Galveston-Brazoria even considering the Tier 2/Sulfur program reductions and the WOE, will not achieve attainment without the application of additional emission control measures to achieve additional emission reductions. Thus, for each of these areas, EPA has identified specific tons per day emissions of $NO_X$ and/or VOC that must be reduced through additional control measures in order to demonstrate attainment and to enable EPA to approve the demonstration. The need for additional emission reductions is generally based on a lack of sufficient compelling evidence that the demonstration shows attainment at the current level of adopted or planned emission controls. As discussed below the Greater Connecticut area does contain compelling evidence that attainment will be attained by its proposed attainment date of November 2007, and that the area does not need the additional reductions outlined in this section. The details for the Greater Connecticut area are discussed below.

6. Mid-Course Review

A mid-course review (MCR) is a reassessment of modeling analyses and more recent monitored data to determine if a prescribed control strategy is resulting in emission reductions and air quality improvements needed to attain the ambient air quality standard for ozone as expeditiously as practicable but no later than the statutory dates.

The EPA believes that a commitment to perform a MCR is a critical element of the WOE analysis for the attainment demonstration on which EPA is proposing to take action today. In order to approve the attainment demonstration SIP for the Greater Connecticut area, EPA believes that the

[13] For purposes of conformity, the State needs a commitment that has been subject to public hearing. If the State has submitted a commitment that has been subject to public hearing and that provides for the adoption of all measures necessary for attainment, the State should submit a letter prior to December 31, 1999, amending the commitment to include the revision of the budget after the release of MOBILE6.

State must have an enforceable commitment to perform a MCR as described here. [14]

The Connecticut DEP submitted an enforceable commitment with its attainment demonstration on September 16, 1998, to submit a MCR in the 2001/2002 time frame and an additional MCR in 2005. To make it easier for EPA to accept that commitment of an MCR, Connecticut should revise its commitment to agree to perform the MCR immediately following the 2003 ozone season and to submit the results to EPA by December 31, 2003. Connecticut should also revise its commitment to agree to work with EPA in a public consultative process to develop a methodology for performing the MCR and developing the criteria by which adequate progress would be judged.

EPA believes that an analysis in 2003 would be most robust since some or all of the regional $NO_X$ emission reductions should be achieved by that date. EPA would then review the results and determine whether any States need to adopt and submit additional control measures for purposes of attainment. The EPA is not requesting that States commit now to adopt new control measures as a result of this process. It would be impracticable for the States to make a commitment that is specific enough to be considered enforceable. Moreover, the MCR could indicate that upwind States may need to adopt some or all of the additional controls needed to ensure an area attains the standard. Therefore, if EPA determines additional control measures are needed for attainment, EPA would determine whether additional emission reductions as necessary from States in which the nonattainment area is located or upwind States, or both. The EPA would require the affected State or States to adopt and submit the new measures within a period specified at the time. The EPA anticipates that these findings would be made as calls for SIP revisions under section 110(k)(5) and, therefore, the period for submission of the measures would be no longer than 18 months after the EPA finding. A draft guidance document regarding the MCR process is located in the docket for this proposal and may also be found on EPA's web site at http://www.epa.gov/ttn/scram.

*D. What Does EPA Expect To Happen With Respect to Attainment Demonstrations for the Greater Connecticut One-Hour Ozone Nonattainment Area?*

Table 2 shows a summary of information on what EPA expects from States such as Connecticut to allow EPA to approve the one-hour ozone attainment demonstration SIPs.

TABLE 2.—SUMMARY SCHEDULE OF FUTURE ACTIONS RELATED TO THE ATTAINMENT DEMONSTRATION FOR THE GREATER CONNECTICUT SERIOUS NONATTAINMENT AREA

| Required no later than: | Action |
|---|---|
| 12/31/99 | State submits the following to EPA:<br>—Motor vehicle emissions budget.[1]<br>—Commitments to do the following:<br>—Submit revised SIP & motor vehicle emissions budget one year after MOBILE6 issued.[2]<br>—Perform a mid-course review. |
| 4/15/00 | State submits in final any submissions made in draft by 12/31/99. |
| Before EPA final rulemaking | State submits enforceable commitments for any above mentioned commitments that may not yet have been subjected to public hearing. |
| 7/1/00 | —State revises and submits SIP and motor vehicle emissions budget to account for Tier 2 reductions as needed.[3] |
| Within one year after release of MOBILE6 model | State submits revised SIP & motor vehicle emissions budget based on MOBILE6. |
| 12/31/03 | State submits mid-course review. |

[1] Final budget preferable; however, if public process is not yet complete, then a ''draft'' budget (the one undergoing public process) may be submitted at this time with a final budget by 4/15/00. However, if a final budget is significantly different from the draft submitted earlier, the final budget must be submitted by 2/15/00 to accommodate the 90 day processing period prior to the 5/31/00 date by which EPA must find the motor vehicle emissions budget adequate. Note that the budget can reflect estimated Tier 2 emission reductions—see memorandum from Lydia Wegman and Merrylin Zaw-Mon, ''1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking.''

[2] The revision for MOBILE6 is only required for SIPs that include the effects of Tier 2. The commitment to revise the SIP after MOBILE6 may be submitted at the same time that the state submits the budget that includes the effects of Tier 2 (no later than 7/1/00).

[3] If the state submits such a revision, it must be accompanied by a commitment to revise the SIP and motor vehicle emissions budget 1 year after MOBILE6 is issued (if the commitment has not already been submitted).

*E. What Are the Relevant Policy and Guidance Documents?*

This proposal has cited several policy and guidance memoranda. The EPA has also developed several technical documents related to the rulemaking action in this proposal. Some of the documents have been referenced above. The documents and their location on EPA's web site are listed below; these documents will also be placed in the docket for this proposal action.

Recent Documents

1. ''Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled.'' U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, Air Quality Modeling Group, Research Triangle Park, NC 27711. November 1999. Web site: http://www.epa.gov/ttn/scram/ (file name: ''ADDWOE1H'').

2. ''Serious and Severe Ozone Nonattainment Areas: Information on Emissions, Control Measures Adopted or Planned and Other Available Control Measures.'' Draft Report. November 3, 1999. Ozone Policy and Strategies Group. U.S. EPA, RTP, NC.

3. Memorandum from Merrylin Zaw-Mon to the Air Division Directors, Regions I–VI, ''Guidance on Motor Vehicle Emissions Budgets in One-Hour Attainment Demonstrations.'' November 3, 1999. Web site: http://www.epa.gov/oms/ transp/traqconf.htm

4. Memorandum from Lydia Wegman and Merrylin Zaw-Mon to the Air Division Directors, Regions I–VI,

[14] For purposes of conformity, the State needs a commitment that has been subject to public hearing. If the State has submitted a commitment that has been subject to public hearing and that provides for the adoption of all measures necessary for attainment, the State should submit a letter prior to December 31, 1999, amending the commitment to include the MCR.

''1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur/Sulfur Rulemaking.'' November 8, 1999. Web site: http://www.epa.gov/oms/transp/traqconf.htm

5. Draft Memorandum, ''Analyses To Support Mid-course Review Of SIP's To Meet The 1-hr NAAQS For Ozone.'' From John Seitz, Director, Office of Air Quality Planning and Standards. Web site: http://www.epa.gov/ttn/scram (file name: ''DR6MCR'').

6. Memorandum, ''Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.'' John S. Seitz, Director, Office of Air Quality Planning and Standards. November 30, 1999. Web site: http://www.epa.gov/ttn/oarpg/t1pgm.html.

Previous Documents

1. U.S. EPA, (1991), Guideline for Regulatory Application of the Urban Airshed Model, EPA–450/4–91–013, (July 1991). Web site: http://www.epa.gov/ttn/scram/ (file name: ''UAMREG'').

2. U.S. EPA, (1996), Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS, EPA–454/B–95–007, (June 1996). Web site: http://www.epa.gov/ttn/scram/ (file name: ''O3TEST'').

3. Memorandum, ''Ozone Attainment Demonstrations,'' from Mary D. Nichols, issued March 2, 1995. Web site: http://www.epa.gov/ttn/oarpg/t1pgm.html.

4. Memorandum, ''Extension of Attainment Dates for Downwind Transport Areas,'' issued July 16, 1998. Web site: http://www.epa.gov/ttn/oarpg/t1pgm.html.

5. December 29, 1997 Memorandum from Richard Wilson, Acting Assistant Administrator for Air and Radiation ''Guidance for Implementing the 1-Hour Ozone and Pre-Existing $PM_{10}$ NAAQS.'' Web site: http://www.epa.gov/ttn/oarpg/t1pgm.html

## II. How Does the Connecticut Submittal Satisfy the Frame Work?

This section provides a review of Connecticut's submittal and an analysis of how this submittal satisfies the frame work discussed in Section I. of this notice.

### *A. What Was Submitted by Connecticut?*

As mentioned previously, the CAA requires nonattainment areas classified as moderate or worse for the one-hour ozone standard to prepare air quality modeling, using a photochemical grid model. This modeling is required to show that collective control strategies will reduce ozone to concentrations below the air quality standard by the area's attainment date. Connecticut submitted its modeling in several submittals. A January 4, 1995 submittal gave EPA the then up-to-date status of the state's modeling effort, including the completed elements of the one-hour modeling. The Phase I submittal, required for those states participating in the OTAG effort, was submitted on November 21, 1997. The Phase II submittal, which along with the previous submittals constitutes the attainment demonstration, was submitted on September 16, 1998.

The Greater Connecticut area is classified as a serious ozone nonattainment area. The Greater Connecticut area includes the entire State of Connecticut except for the southwest corner of Connecticut, near New York City. The Greater Connecticut area was required to attain the one-hour ozone standard by November 15, 1999. This area includes all of the following counties: Hartford, Middlesex, New Haven, New London, Tolland, and Windham. It also includes Shelton City in Fairfield County, and all cities and towns in Litchfield County except Bridgewater and New Milford (40 CFR 81.307). The rest of Connecticut, officially titled the New York-Northern New Jersey-Long Island Area, will be referred to in this notice as the Connecticut portion of the New York City area. The Connecticut portion of the New York City area's attainment demonstration is a separate SIP action, and is discussed elsewhere in this **Federal Register**. The rest of the New York City area's attainment demonstration is also a separate SIP action, and is discussed elsewhere in this **Federal Register**.

The Greater Connecticut area was modeled by the New York Department of Environmental Conservation, with input from environmental agency staff of both the States of Connecticut and New Jersey and by staff from EPA Regions I and II. This arrangement was agreed to in 1990 by all the participating parties, with concurrence from EPA Regions I and II. The modeling also includes the modeling for the New York City area.

### *B. How Was the Model Selected?*

EPA recommended that states use the Urban Airshed Model (UAM) version IV as the ozone model of choice for the grid-point modeling required by the Clean Air Act (CAA) for the one-hour attainment demonstrations. Other models are allowed if the states show that they are scientifically valid and they perform (*i.e.* are just as reliable) as well as, or better than, UAM IV. The NYC domain chose to use UAM IV. Details on the model and its selection can be found in the submittal from the State of Connecticut. Many different sensitivity runs and model performance runs were performed using the UAM IV model, also different boundary conditions were tried. The results of these runs are available in the submittal from Connecticut.

### *C. What Did the Photochemical Grid Modeling Show?*

The UAM modeling analysis is contained in the State Implementation Plan (SIP) submitted by the CT DEP. A similar analysis was also submitted by New Jersey (NJDEP) and New York State (NYSDEC) since, as explained above, the modeling performed was conducted both for the Greater Connecticut area and the New York City area.

The domain covers both the New York Northern-New Jersey-Long Island severe area, and the Greater Connecticut serious area. Information on how the UAM modeling meets EPA guidance is summarized here and detailed in the State's submittals.

EPA's Guideline on the use of photochemical grid models recommends that areas model three or more episodes including the types of weather conditions most conducive to ozone formation. The final photochemical grid modeling submitted by Connecticut focused on the UAM–IV modeling for several episodes from 1988 and 1991. All episodes represent significant ozone exceedances, under various meteorological conditions. The episodes have some of the worst case meteorology (*i.e.,* the highest potential for ozone formation) of the episodes in the past forty years. It follows that if an extreme episode, like the ones chosen, pass the modeled attainment test, then less extreme days would pass as well.

The UAM IV was run using the CALMET meteorological processor, with State actual emission inventories for the base years (1988 or 1991 as appropriate) and with projected emissions representing grown and controlled emissions for the attainment year. The projected emissions used were the Case-E scenario developed for EPA–OTC modeling simulations and included the effects of projected growth, the CAA required measures, low emission vehicle (LEV) assumptions for the motor vehicle section, and $NO_X$ reductions equivalent to the regional $NO_X$ SIP call adopted by EPA.

The UAM IV model shows that domain wide there is a 91% decrease in the number of grid cells that exceed the one-hour standard from the base year to 2007. A 100% decrease would be

necessary to pass the deterministic model test. For the model predictions in the Greater Connecticut area and areas downwind, the UAM model predicts levels below the acceptable upper limit on all but two of the days. The predicted peaks in the Greater Connecticut nonattainment portion of the modeling domain for 2007 remain above the one-hour standard with peak concentrations of 152 ppb in 2007. This too does not pass the deterministic test. Since the UAM–IV model, as run for this analysis, does not show attainment in 2007 additional weight of evidence analyses were performed. These additional analyses are discussed below.

*D. How Well Did the Model Perform?*

The UAM–IV model predicts ozone within the quality limits set by EPA guidance on most days. Qualitatively, the model predicts the peak ozone in the observed locations downwind of New York City. The model shows a slight bias toward over predicting ozone.

As prescribed by EPA Guidance, the UAM–IV modeling predicts ozone concentrations for the year 2007 using the meteorology of the episodes from 1988 and 1991 combined with the emissions that are projected for the year 2007. The 2007 emissions include emission increases due to population and economic growth and decreases due to the control strategies that will be in place by then (including an estimate of the EPA $NO_X$ SIP Call).

*E. What Other Type of Analyses Were Performed By Connecticut?*

In the past, EPA guidance for use of the UAM model required that all modeling days show attainment of the ozone standard at all grid cells. This is called the deterministic method. The attainment demonstration guidance allows the user to adjust for days that have an extremely high ability to form ozone because of its meteorology. Adjustments are allowed since the one-hour ozone standard allows each location to have one day per year, on average, over the one-hour ozone standard.

The attainment demonstration guidance allows use of additional corroborative analyses to support the attainment demonstration when the modeled attainment test is not passed. These other analyses can be used as part of the weight of evidence to attainment. The weight of evidence used to supplement the modeled attainment test in the Greater Connecticut area attainment demonstration, and how they can help predict that the area will attain the standard, are described here. In addition, one of the factors that EPA can consider as part of the weight-of-evidence analysis is whether there will be additional emission reductions anticipated that are not modeled.

Greater Connecticut is classified as serious, and is required under the CAA to attain the ozone standard by 1999. This is not possible, based on the preliminary measured air quality from the summer of 1999. EPA policy allows for an attainment date extension based on transport, and Connecticut has asked for an extension for the Greater Connecticut area to November 15, 2007, the attainment date for the upwind New York City area. The attainment date extension is discussed here, and EPA's action on the request is discussed below. The State submittal for Greater Connecticut gives evidence of significant transport into the Greater Connecticut area from the south and west. The state performed several model runs and other analyses which show that the Greater Connecticut area is effected by significant transport. These analyses as well as the request for an attainment date extension are discussed below.

Connecticut submitted additional information from other methods that can predict future concentrations of ozone. Air quality trends data show that attainment of the standard by 2007 for the Greater Connecticut area is feasible and this is confirmed by use of recent air quality data combined with ozone reductions predicted by photochemical grid modeling (*i.e.* the Design Value analysis method). In short, and as shown later, these weight of evidence analyses lead EPA to conclude that the Greater Connecticut area is likely to attain the ozone standard by 2007, as a result of additional control measures to be implemented by the States of New York, New Jersey and Connecticut in conjunction with upwind reductions accomplished by CAA requirements for upwind states and reductions from EPA's $NO_X$ SIP call which requires further $NO_X$ reductions from 23 jurisdictions in the Eastern United States.

This notice discusses several analyses, which when combined lead EPA to conclude that the Greater Connecticut area will achieve attainment by 2007. Those analyses are the local Photochemical Grid Modeling (discussed above), Air Quality Trends Analyses, the Design Value Rollback analysis, and an additional analysis done pursuant to EPA memorandum entitled ''Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled.''

*F. What Do Air Quality Trends Show?*

Linear extrapolation of present air quality trends predicts that the peak ozone values will be less than 125 ppb and the number of exceedances of the air quality standard will be less than one per year about the year 2005. Since a number of emission control programs, such as the $NO_X$ SIP Call, and Tier 2 car standards are still to be implemented and others, like the OTC $NO_X$ agreement and vehicle inspection and maintenance programs, are still being implemented (*i.e.* not achieving full emissions reduction benefit), emissions of ozone precursors will continue to decrease from now through 2007. Connecticut's attainment demonstration states that attainment of the one-hour ozone standard is possible based on an extrapolation of the air quality data.

The attainment demonstration also includes research showing that ozone decreases occur at all of the monitors in the New York City airshed. Even when the trends are adjusted for year-to-year changes in how favorable the weather is for ozone formation (*i.e.* meteorologically adjusted trends), every air quality monitor except one shows decreased ozone. This supports the conclusion that the improvements in air quality during recent years are due to reductions in emissions rather than meteorology.

*G. What Does The Regional Design Value Rollback Analysis Show?*

One of the analyses in the weight of evidence is the design value rollback analysis. Design value rollback uses the design value from recent air quality data as its starting point. The amount of ozone reduction predicted by the model from the starting point to the attainment year is calculated and the design value from recent air quality data is reduced by that amount.

For the Connecticut analysis, EPA supplied calculations of the percentage reduction in ozone at the grid cells near the monitoring sites. The calculations were from the UAM–V modeling that EPA has been doing for the $NO_X$ SIP Call. EPA ran the UAM–V for the entire eastern United States for various episodes in 1991, 1993 and 1995 with both 1995 and 2007 OTAG emission inventories. The 2007 run included emissions adjusted for growth and reductions from the CAA-required controls plus the $NO_X$ SIP Call, and the National LEV (NLEV) program.

The percentage difference between the base and the future case was calculated for the days when the modeling predicted the highest concentrations near each monitoring

site. The ozone reductions on those days were averaged for each monitoring site. This percent difference was divided by 100 to produce a ''rollback factor.'' The observed ozone design value was multiplied by the rollback factor to obtain the concentration of ozone predicted for the monitoring site for the year 2007. The ozone design value was the fourth highest concentration at each site over the three-year period from 1996 to 1998. The highest predicted design value for 2007 from all the monitoring sites is 122 ppb, less than the 125 ppb one-hour ozone standard. This is how the design value rollback method predicts that the area may attain the ozone standard by 2007. The three years of data used by Connecticut in its submittal to calculate the observed design value were the latest available data at the time: 1996 to 1998. When EPA used the method in the $NO_X$ SIP Call, it used the design value from 1994 to 1996, centered on 1995 when the model begins its reductions in emissions and ozone. The period used by in the analysis submitted by CT DEP does not overlap 1995. It should also be noted that preliminary ozone data from the summer of 1999 for this area shows that ozone levels have risen, most likely due to weather conditions, and that the three year design value has also risen. So the regional design value rollback method, when applied to the most recent air quality data does not show attainment in 2007. Further analyses are thus necessary, such as those discussed below.

The design value rollback technique is a way of using existing air quality and the model in a relative sense to predict how the air quality will improve. Existing air quality is a readily measured quantity. Models may be more accurate at calculating the amount of improvement in air quality as opposed to predicting an absolute concentration. Therefore, this method counteracts some of UAM–IV's biases toward underestimating the extent of ozone reduction. The design value rollback method provides another gauge of whether an area will attain the air quality standard, using a method which does not rely solely on the absolute predictions made by the models.

In summary, the design value rollback method was applied to the New York City airshed, where it used the most recent data to predict that all of the air quality stations will have better air quality than the one-hour air quality standard when the present ozone concentrations are reduced by the percentage ozone reduction that the UAM–V model predicts from the baseline to the attainment year. More recent air quality data call this analysis into question.

*H. Does Greater Connecticut Area Need Additional Local Measures?*

Realizing that the attainment analysis for Greater Connecticut yields uncertain results regarding whether the area will attain by the year 2007, EPA conducted a further analysis of the attainment demonstration submitted by Connecticut. For this analysis, EPA looked at the base year modeling performed using UAM–IV as well as the future year modeling for 2007. The EPA analysis concentrated only on the Greater Connecticut area. Base year model maximums and future year model maximums were derived from the attainment demonstration submittal. Using the statistical test described above, the future year maximums for each episode day were compared to their acceptable upper limits. For the model predictions in the Greater Connecticut area and areas downwind, the UAM model predicts levels below the acceptable upper limit on all but two of the days. EPA's analysis also looked at the projected ozone benefits from the Tier 2/Sulfur program in 2007. The Tier 2/Sulfur program will show improvements in the modeled peaks.

Since the attainment test is not passed in this additional analysis, EPA analyzed whether additional local measures are necessary to achieve attainment. In order to do this, EPA did an analysis pursuant to EPA memorandum entitled ''Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled.'' The method used pursuant to this guidance makes use of the relationship between ozone and its precursors (VOC and $NO_X$) to identify additional reductions that, at a minimum, would bring the model predicted future ozone concentration to a level at or below the standard. The relationship is derived by comparing changes in either (1) the model predicted ozone to changes in modeled emissions or (2) in observed air quality to changes in actual emissions. The results for the Greater Connecticut area show that the UAM–IV modeling performed for Connecticut estimates the future design value with the benefits of the Tier 2/Sulfur program incorporated to be 116 ppb, which is below the 124 ppb one-hour standard. Therefore, additional emission controls beyond the benefits of the Tier 2/Sulfur program are not expected to be needed for the Greater Connecticut area to demonstrate attainment.

Weighing all of the evidence, as provided in EPA's Guidance, EPA believes the Attainment Demonstration for the Greater Connecticut demonstrates attainment by 2007 and should thus be approved.

*I. Does Greater Connecticut Need A Mid-Course Review?*

Since Greater Connecticut has requested and EPA is proposing to approve an attainment date extension to November 2007, and since the attainment date extension and attainment demonstration approval are based on a weight-of-evidence analysis, and not a purely deterministic test, EPA guidance provides for a mid-course review to access if the assumptions used in 1999 are still true in the future. This mid-course review should take place after the 2003 ozone season. The Connecticut DEP submitted an enforceable commitment with its attainment demonstration on September 16, 1998, to submit a MCR in the 2001/2002 time frame, and an additional MCR in 2005. In order for EPA to accept that commitment of an MCR, Connecticut will have to agree to perform the MCR immediately following the 2003 ozone season and to submit the results to EPA by December 31, 2003. Connecticut should also work with EPA in a public consultative process to develop a methodology for performing the MCR and developing the criteria by which adequate progress would be judged. Once Connecticut modifies their commitment on the MCR to include these issues, then EPA can move forward to approve the attainment demonstration.

*J. What Are EPA's Recommendations With Regard to the Modeling Portion of the Attainment demonstration?*

The modeling for Greater Connecticut uses analyses that follow the EPA guidelines for predicting future air quality. These analyses, on balance, show that air quality will meet the one-hour ozone air quality standard by the requested attainment date of 2007. EPA guidance allows for this weight of evidence analysis when other modeling methods give results that contradict the traditional deterministic photochemical grid modeling analysis. The weight-of-evidence in conjunction with additional analyses performed by EPA using the most up-to-date EPA guidance confirm that the trend analysis is correct in determining that the continued decreases in emissions, locally and from distant sources, will result in attainment by 2007.

Connecticut, along with New York and New Jersey, has committed to perform a mid-course review, as recommended by EPA. The states are

expected to follow EPA guidance in conducting this mid-course review.

Because the modeling portion of the submittal demonstrates attainment consistent with EPA's guidance, it should be approved by EPA. As a result of decreases in emissions currently in place and additional reductions expected to continue, the Greater Connecticut area should attain the one-hour ozone standard by 2007.

*K. What Is EPA Policy With Regard To An Attainment Date Extension?*

On July 16, 1998, a guidance memorandum entitled ''Extension of Attainment Dates for Downwind Transport Areas'' was signed by Richard D. Wilson, then Acting Assistant Administrator for Air and Radiation. That memorandum included EPA's interpretation of the Clean Air Act regarding the possibility of extending attainment dates for ozone nonattainment areas that have been classified as moderate or serious for the 1-hour standard and which are downwind of areas that have interfered with their ability to demonstrate attainment by dates prescribed in the Act. That memorandum stated that EPA will consider extending the attainment date for an area that:

(1) has been identified as a downwind area affected by transport from either an upwind area in the same State with a later attainment date or an upwind area in another State that significantly contributes to downwind nonattainment;

(2) has submitted an approvable attainment demonstration with any necessary, adopted local measures and with an attainment date that shows that it will attain the one-hour standard no later than the date that the reductions are expected from upwind areas under the final $NO_X$ SIP call and/or the statutory attainment date for upwind nonattainment areas, i.e., assuming the boundary conditions reflecting those upwind reductions;

(3) has adopted all applicable local measures required under the area's current classification and any additional measures necessary to demonstrate attainment, assuming the reductions occur as required in the upwind areas;

(4) has provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved.

*L. Does the Greater Connecticut Area Qualify For An Attainment Date Extension?*

As discussed above, Connecticut requested an attainment date extension to November 15, 2007. This is consistent with EPA guidance for attainment date extensions. The first test for an attainment date extension is that you are effected by transport, and but for this transport, you would achieve attainment of the standard by your CAA attainment date.

The CT DEP submitted evidence of significant transport into the Greater Connecticut area. First, it must be stated that, the maximum observed ozone in Northern New Jersey, New York and Connecticut are currently in the Greater Connecticut area. Greater Connecticut is classified as serious, and is required under the CAA to attain the ozone standard 8 years before the New York City area, which has an attainment date of 2007. The Greater Connecticut area is required by the CAA to attain by 1999. This is not possible based on the preliminary measured air quality from the summer of 1999. EPA policy allows for an attainment date extension based on transport, and as mentioned above Connecticut has asked for an extension of the Greater Connecticut area to November 15, 2007, the same attainment date for the upwind New York City area. The State submittal for Greater Connecticut gives evidence of significant transport into Greater Connecticut from the south and west, where the NYC nonattainment area is located. The state performed an ''informal UAM–IV sensitivity analysis investigating the effects within the * * * modeling domain of excluding anthropogenic emissions strictly in Connecticut. The sensitivity run was conducted for the July 6, 1988 event using 1988 data files supplied by the NYSDEC, 1988 ROM boundary conditions, and no anthropogenic emissions within Connecticut.''

Modeled ozone concentrations for this zero-out model run (looking only at levels above the standard) are relatively similar to the ''base case'' or full anthropogenic run, suggesting that even if one could shut down all anthropogenic emission within the Greater Connecticut area it would still violate the ozone standard as of its 1999 attainment date, and furthermore, there would be little improvement to observed ozone levels. This type of analysis shows that Greater Connecticut is affected by significant transport.

Another way to look for evidence of significant transport is to look for differences in the number of grid-cell hours (gch) between ''zero-out'' runs and the base case runs. The following is taken from the Connecticut submittal: ''The improvement (decrease) in the number of grid-cell hours (gch) above 120 ppb, was also determined for the Connecticut zero-out run. In the base case, there were 6032 gch above 120 ppb in the entire modeling domain, of which 3214 gch occurred in Connecticut. In the zero-out run, there were 5321 gch above 120 ppb in the domain, an improvement of 711 gch.'' An improvement of 711 gch out of 3214 gch is only a 22% improvement. This shows that significant emission reductions are needed from upwind areas to reach attainment of the one-hour ozone NAAQS in Greater Connecticut.

Connecticut was also able to use the modeling done by Massachusetts and New Hampshire to bolster its demonstration that it is significantly effected by transport. The model used by these states is CALGRID. The model was run for the July 8, 1988 episode, an episode with very high ozone levels in all of New England, including Connecticut. In the CALGRID run, anthropogenic emissions were eliminated (set to zero) in Connecticut and the model run. These ''zero-out'' results were compared to the same model run assuming 1999 Clean Air Act emissions throughout the domain. Connecticut reached several conclusions using these results. Taken from the attainment demonstration submittal they are as follows:

1. ''Eliminating Connecticut's man-made emissions has very little effect on both the magnitude and the geographical extent of maximum ozone concentrations within Connecticut by its 1999 attainment date. Widespread areas of modeled nonattainment remain in the State. Modeled exceedances in Connecticut for this event are largely due to overwhelming transport from upwind areas.''

2. ''Zeroing out Connecticut emissions for this event does not have much effect on the magnitude or geographic area of modeled exceedances downwind in western and central Massachusetts.''

3. ''Zeroing out Connecticut's man-made emissions results in an area of modeled ozone increases (disbenefits) of 1 to 10 ppb in north-central Connecticut and Central Massachusetts.''

The second test is that an area has submitted an approvable attainment demonstration with any necessary, adopted local measures and with an attainment date that shows that it will attain the one-hour standard no later than the date that the reductions are expected from upwind areas under the final $NO_X$ SIP call and/or the statutory

attainment date for upwind nonattainment areas, i.e., assuming the boundary conditions reflecting those upwind reductions. Since the CT DEP submitted an attainment demonstration for the Greater Connecticut area and this notice is proposing approval of that plan without additional measures, this test is passed.

The third test that Greater Connecticut had to meet is to show that it met all the CAA requirements for a serious nonattainment area. The Greater Connecticut area is classified as serious and is required to submit certain measures. Table 3 contains a summary of the CAA required ozone SIP elements and of any additional measures included in the attainment demonstration. This Table indicates if a control measure was part of the modeling demonstration and a summary of the approval or promulgation status.

TABLE 3.—CONTROL MEASURES IN THE ONE-HOUR OZONE ATTAINMENT PLANS FOR THE GREATER CONNECTICUT SERIOUS OZONE NONATTAINMENT AREA

| Name of control measure | Type of measure | Included in local modeling | Approval status |
|---|---|---|---|
| On-board Refueling Vapor Recovery | federal rule | Yes | Promulgated at 40 CFR 86. |
| Federal Motor Vehicle Control program. | federal rule | Yes | Promulgated at 40 CFR 86. |
| Federal Non-road Gasoline Engines | federal rule | Yes | Promulgated at 40 CFR 90. |
| Federal Non-road Heavy Duty diesel engines. | federal rule | Yes | Promulgated at 40 CFR 89. |
| AIM Surface Coatings | federal rule | Yes | Promulgated at 40 CFR 59 subpart D. |
| Consumer & commercial products | federal rule | Yes | Promulgated at 40 CFR 59 subpart C. |
| Enhanced Inspection & Maintenance | CAA SIP Requirement | Yes | Conditionally SIP approved (64 FR 12005; 3/10/99).[1] |
| $NO_X$ RACT | CAA SIP Requirement | Yes | SIP approved (62 FR 52016; 10/6/97). |
| VOC RACT pursuant to sections 182(a)(2)(A) and 182(b)(2)(B) of Clean Air Act. | CAA SIP Requirement | Yes | SIP approved (56 FR 52205; 10/18/91 and 64 FR 12019; 3/10/99). |
| VOC RACT pursuant to sections 182(b)(2)(A) and (C) of Clean Air Act. | CAA SIP Requirement | Yes | Conditionally SIP approved (64 FR 12019; 3/10/99)—SIP approval pending for SIP submitted in response to condition.[2] |
| Stage II Vapor Recovery | CAA SIP Requirement | Yes | SIP approved (58 FR 65930; 12/17/93). |
| Stage I Vapor Recovery | CAA SIP Requirement | Yes | SIP approved (56 FR 52205; 10/18/91). |
| Reformulated Gasoline | CAA required program in NYC and Hartford areas. Opt-in to federal program for remainder of state. | Yes | Promulgated statewide under 40 CFR section 80.70. Also approved for opt-in portion of state as part of 15% plan (64 FR 12015; 3/10/99). |
| National Low Emission Vehicle (NLEV). | State opt-in | Yes | Federal program promulgated at 40 CFR 86 subpart R. State opt-in SIP approval proposed 8/16/99, 64 FR 44450.[3] |
| Clean Fuel Fleets | CAA SIP Requirement | Yes | RFG and I/M reductions substitute—SIP approval pending.[4] |
| New Source Review | CAA SIP Requirement | No | SIP approval pending.[5] |
| Base Year Emissions Inventory | CAA SIP Requirement | N/A[6] | SIP approved (62 FR 55336; 10/24/97). |
| 15% VOC Reduction Plan | CAA SIP Requirement | Yes[7] | SIP approved (64 FR 12015; 3/10/99). |
| Enhanced Rule Effectiveness | State measure | Yes[7] | SIP approved (64 FR 12015; 3/10/99). |
| 9% rate of progress plan | CAA SIP Requirement | Yes[7] | SIP approval pending.[8] |
| Emissions Statements | CAA SIP Requirement | N/A[6] | SIP approved (60 FR 2524; 1/10/95). |
| Enhanced Monitoring (PAMS) | CAA Requirement | N/A[6] | SIP approved (62 FR 55336; 10/24/97). |
| OTC $NO_X$ MOU Phase II | State initiative | Yes | SIP approved (64 FR 52233; 9/28/99). |
| EPA $NO_X$ SIP call | EPA requirement | Yes | SIP approval pending.[9] |

[1] The fact that CT's enhanced I/M rule is conditionally approved does not affect the emission reductions that Connecticut can rely on for attainment purposes since the achievement of those emission reductions in no way depends upon the fulfillment of the conditions outlined in that final rule. Rather, the conditions relate to certain procedural requirements only.

[2] With respect to the various VOC and Non-CTG rules, Connecticut submitted a revised non-CTG RACT rule on September 2, 1999. In order to meet the requirements of sections 182(b)(2) (A) and (C), CT revised section 22a–174–32 to remove the exemption for the remaining Appendix E categories, as well as expanding the applicability to sources in industrial categories in CT for which EPA has published final CTGs since the date of enactment (e.g., aerospace, shipbuilding, and wood furniture coating). Appendix E categories are those listed in App. E to EPA's General Preamble 57 FR 18077 (April 28, 1992). EPA deemed the SIP submittal complete on September 10, 1999. EPA will take final action on the revised section 22a–174–32 prior to finalizing action on the one-hour ozone attainment plan.

[3] EPA intends to publish final rules for the NLEV opt-in SIP before or at the same time as we publish final rules on the attainment demonstration.

[4] Since the clean fuels fleet program would simply substitute for RFG and I/M emission reductions already approved into the SIP, the Clean Fuel Fleet program will not have to be finally approved in order to approve the attainment demonstration.

[5] CT submitted its New Source Review (NSR) program for VOC and $NO_X$ as a SIP revision on May 23, 1994. The state is not relying on emission reductions from this NSR SIP, and therefore it will not have to be finally approved in order to approve the attainment demonstration.

[6] Does not produce emission reductions.

[7] The measures used to demonstrate rate of progress were modeled.

[8] The nine percent plan rate-of-progress (ROP) plan SIP was submitted to EPA on December 31, 1997, with minor revisions on January 7, 1998. This plan is currently under review by EPA. A notice of proposed rulemaking will be published soon. EPA intends to publish final rules for the nine percent ROP plan before or at the same time as we publish final rules on the attainment demonstration.

[9] On September 30, 1999, CT submitted a SIP revision in response to EPA's regulation entitled, ''Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone,'' otherwise known as the ''$NO_X$ SIP Call.'' The SIP submittal included a $NO_X$ budget and allowance trading regulation, section 22a–174–22b. Although not a CAA required measure, section 22a–174–22b requires significant $NO_X$ reductions from 2003 onward which will strengthen the SIP. EPA will take final action on section 22a–174–22b prior to finalizing action on the one-hour ozone attainment plan. This also fulfills Connecticut's commitment under the OTC MOU Phase III program.

Finally, the state has provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. All of the above measures will be implemented before 2007.

In summary since Connecticut has met all the CAA requirements, or will before final approval of the attainment date extension is granted, and since the ozone modeling for the Greater Connecticut area meets the other requirements for an attainment date extension, EPA proposes to approve the attainment date extension for Greater Connecticut to November 15, 2007.

*M. Motor Vehicle Emissions Budget*

The CT DEP submitted 2007 conformity budgets associated with their attainment demonstration for the Greater Connecticut nonattainment area on February 10, 1999. These budgets were developed from the mobile source inventories developed by EPA for the $NO_X$ SIP call. In its February 10, 1999 letter, CT DEP concluded that it is reasonable to extract 2007 transportation conformity budgets from the $NO_X$ SIP call since Connecticut's ozone attainment demonstrations rely on EPA modeling results developed using emission inventories equivalent to those used by EPA to develop the $NO_X$ SIP call. In a November 19, 1999 letter from Susan Studlien, EPA Region I to Carmine DiBattista, CT DEP, EPA found that the 2007 motor vehicle emissions budgets submitted for the Greater Connecticut area are inadequate for conformity purposes. The budgets were determined to be inadequate because in some instances they do not accurately reflect the mobile source control strategies Connecticut is implementing and, when compared to more recent mobile source emission estimates prepared by the state for conformity, appear to be substantially higher in the attainment year than the most current projections. The letter, which is available in the docket for this action, further outlines the rationale behind this determination.

A notice of public hearing was signed by Arthur Rocque, Jr, Commissioner, Connecticut DEP on November 24, 1999 requesting public comment on proposed changes to the attainment demonstration for the Greater Connecticut serious nonattainment area. In that notice of public hearing, Connecticut DEP has included proposed 2007 conformity budgets for the Greater Connecticut area. These budgets incorporate the benefits of the Tier 2/Sulfur program for the Greater Connecticut area. The EPA is proposing to approve the attainment demonstration SIP should Connecticut correct the deficiencies that cause the motor vehicle emissions budget to be inadequate and, alternatively, to disapprove it if Connecticut does not correct the deficiencies.

Because many States may shortly be submitting revised demonstrations with revised motor vehicle emission budgets, EPA is providing a 60 day comment period on this proposed rule. If Connecticut submits a revised attainment demonstration, EPA will place the revisions in the docket for this rulemaking and will post a notice on EPA's website at www.epa.gov/oms/traq. By posting notice on the website, EPA will also initiate the adequacy process.

*N. Tier 2/Sulfur Program benefits*

As a result of EPA's review of the State's SIP submittal, EPA believes that the ozone modeling submitted by the State for the Greater Connecticut area, for which EPA is proposing to approve or disapprove-in-the-alternative, needs to incorporate EPA's Tier 2/Sulfur program benefits to improve the State's weight-of-evidence analysis. This is the result of a detailed review of the attainment demonstration. With Tier 2/Sulfur program reductions incorporated, the conclusion that attainment can be reached in this area by 2007 can be supported. This is consistent with the conclusions originally reached in the CT DEP attainment demonstration submittal which did not initially include Tier 2/Sulfur program reductions but specifically noted that there are uncertainties in the design value approach used to support the conclusion that attainment can be reached in the Greater Connecticut nonattainment area by November 15, 2007. The uncertainties noted in the attainment demonstration submittal were: (1) Uncertainty in year-to-year meteorological fluctuations; (2) uncertainty in projections of emissions and economic growth; and (3) uncertainties inherent in the modeling system chosen. Additionally, the attainment demonstration noted the need for EPA to pursue other supplemental emission reductions strategies beyond the measures identified in the OTAG recommendations. One action specifically noted was more stringent standards for new on-road vehicles under section 202(i) of the Clean Air Act.

On May 13, 1999, EPA proposed such standards designed to significantly reduce the emissions from new passenger cars and light trucks, including pickup trucks, minivans, and sport-utility vehicles (the ''Tier 2 program''). The proposed program combines requirements for cleaner vehicles and requirements for lower levels of sulfur in gasoline. Tier 2 emission reductions will lower ozone in the Greater Connecticut area and support the conclusion that the future design value for the nonattainment area will be below 125 parts per billion and that the area will achieve attainment by the attainment date requested (i.e., November 15, 2007). EPA, therefore, will require Connecticut to incorporate the Tier 2/Sulfur requirements into the attainment demonstration in order to fully approve the attainment demonstration. As stated previously, a notice of public hearing was signed on November 24, 1999 requesting public comment on proposed changes to the attainment demonstration for the Greater Connecticut serious nonattainment area. In that notice of public hearing, Connecticut DEP has included proposed 2007 conformity budgets for the Greater Connecticut area which incorporate the benefits of the Tier 2/Sulfur program for the Greater Connecticut area.

*O. What are the consequences of State failure?*

This section explains the CAA consequences of State failure to meet the time frames and terms described generally in this notice. The CAA provides for the imposition of sanctions and the promulgation of a federal implementation plan if States fail to submit a required plan, submit a plan that is determined to be incomplete or if EPA disapproves a plan. (We are using the phrase ''failure to submit'' to cover both the situation where a State makes no submission and the situation where the State makes a submission that

we find is incomplete in accordance with section 110(k)(1)(B) and 40 CFR part 51, Appendix V.) For purposes of sanctions, there are no sanctions clocks in place based on a failure to submit. Thus, the description of the timing of sanctions, below, is linked to a potential disapproval of the State's submission.

1. What are the CAA's provisions for sanctions?

If EPA disapproves a required SIP, such as the attainment demonstration SIPs, section 179(a) provides for the imposition of two sanctions. The first sanction would apply 18 months after EPA disapproves the SIP if the State fails to make the required submittal which EPA proposes to fully or conditionally approve within that time. Under EPA's sanctions regulations, 40 CFR 52.31, the first sanction would be 2:1 offsets for sources subject to the new source review requirements under section 173 of the CAA. If the State has still failed to submit a SIP for which EPA proposes full or conditional approval 6 months after the first sanction is imposed, the second sanction will apply. The second sanction is a limitation on the receipt of Federal highway funds. EPA also has authority under section 110(m) to a broader area, but is not proposing to take such action today.

2. What are the CAA's FIP provisions if a State fails to submit a plan?

In addition to sanctions, if EPA finds that a State failed to submit the required SIP revision or disapproves the required SIP revision EPA must promulgate a FIP no later than 2 years from the date of the finding if the deficiency has not been corrected. The attainment demonstration SIPs on which EPA is taking action today were originally due in November 1994. However, through a series of policy memoranda, EPA recognized that States had not submitted attainment demonstrations and were constrained to do so until ozone transport had been further analyzed. As provided in the Background, above, EPA provided for States to submit the attainment demonstration SIPs in two phases. In June 1996, EPA made findings that ten States and the District of Columbia had failed to submit the phase I SIPs for nine nonattainment areas. 61 FR 36292 (July 10, 1996). In addition on May 19, 1997, EPA made a similar finding for Pennsylvania for the Philadelphia area. 62 FR 27201.

In July 1998, several environmental groups filed a notice of citizen suit, alleging that EPA had outstanding sanctions and FIP obligations for the serious and severe nonattainment areas on which EPA is proposing action today. These groups filed a lawsuit in the Federal District Court for the District of Columbia on November 8, 1999.

## III. Proposed Action

EPA is proposing to approve the ground-level one-hour ozone attainment demonstration State implementation plan for the Greater Connecticut nonattainment area submitted by Connecticut on September 16, 1998. This submission includes analyses which taken together and supplemented to include the effects of the Tier 2/Sulfur program leads EPA to conclude that the Greater Connecticut area is likely to attain the ozone standard by 2007. This is a result of additional control measures to be implemented by the States of New York, New Jersey and Connecticut in conjunction with upwind reductions accomplished by CAA requirements for upwind states and reductions from EPA's $NO_X$ SIP call which requires further $NO_X$ reductions from 23 jurisdictions in the Eastern United States. EPA is also proposing to approve an attainment date extension for this area to November 15, 2007, submitted at the same time. EPA is also proposing, in the alternative, to approve in part and disapprove in part this demonstration if the State does not submit: take final action an adequate motor vehicle emissions budget consistent with attainment. Lastly, EPA intends to publish final rules for Nine Percent ROP, NLEV and the $NO_X$ SIP call for Connecticut either before or at the same time as publication of final approval of the attainment demonstration.

EPA is soliciting public comments on the issues discussed in this proposal or on other relevant matters. These issues will be considered before EPA takes final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to the EPA Regional office listed in the **ADDRESSES** section of this action. A more detailed description of the state submittal and EPA's evaluation are included in a Technical Support Document (TSD) prepared in support of this rulemaking action. A copy of the TSD is available upon request from the EPA Regional Office listed in the **ADDRESSES** section of this action.

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any State implementation plan. Each request for revision to the State implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

## IV. Administrative Requirements

### *A. Executive Orders 12866*

The Office of Management and Budget (OMB) has exempted this regulatory action from review under Executive Order 12866, entitled ''Regulatory Planning and Review.''

### *B. Executive Order 13045*

Executive Order 13045, entitled ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), applies to any rule that the EPA determines (1) is ''economically significant,'' as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health and safety risks.

### *C. Executive Order 13084*

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly affects or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments. If the mandate is unfunded, EPA must provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.'' Today's rule does not

significantly or uniquely affect the communities of Indian tribal governments. This action does not involve or impose any requirements that affect Indian Tribes. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

*D. Executive Order 13132*

Executive Order 13132 Federalism (64 FR 43255, August 10, 1999), revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a State rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

*E. Regulatory Flexibility Act*

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This proposed rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities. Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of a flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.* v. *U.S. EPA,*427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2).

If the approval is converted to a disapproval under section 110(k), based on the State's failure to meet the commitment, it will not affect any existing State requirements applicable to small entities. Federal disapproval of the State submittal does not affect State-enforceability. Moreover, EPA's disapproval of the submittal does not impose any new requirements. Therefore, I certify that such a disapproval action will not have a significant economic impact on a substantial number of small entities because it would not remove existing requirements nor would it substitute a new Federal requirement.

The EPA's alternative proposed disapproval of the State request under section 110 and subchapter I, part D of the Act would not affect any existing requirements applicable to small entities. Any pre-existing Federal requirements would remain in place after this disapproval. Federal disapproval of the State submittal would not affect State-enforceability. Moreover EPA's disapproval of the submittal does not impose any new Federal requirements. Therefore, I certify that the proposed disapproval would not have a significant impact on a substantial number of small entities.

*F. Unfunded Mandates*

Under section 202 of the Unfunded Mandates Reform Act of 1995 (''Unfunded Mandates Act''), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated annual costs to State, local, or tribal governments in the aggregate; or to private sector, of $100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the proposed approval action does not include a Federal mandate that may result in estimated annual costs of $100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

Sections 202 and 205 do not apply to the proposed disapproval because the proposed disapproval of the SIP submittal would not, in and of itself, constitute a Federal mandate because it would not impose an enforceable duty on any entity. In addition, the Act does not permit EPA to consider types of analyses described in section 202 in determining whether a SIP submittal meets the CAA. Finally, section 203 does not apply to the proposed disapproval because it would affect only the State of Connecticut, which is not a small government.

*G. National Technology Transfer and Advancement Act*

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing new regulations. To comply with NTTAA, the EPA must consider and use ''voluntary consensus standards'' (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Hydrocarbons, Intergovernmental relations, Nitrogen dioxide, Ozone.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: November 30, 1999.

**Mindy S. Lubber,**

*Deputy Regional Administrator, Region I.*

[FR Doc. 99–31710 Filed 12–15–99; 8:45 am]

**BILLING CODE 6560–50–P**

## ENVIRONMENTAL PROTECTION AGENCY

## 40 CFR Part 52

**[CT057–7216: FRL–6502–1]**

## Approval and Promulgation of Implementation Plans; Connecticut; One-Hour Attainment Demonstration; Connecticut Portion of the New York-Northern New Jersey-Long Island Severe Ozone Nonattainment Area

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The EPA is proposing to conditionally approve the ground-level one-hour ozone attainment demonstration State Implementation Plan (SIP) for the Connecticut portion of the New York-Northern New Jersey-Long Island severe ozone nonattainment area submitted by the Commissioner of the Connecticut Department of Environmental Protection (CT DEP) on September 16, 1998. EPA is also proposing to conditionally approve the Connecticut's commitment to submit rate-of-progress (ROP) target calculations for ROP after 1999 and the adopted measures to achieve post-1999 ROP by December 2000. EPA is also proposing, in the alternative, to disapprove this demonstration if Connecticut does not submit an adequate motor vehicle emissions budget and additional control measures to make up for the projected need for additional controls to ensure attainment of the one-hour ozone standard by November 2007.

**DATES:** Comments must be received on or before February 14, 2000.

**ADDRESSES:** Written comments (in duplicate if possible) should be sent to: David B. Conroy at the EPA Region I (New England) Office, One Congress Street, Suite 1100–CAQ, Boston, Massachusetts 02114–2023. Copies of the State submittal and EPA's technical support document are available for public inspection during normal business hours at the following address: U.S. Environmental Protection Agency, Region 1 (New England), One Congress St., 11th Floor, Boston, Massachusetts. Telephone (617) 918–1664 an at the Bureau of Air Management, Department of Environmental Protection, State Office Building, 79 Elm Street, Hartford, CT 06106. Please telephone in advance before visiting.

**FOR FURTHER INFORMATION CONTACT:** Richard Burkhart (617) 918–1664.

**SUPPLEMENTARY INFORMATION:** This document provides background information on attainment demonstration SIPs for the one-hour ozone national ambient air quality standard (NAAQS) and an analysis of the one-hour ozone attainment demonstration SIP submitted by the CT DEP for the New York-Northern New Jersey-Long Island severe ozone nonattainment area. This document address the following questions:

What is the Basis for the Attainment Demonstration SIP?

What are the Components of a Modeled Attainment Demonstration?

What is the Frame Work for Proposing Action on the Attainment Demonstration SIPs?

What Does EPA Expect to Happen with Respect to the Attainment Demonstrations for the Connecticut Portion of the New York-Northern New Jersey-Long Island Severe One-hour Ozone Nonattainment Area?

What are the Relevant Policy and Guidance Documents?

How Does the Connecticut Submittal Satisfy the Frame Work?

### I. Background

*A. What Is the Basis for the State's Attainment Demonstration SIP?*

1. CAA Requirements

The Clean Air Act (CAA) requires EPA to establish national ambient air quality standards (NAAQS or standards) for certain widespread pollutants that cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. CAA sections 108 and 109. In 1979, EPA promulgated the one-hour 0.12 parts per million (ppm) ground-level ozone standard. 44 FR 8202 (Feb. 8, 1979). Ground-level ozone is not emitted directly by sources. Rather, emissions of nitrogen oxides ($NO_X$) and volatile organic compounds (VOCs) react in the presence of sunlight to form ground-level ozone. $NO_X$ and VOC are referred to as precursors of ozone.

An area exceeds the one-hour ozone standard each time an ambient air quality monitor records a one-hour average ozone concentration above 0.124 ppm. An area is violating the standard if, over a consecutive three-year period, more than three exceedances are expected to occur at any one monitor. The CAA, as amended in 1990, required EPA to designate as nonattainment any area that was violating the one-hour ozone standard, generally based on air quality monitoring data from the three-year period from 1987–1989. CAA section 107(d)(4); 56 FR 56694 (Nov. 6, 1991). The CAA further classified these areas, based on the area's design value, as marginal, moderate, serious, severe or extreme. CAA section181 (a). Marginal areas were suffering the least significant air pollution problems while the areas classified as severe and extreme had the most significant air pollution problems.

The control requirements and dates by which attainment needs to be achieved vary with the area's classification. Marginal areas are subject to the fewest mandated control requirements and have the earliest attainment date. Severe and extreme areas are subject to more stringent planning requirements but are provided more time to attain the standard. Serious areas are required to attain the one-hour standard by November 15, 1999 and severe areas are required to attain by November 15, 2005 or November 15, 2007. The New York-Northern New Jersey-Long Island nonattainment area is classified as severe and its attainment date is November 15, 2007.

Under section 182(c)(2) and (d) of the CAA, serious and severe areas were required to submit by November 15, 1994 demonstrations of how they would attain the one-hour standard and how they would achieve reductions in VOC emissions of 9 percent for each three-year period until the attainment year (rate-of-progress or ROP). (In some cases, $NO_X$ emission reductions can be substituted for the required VOC emission reductions.) Today, in this proposed rule, EPA is proposing action on the attainment demonstration SIP submitted by Connecticut for the New York-Northern New Jersey-Long Island nonattainment area. EPA is also proposing action on the Connecticut's commitment to submit ROP target calculations for rate-of-progress after 1999 and the adopted measures to achieve post-1999 ROP by December 2000. EPA will take action on the Connecticut's 9% ROP plan for reductions from 1996–1999 in a separate rulemaking action. (The 9% ROP plan was submitted to EPA on December 31, 1997, with minor revisions on January 7, 1998.) In addition, elsewhere in this **Federal Register**, EPA is today proposing to take action on nine other serious or severe one-hour ozone attainment demonstration and, in some