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. NOx 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 threeyear 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

cases ROP SIPs. The additional nine areas are Greater Connecticut (CT), Springfield (Western Massachusetts) (MA), 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 NAAOS.

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 nonattainment 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 20003; (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.4

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. 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.

¹Memorandum, "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.

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

³ In general, a commitment for severe areas to adopt by December 2000 the control measures necessary for attainment and ROP plans through the attainment year applies to any additional measures necessary for attainment that were not otherwise required to be submitted earlier. (For example, this memorandum was not intended to allow States to delay submission of measures required under the CAA, such as inspection and maintenance (I/M) programs or reasonable available control technology (RACT) regulations, required at an earlier time.) Thus, this commitment applies to any control measures or emission reductions on which the State relied for purposes of the modeled attainment demonstration. To the extent that Connecticut has relied on a commitment to submit these measures by December 2000, EPA is proposing a conditional approval of the area's attainment demonstration. Some severe areas submitted the actual adopted control measures and are not relying on a commitment.

⁴Memorandum, "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. 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

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.⁵ 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 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

⁵The 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").

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 ⁶ 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 NAAOS 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. 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 midcourse 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 that EPA is proposing to take 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 midcourse 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.

⁶The initial, "ramp-up" days for each episode are excluded from this determination.

In addition, a State may have included 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 severe nonattainment 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(d).

TABLE 1.—CAA REQUIREMENTS FOR SEVERE AREAS

- —NSR for VOC and $NO_{\rm X}$, including an offset ratio of 1.3:1 and a major VOC and $NO_{\rm X}$ source cutoff of 25 tons per year (tpy).
- —Reasonable Available Control Technology (RACT) for VOC and NO_X1.¹
- Enhanced Inspection and Maintenance (I/ M) program.
- —15% volatile organic compound (VOC) plans.
- -Emissions inventory.
- —Emission statements.
- —Periodic inventories.
- —Clean fuels program or substitute.
- —Enhanced monitoring Photochemical Assessment Monitoring Stations (PAMS).
- —Stage II vapor recovery.
- -Reformulated gasoline.
- Requirement for fees for major sources for failure to attain.
- —9 percent ROP plan through attainment year.
- —Attainment demonstration.
- $^{1}\,\text{Unless}$ the area has in effect a NO $_{\rm X}$ waiver under section 182(f). The Connecticut portion of the New York-Northern New Jersey-Long Island area is not such a area.
- 2. NO_X Reductions Consistent With the Modeling Demonstration

The EPA completed final rulemaking on the $NO_{\rm X}$ SIP call on October 27, 1998, which required States to address transport of $NO_{\rm X}$ 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 NOx 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 7 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 $_{\rm X}$ 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 vear 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)

 $^{^7\}mathrm{For}$ 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 x 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.

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, 2000.8 In order for EPA to complete the adequacy process by the end of May, States should submit a budget no later than December 31, 1999.9 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 New York-North New Jersey-Long Island area, whose attainment demonstration EPA is proposing to approve 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. ¹⁰ 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.¹¹ This memorandum explains that conformity analyses in serious and severe ozone nonattainment areas can begin 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 vet 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, Atlanta, and Houston-Galveston-Brazoria 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 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

⁸ For severe areas, EPA will determine the adequacy of the emissions budgets associated with the post-1999 ROP plans once the States submit the target calculations, which are due no later than December 2000.

⁹ 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.

¹⁰ 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.html.

¹¹ 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.html.

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.¹²

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; Houston-Galveston-Brazoria and Atlanta, 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. This is discussed in detail below for the New York-Northern New Jersey-Long Island area. The method used by EPA to calculate the amount of additional reductions is described in a technical support document located in the record for this proposed rule. Briefly, the method 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 EPA is not requesting that States perform new photochemical grid modeling to assess the full air quality impact of the additional measures that would be adopted. Rather, as described above, one of the factors that EPA can consider as part of the WOE analysis of the attainment demonstration is whether there will be additional emission reductions anticipated that were not modeled. Therefore, EPA will consider the reductions from these additional measures as part of the WOE analysis if the State adopts the measures or, as appropriate, submits an enforceable commitment to adopt the

As an initial matter, for areas that need additional measures, the State

must submit a commitment to adopt additional control measures to meet, the level of reductions that EPA has identified as necessary for attainment. For purposes of conformity, if the State submitted a commitment, which has been subject to public hearing, to adopt the control measures necessary for attainment and ROP through the area's attainment date in conformance with the December 1997 Wilson policy, the State will not need an additional commitment at this time. However, the state will need to amend its commitment by letter to provide two things concerning the additional measures.

First, the State will need to identify a list of potential control measures (from which a list of measures could be selected) that, when implemented, would be expected to provide sufficient additional emission reductions to meet the level of reduction that EPA has identified as necessary for attainment. States need not commit to adopt any specific measures on their list at this time, but if they do not do so, they must identify sufficient additional emission reductions to attain the standard with the submitted motor vehicle emissions budget. These measures may not involve additional limits on highway construction beyond those that could be imposed under the submitted motor vehicle emissions budget. (See 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 13). States may, of course, select control measures that do impose limits on highway construction, but if they do so, they must revise the budget to reflect the effects of specific, identified measures that were either committed to in the SIP or were actually adopted. Otherwise, EPA could not conclude that the submitted motor vehicle emissions budget would be providing for attainment, and EPA could not find it adequate for conformity purposes.

Second, the letter should provide that the State will recalculate and submit a revised motor vehicle emissions budget that includes the effects, if any, of the measure or measures that are ultimately adopted when those measures are submitted as SIP revisions should any of the measures pertain to motor vehicles.

¹² 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.

¹³ 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.

For purposes of approving the SIP, the State will need an enforceable commitment that identifies the date by which the additional measures will be submitted, identifies the percentage reductions needed of VOC and NOx, and provides that the State will recalculate and submit a revised motor vehicle emissions budget that includes the effects, if any, of the measure or measures that are ultimately adopted when these measures are submitted as SIP revisions should any of the measures pertain to motor vehicles. To the extent the State's current commitment does not include one of the above items or to the extent that a State plans to revise one of the above items in an existing commitment, the State will need a new public hearing.

For areas within the OTR, EPA believes it is appropriate to provide a State that is relying on a regional solution to a Congressionally-recognized regional air pollution problem with more time to adopt and submit measures for additional reductions to EPA than for a State that will rely on intrastate measures to achieve the reductions. Therefore, the EPA believes that States in the OTR must be allowed sufficient time for the OTR to analyze the appropriate measures as well as time for the State to adopt the measures. For these States, EPA believes it is appropriate for them to commit to work through the OTR to develop a regional strategy regarding the measures necessary to meet the additional reductions identified by EPA for these areas. However, as a backstop, the State will need to commit to adopt intrastate measures sufficient to achieve the additional reductions if the regional measures are not identified by the OTR and adopted by the relevant States.

For purposes of conformity, if the State submitted a commitment consistent with the December 1997 Wilson policy and which has been subject to public hearing, the State may amend its current commitment by letter to provide these assurances. However, before EPA can take final rulemaking action to approve the attainment demonstration, the State will need to meet the public hearing requirements for the commitment and submit it to EPA as a SIP revision. The EPA will have to propose and take final action on this SIP revision before EPA can fully approve the State's attainment demonstration. The State will have to submit the necessary measures themselves (and a revised motor vehicle emissions budget that includes the effects, if any, of the measure or measures that are ultimately adopted should any of the measures pertain to

motor vehicles) as a SIP revision no later than October 31, 2001.

a. Guidance on Additional Control Measures. Much progress has been made over the past 25 years to reduce VOC emissions and over the past 9 years to reduce NO_X emissions. Many large sources have been controlled to some extent through RACT rules or other emission standards or limitations, such as maximum achievable control technology (MACT), new source performance standards (NSPS) and the emission control requirements for NSR—lowest achievable emissions rate (LAER) and best achievable control technology (BACT). However, there may be controls available for sources that have not yet been regulated as well as additional means for achieving reductions from sources that have already been regulated. The EPA has prepared a report to assist States in identifying additional measures. This report is called "Serious and Severe Ozone Nonattainment Areas: Information on Emissions, Control Measures Adopted or Planned and Other Available Control Measures". The purpose of this report is to provide information to State and local agencies to assist them in identifying additional control measures that can be adopted into their SIPs to support the attainment demonstrations for the serious and severe nonattainment areas under consideration. This report has been added to the record for this proposal.

In summary, the report provides information in four areas. First, the report contains detailed information on emissions for ozone precursor emissions of NO_X and VOCs. This inventory data gives an indication of where the major emissions are coming from in a particular geographic area and may indicate where it will be profitable to look for further reductions. Second, the report contains information on control measures for emission sources of NO_X and VOC (including stationary, area and mobile source measures) for which controls may not have been adopted by many jurisdictions. This would include many measures listed among the control measures EPA considered when developing the Regulatory Impact Analysis (RIA) for promulgation of the 8-hour ozone NAAQS. Third, the report includes information on standards EPA has issued for the NSPS and MACT programs as well as information on alternative control techniques (ACT) documents. This may be useful to States who may already specify emission limits on existing source categories to which NSPS and MACT for new sources apply, but the current RACT level of control for these existing sources may

not match the level specified in the NSPS or MACT standards for new sources or sources which emit hazardous air pollutants. Finally, the report includes information on the control measures not already covered elsewhere that States have adopted, or have proposed to adopt at the date of the report, into their SIPs. Comparison of information on measures already adopted into others' SIPs may help inform States about reductions that may be available from their sources whose emissions are currently not regulated.

Another source of information is the BACT and LAER determinations that States have made for individual new sources. Information on BACT/LAER determinations is available through EPA's RACT/BACT/LAER Clearinghouse (RBLC) which may be accessed on EPA's web site on the internet at the following address: www.epa.gov/ttn/catc/.

The ACT documents for VOC and NO_X are valuable because EPA has not issued control technique guidelines (CTGs) that specify the level of RACT for several categories of sources. For some of these source categories, EPA has prepared ACT documents which describe various control technologies and associated costs for reducing emissions. While States were required to adopt RACT for major sources within these source categories, the ACT documents may identify an additional level of control for regulated sources or may provide control options for nonmajor sources within these source categories. States are free to evaluate the various options given and use the results to assist in formulating their own regulations.

The EPA report lists the various sources EPA used to develop the lists of additional measures. These sources include an EPA draft control measure data base, State and Territorial Air Pollution Administrators and the Association of Local Air Pollution Control Official's (STAPPA/ALAPCO's) books "Controlling Nitrogen Oxides under the Clean Air Act: A Menu of Options", and "Meeting the 15-Percent Rate-of-Progress Requirement Under the Clean Air Act: A Menu of Options," California's ozone SIP for the South Coast and various ACT documents.

There is one control approach which bears special mention because it is broader in application than any one specific control measure. That is the approach of "cap and trade." In this approach, a cap is placed on emissions, and existing sources are given emission allotments. Under a declining cap, emissions would be decreased each year. Sources may over-control and sell

part of their allotments to other sources which under-control. Overall, the percentage decrease in emissions is maintained, but the reductions are made where they are most economical. A cap and trade program has been in operation in the South Coast Air Quality Management District in California since about 1992.

The State of Illinois has adopted a declining cap and trade program. The Illinois program will set a cap on future emissions of major sources in the Chicago area that in most cases is 12 percent lower than baseline emissions. Illinois will issue a number of emission allotments corresponding to the cap level and will require each source to have VOC emissions at or below the level for which it holds emission allotments. Trading of emission allotments will be allowed, so that sources that reduce VOC emissions more than 12 percent may sell emission allotments, and sources that reduce VOC emission less than 12 percent must buy emission allotments. The proposed reductions are planned to begin in the next ozone season, May 2000.

In addition, EPA's draft economic incentives program guidance (EIP) was proposed in September 1999. This encourages cost-effective and innovative approaches to achieving air pollution goals through emissions trading. Such an approach has been demonstrated to be successful and cost-effective in reducing air pollution in EPA's acid rain emissions trading program. These and other similar programs should allow cost-effective implementation of additional control measures.

Finally, a reduction in VOC and NOx emissions can be achieved through a wide range of control measures. These measures range from technology based actions such as retrofitting diesel trucks and buses, and controlling ground service equipment at airports to activity based controls such as increased use of transit by utilizing existing Federal tax incentives, market and pricing based programs, and ozone action days. States can also achieve emission reductions by implementing programs involving cleaner burning fuels. The State of Texas is also considering a rule to change the times during the day in which construction can occur to reduce

ozone precursor emissions during periods when ozone formation is occurring. There are a wide range of new and innovative programs beyond the few examples listed here. These measures, if taken together, can provide significant emission reductions for attainment purposes. In addition, a variety of mobile source measures could be considered as part of the commitment to meet the need for additional emission reduction measures.

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 Connecticut portion of the New York city area (NYC area), EPA believes that the 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. The commitment made was to submit a MCR in the 2001/2002 time frame and an additional MCR in 2005. EPA is suggesting that Connecticut revise its commitment to provide for the MCR immediately following the 2003 ozone season. 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.

For severe areas, the States must have an enforceable commitment to perform the MCR preferably following the 2003 ozone season, and to submit the results to EPA by the end of the review year (e.g., by December 31, 2003). 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 the Attainment Demonstration for the Connecticut Portion of the New York-Northern New Jersey-Long Island Severe One-Hour Ozone Nonattainment Area?

Table 2 shows a summary of information on what EPA expects from the states in which the New York-Northern New Jersey-Long Island area is located to allow EPA to approve the one-hour ozone attainment demonstration SIPs.

¹⁴For 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.

TABLE 2.—SUMMARY SCHEDULE OF FUTURE STATE ACTIONS RELATED TO ATTAINMENT DEMONSTRATION FOR THE PORTION OF THE NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND SEVERE NONATTAINMENT AREA IN CONNECTICUT

Req'd no later than	Action
12/31/99	State submits the following to EPA: —motor vehicle emissions budget.¹ —Commitments² to do the following: —Submit by 10/31/01, measures for additional emission reductions as required in the attainment demonstration test developed through the regional process. (The State must also submit a backstop commitment to adopt and submit by 10/31/01 intrastate measures for the emission reductions in the event the OTR process does not recommend measures that produce emission reductions.) —Submit revised SIP and motor vehicle emissions budget by 10/31/01, if additional measures (due 10/31/01) affect the motor vehicle emissions inventory. —Revise SIP and motor vehicle emissions budget 1 year after MOBILE6 issued.³ —Perform a mid-course review.—A list of potential control measures identified that could provide additional emission reductions needed to attain the standard.⁴
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.
12/31/00	—State submits adopted modeled measures relied on in attainment demonstration and relied on for ROP through the attainment year.
10/31/01	 —State revises and submits SIP and motor vehicle emissions budget to account for Tier 2 reductions as needed.⁵ —OTR States submit additional measures developed through the regional process. —State revises SIP and motor vehicle emissions budget, if the additional measures are for motor vehicle category.
Within 1 yr after release of MOBILE6 model	State submits revised SIP & motor vehicle emissions budget based on MOBILE6.

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

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 As provided in the preamble text, the State may clarify by letter an existing commitment, which has been subject to public hearing, to submit the control measures needed for attainment. If the State has not yet submitted such a commitment, the State should adopt a commitment after public hearing. If the public hearing process is not yet complete, then draft commitments may be submitted at this time. The final commitment should be submitted no later than 4/15/00.

³The 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).

⁴The State is not required to commit to adopt any specific measures. However, if the State does not do so, the list cannot include any meas-

ures that place limits on highway construction.

of 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, "1-Hour Ozone Attainment Demonstrations and Tier 2/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 PM₁₀ 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 New York-New Jersey-Long Island severe ozone nonattainment area, which includes the southwest corner of Connecticut and is classified as severe-17, must attain the one-hour ozone standard by November 15, 2007. The Connecticut portion includes all of Fairfield County, CT except Shelton City, plus the towns of Bridgewater and New Milford, which are both in Litchfield County (40 CFR 81.307). The rest of Connecticut, including Shelton City is officially titled the Greater Connecticut serious area. The Greater Connecticut serious area's attainment demonstration is a separate SIP action, and is discussed elsewhere in this Federal Register. The New York-New Jersey-Long Island severe ozone nonattainment area contains the states of Connecticut, New Jersey and New York. All three states are required to

submit an attainment demonstration State Implementation Plan (SIP). Since New York and New Jersey are part of EPA Region II, EPA Region II is responsible for their SIP submittal, and those submission are addressed elsewhere in this **Federal Register**.

The Connecticut portion of the New York-Northern New Jersey-Long Island severe nonattainment 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 Greater Connecticut nonattainment 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 preform (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. These runs are available in the submittal from Connecticut.

C. What Did the Photochemical Grid Modeling Show?

The UAM IV modeling analysis is contained in the State Implementation Plan (SIP) submitted by the CT DEP. A mostly similar analysis was also submitted by New Jersey (NJDEP) and New York State (NYSDEC) since, as explained above, their SIPs include portions of the modeling domain. The domain covers both the New York Northern New Jersey-Long Island severe area, and the Greater Connecticut 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. The predicted peaks for 2007 remain above the one-hour standard with peak concentrations of 171 ppb in 2007. This 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 to occur by 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 for 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 Connecticut portion of the New York-Northern New Jersey-Long Island 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-ofevidence analysis is whether there will be additional emission reductions anticipated that are not modeled.

This notice discusses several analyses. 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 NOx 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 conducive 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 the Connecticut Portion of the New York-Northern New Jersey-Long Island Severe Nonattainment Area Need Additional Local Measures?

EPA does not believe the attainment analysis for New York-Northern New Jersey-Long Island area proves attainment by the year 2007. EPA conducted a further analysis to further determine how much additional reduction is needed in order for EPA to approve or conditionally approve a revised and re-submitted attainment demonstration for this area. The EPA suggests that Connecticut include these calculations as part of the WOE analysis accompanying the adjusted attainment demonstration and revised motor vehicle emissions budget for this area.

EPA calculated the emission reductions needed to make up the difference between the future year modeled ozone values and the ozone standard. The details of this calculation are contained in the TSD for this notice. The analysis shows an ozone shortfall of 5 ppb for the New York-Northern New Jersey-Long Island severe nonattainment. From this 5 ppb shortfall value, additional local emission reduction targets can be developed. When the appropriate method is applied to this area, it is predicted that an additional 3.8% VOC and 0.3% NO_X reduction from base year 1990 inventories is necessary to approve or conditionally approve a revised and re-submitted attainment demonstration for this area. These additional reductions are over and above the Clean Air Act measures required for this area and the measures already relied on in the demonstration of attainment. Since Tier 2/Sulfur is included in the EPA analysis the percent reduction figures are also over and above Tier 2/Sulfur reductions as well. The three states within the nonattainment area will have to work together to achieve these reductions. 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 Connecticut portion of the New York-Northern New Jersey-Long Island severe nonattainment area.. To achieve the additional reductions necessary for attainment, Connecticut has proposed to: (1) Revise the transportation conformity budget to include the effects of EPA's recently proposed Tier 2 motor vehicle emissions control program and associated fuel sulfur control program,

(2) commit to adopt additional NO_X emission limits applicable to municipal waste combustors, and (3) commit to work with other jurisdictions of the Ozone Transport Region (OTR) and to submit, by October 31, 2001, additional necessary regional control measures in conjunction with other jurisdictions of the OTR to offset the emissions reduction shortfall in order attain the 1-hour ozone NAAQS by 2007.

I. Does Connecticut Portion of the New York-Northern New Jersey-Long Island Severe Nonattainment Area Need a Mid-Course Review Correction?

EPA guidance requires a mid-course review correction for the Connecticut portion of the New York-Northern New Jersey-Long Island severe nonattainment area to access assess whether the assumptions used in the attainment demonstration 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 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.

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 the Connecticut portion of the New York-Northern New Jersey-Long Island severe nonattainment area uses analyses that follow the EPA guidelines for predicting future air quality. These analyses, on balance, do not show that air quality will meet the one-hour ozone air quality standard by the requested attainment date of 2007. Additional analyses performed by EPA using the most up-to-date EPA guidance allows for attainment if the state commits to incorporate the Tier 2/Sulfur program into its attainment demonstration and commits to adopt measures which achieve an additional 3.8% VOC and a 0.3% NOx emission reduction. As stated previously, Connecticut has recently proposed revisions to its attainment demonstration to address these requirements.

K. What Measures Did Connecticut Rely on in Their Attainment Demonstration?

Table 3 shows the measures Connecticut relied on in the attainment demonstration for the Connecticut portion of the New York Northern New Jersey-Long Island nonattainment area. The measures along with their approval status is shown.

TABLE 3.—CONTROL MEASURES IN THE ONE-HOUR OZONE ATTAINMENT PLANS FOR THE CONNECTICUT SEVERE 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 Require- ment.	Yes	Conditionally SIP approved (64 FR 12005; 3/10/99).1
NO _X RACT	CAA SIP Require- ment.	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 Require- ment.	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 Require- ment.	Yes	SIP approved (58 FR 65930; 12/17/93).
Stage I Vapor Recovery	CAA SIP Require- ment.	Yes	SIP approved (56 FR 52205; 10/18/91).

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

Name of control measure	Type of measure	Included in local modeling	Approval status
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 sub- part R. State opt-in SIP approval proposed 8/ 16/99, 64 FR 44450.3
Clean Fuel Fleets	CAA SIP Require- ment.	Yes	RFG and I/M reductions substituted—SIP approval pending.4
New Source Review	CAA SIP Require- ment.	No	SIP approval pending. ⁵
Base Year Emissions Inventory	CAA SIP Require- ment.	N/A 6	SIP approved (62 FR 55336; 10/24/97).
15% VOC Reduction Plan	CAA SIP Require- ment.	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 plans	CAA SIP Requirement.	Yes for the strate- gies relied on for the first phase from 1996– 1999 7.	SIP approval pending for the first phase from 1996–1999.8 For the ROP plans post 1999, CT provided an enforceable commitment to submit the plans and adopt all necessary rules demonstrating ROP through 2007 by December 2000.9
Emissions Statements	CAA SIP Require- ment.	N/A 6	SIP approved (60 FR 2524; 1/10/95).
Enhanced Monitoring (PAMS) OTC NO _X MOU Phase II EPA NO _X SIP call	CAA Requirement State initiative EPA requirement	N/A ⁶ Yes	SIP approved (62 FR 55336; 10/24/97). SIP approved (64 FR 52233; 9/28/99). SIP approval pending. ¹⁰

¹The 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.

²With 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 the 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). 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 demonstra-

4 Since 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) for VOC and NO $_{
m X}$ 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.

The measures used to demonstrate rate of progress were modeled.

The nine percent plan rate-of-progress (ROP) plan SIP for reductions from 1996 through 1999 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 before or at the same time as it publishes final rules on the attainment demonstra-

9 In today's notice, EPA is proposing to conditionally approve Connecticut's attainment demonstration for the New York-Northern New Jersey-Long Island severe ozone nonattainment area, including the enforceable commitment for the Post-99 ROP submission.

10 On September 30, 1999, CT DEP submitted a SIP revision in response to the 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 $_{\rm X}$ SIP Call." The SIP submittal included a NO $_{\rm X}$ budget and allowance trading regulation, section 22a–174–22b. Although not a CAA required measure, section 22a–174–22b requires significant NO $_{\rm X}$ 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.

L. Motor Vehicle Emission Budget

The CT DEP submitted 2007 conformity budgets for the Connecticut portion of the New York-Northern New Jersey-Long Island severe ozone 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 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 substantial 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.

In November 24, 1999 notice of public hearing discussed previously, Connecticut DEP has included proposed 2007 conformity budgets for the Connecticut portion of the New York Northern New Jersey-Long Island nonattainment area. These budgets incorporate the benefits of the Tier 2/ Sulfur program for the Connecticut portion of the New York Northern New Jersey-Long Island nonattainment area. The EPA is proposing to conditionally approve the attainment demonstration SIP should Connecticut corrects 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 Connecticut 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.

M. Tier 2/Sulphur Program Benefits

As result of EPA's review of the State's SIP submittal, EPA believes that the ozone modeling submitted by the State for the New York-Northern New Jersey-Long Island severe nonattainment area on which EPA is proposing to conditionally approve and disapprovein-the-alternative today will need the emission reductions from EPA's Tier 2/ Sulfur to attain the one-hour ozone NAAQS. Further, EPA believes that the New York-Northern New Jersey-Long Island severe nonattainment area will require additional emission reductions identified by EPA, beyond those from EPA's Tier 2/Sulfur program, to attain the one-hour ozone NAAQS.

For the New York-Northern New Jersey-Long Island severe nonattainment area, EPA is proposing to determine that the submitted control strategy does not provide for attainment by the attainment deadline. The emission reductions of EPA's Tier 2/Sulfur program, which are not reflected in the submitted SIP, will assist in attainment and the effects of these standards must be included in the motor vehicle emissions budget.

To assist the State in the preparation of a new submission which could be approved or conditionally approved,

EPA has prepared an estimate of the air quality benefits of EPA's Tier 2/Sulfur program. In our calculation, EPA assumed that all of the Tier 2/Sulfur emissions reductions will contribute to the ability of the New York-Northern New Jersey-Long Island severe nonattainment area to demonstrate attainment. The EPA has further calculated how much additional emission reduction is needed for the New York-Northern New Jersey-Long Island severe nonattainment area in order for EPA to approve or conditionally approve a revised and resubmitted attainment demonstration for this area. The EPA suggests that the State include these calculations as part of the WOE analysis accompanying the adjusted attainment demonstration and revised motor vehicle emissions budget for this area. Today EPA is proposing to conditionally approve a new attainment demonstration if it meets this description.

However, Connecticut can use some of EPA's Tier 2/Sulfur program credit for other purposes. Thus, the State could take credit for all or some of EPA's Tier 2/Sulfur program credit for its attainment demonstration.

If the amount of Tier 2/Sulfur program credit that Connecticut is assuming in its adjusted attainment plan is less than the amount that EPA assumed would be available for attainment, *i.e.*, the State is applying some or all of the Tier 2/Sulfur program credit for other purposes, the State will have to calculate the remaining amount of additional emission reductions needed and commit to adopt measures to achieve them. If the State assumes all the Tier 2/Sulfur program credit will go toward attainment, then the State will be able to rely on EPA's estimate of the additional emission reductions needed.

N. 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 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 conditionally approve the ground-level one-hour ozone attainment demonstration State implementation plan (SIP or demonstration) for the Connecticut portion of the New York-Northern New Jersey-Long Island severe nonattainment Area submitted by Connecticut on September 16, 1998. EPA is also proposing to conditionally approve the Connecticut's commitment to submit 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 approve in part and disapprove in part this demonstration if the State does not submit an adequate motor vehicle emissions budget consistent with attainment, and a commitment to the additional measures required for attainment of the standard. 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 Order 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 Stateenforceability. 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. 99–31711 Filed 12–15–99; 8:45 am] BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[Region 2 Docket No. NY38-204, FRL-6502-2]

Approval and Promulgation of Implementation Plans; New York; 1-Hour Ozone Attainment Demonstration State Implementation Plan and 2007 Transportation Conformity Budgets

AGENCY: Environmental Protection Agency (EPA or Agency). **ACTION:** Proposed rule.

SUMMARY: EPA is proposing to approve New York's 1-hour Ozone Attainment Demonstration State Implementation Plan (SIP) for the New York-Northern New Jersey-Long Island nonattainment area or in the alternative to disapprove it, depending on whether New York submits the adopted NO_X SIP Call, the revised transportation conformity budgets and necessary enforceable commitments.

First, EPA is proposing to approve New York's Ozone Attainment Demonstration SIP provided New York submits: the adopted NO_X SIP Call program as a SIP revision; an enforceable commitment to adopt sufficient measures to address the required level of emission reductions identified by EPA; revised transportation conformity budgets which reflect the additional emission reductions identified by EPA for attainment; revised transportation conformity budgets to include the Tier 2/Sulfur program benefits, if these benefits have not already been incorporated; an enforceable commitment to revise the Attainment Demonstration SIP, including recalculation of the transportation conformity budgets (if any of the additional emission reductions pertain to motor vehicle measures) to reflect the adopted additional measures needed for attainment; an enforceable commitment to revise the Attainment Demonstration, including transportation conformity budgets, when MOBILE6 (the most recent model for estimating mobile source emissions) is released; and, an enforceable commitment to perform a mid course review and submit the results to EPA by December 31, 2003.

With respect to the NO_X SIP Call, the proposed approval is predicated upon the expectation that New York will submit the NO_X SIP Call program prior to EPA taking final action on today's proposal.

EPA also is proposing to disapprovein-the-alternative New York's Ozone