The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

**Taking of Private Property**

This proposed rule would not affect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

**Civil Justice Reform**

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

**Protection of Children**

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This proposed rule is not economically significant and does not cause an environmental risk to health or risk to safety that may disproportionately affect children.

**Indian Tribal Governments**

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, or on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

To help the Coast Guard establish regular and meaningful consultation and collaboration with Indian and Alaskan Native tribes, we published a notice in the Federal Register (66 FR 36361, July 11, 2001) requesting comments on how to best carry out the Order. We invite your comments on how this proposed rule might impact tribal governments, even if that impact may not constitute a “tribal implication” under the Order.

### Environmental Protection Agency

**40 CFR Part 52**

[71 FR 7174b:FRL-7396-6]

**Approval and Promulgation of Implementation Plans; New Hampshire; One-hour Ozone Attainment Demonstration for the New Hampshire Portion of the Boston-Lawrence-Worcester, MA-NH Ozone Nonattainment Area**

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

**ACTION:** Proposed rule.

**SUMMARY:** The EPA is proposing to fully approve the one-hour ozone attainment demonstration State Implementation Plan (SIP) for the New Hampshire portion of the Boston-Lawrence-Worcester, MA-NH serious ozone nonattainment area submitted by the New Hampshire Department of Environmental Services on June 30, 1998. This action is based on the requirements of the Clean Air Act (CAA) as amended in 1990, related to one-hour ozone attainment demonstrations.

**DATES:** Comments must be received on or before November 20, 2002.

**ADDRESSES:** Written comments (two copies 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 (9 a.m. to 4 p.m.) at the following addresses: U.S. Environmental Protection Agency, Region 1 (New England), One Congress St., 11th Floor, Boston, Massachusetts, telephone (617) 918–1664, and at the Air Resources Division, Department of Environmental Services, 6 Hazen Drive, P.O. Box 95, Concord, NH 03302–0095 Please telephone in advance before visiting.

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

**SUPPLEMENTARY INFORMATION:** This notice provides an analysis of the one-hour ozone attainment demonstration SIP submitted by the New Hampshire Department of Environmental Services (New Hampshire DES) for the New Hampshire portion of the Boston-Lawrence-Worcester MA-NH serious nonattainment area. Table of Contents:

I. Clean Air Act Requirements for Serious Ozone Nonattainment Areas

II. Background and Current Air Quality Status of the Boston-Lawrence-
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 attaining the standard. Serious areas were required to attain the one-hour ozone standard by November 15, 1999 and severe areas are required to attain by November 15, 2005 or November 15, 2007. The Boston-Lawrence-Worcester, MA-NH ozone nonattainment area is classified as serious and its attainment date is November 15, 1999.

Under section 182(c)(2) of the CAA, serious areas were required to submit by November 15, 1994 demonstrations of how they would attain the one-hour ozone standard and how they would achieve reductions in VOC emissions of 9 percent for each three-year period until the attainment year. In some cases, NOX emission reductions can be substituted for the required VOC emission reductions. 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 federal-aided roadways and transit on attainment of the standard. As described in section 176(c)(2)(A) of the CAA, 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 federal-aided transportation projects conform to the attainment demonstration SIP.

II. Background and Current Air Quality Status of the Boston-Lawrence-Worcester, MA-NH Ozone Nonattainment Area

The Boston-Lawrence-Worcester, MA-NH ozone nonattainment area is a multi-state nonattainment area consisting of a small portion of southern New Hampshire and the entire eastern half of Massachusetts. In New Hampshire, the nonattainment area consists of 28 individual cities and towns in portions of Hillsborough and Rockingham counties. In Hillsborough County, the individual cities and towns included in the nonattainment area are: Amherst Town, Brookline Town, Hollis Town, Hudson Town, Litchfield Town, Merrimack Town, Milford Town, Mont Vernon Town, Nashua City, Pelham Town, and Wilton Town. In Rockingham, the individual towns included in the nonattainment area are: Atkinson Town, Brentwood Town, Danville Town, Derry Town, E. Kingston Town, Hampstead Town, Hampton Falls Town, Kensington Town, Kingston Town, Londonderry Town, Newton Town, Plainfield Town, Salem Town, Sandown Town, Seabrook Town, South Hampton Town, and Windham Town. In Massachusetts, the nonattainment area includes a much larger area, consisting of 10 counties in their entirety (i.e., Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester counties). Based on 1999 emission estimates by the New Hampshire DES and the Massachusetts Department of Environmental Protection (DEP), the New Hampshire portion of the nonattainment area accounted for only 6 percent of the total VOC emissions in the nonattainment area, and only 4 percent of the total NOX emissions.

Historically and throughout most of the 1990’s, ozone monitors throughout the Boston-Lawrence-Worcester, MA-NH nonattainment area violated the one-hour ozone standard. Directly downwind of the Boston-Lawrence-Worcester, MA-NH nonattainment area, there were also a number of other nonattainment areas violating the one-hour ozone standard during the 1990’s in other parts of New Hampshire and in portions of southern Maine. On June 9, 1999, however, EPA determined that the Boston-Lawrence-Worcester, MA-NH serious ozone nonattainment area had attained the 1-hour ozone standard (64 FR 30911).2 This determination was based on data collected from 1996–1998. On June 9, 1999, EPA also determined that the Portland-Southwest Maine serious ozone nonattainment area had also attained the 1-hour ozone standard based on data collected from 1996–1998. See 64 FR 30911. At the time of these determinations of attainment,

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1 The one-hour ozone standard is 0.12 ppm. EPA’s long-standing practice is that monitored values of 0.125 ppm or higher are rounded up, and thus considered an exceedance of the NAAQS and values less than 0.125 ppm are rounded down and are not an exceedance.

2 In that notice, EPA also determined the one-hour ozone standard no longer applied to the Portland-Southwest Maine nonattainment area. Subsequently, due to continued litigation regarding the 8-hour ozone standard, EPA reinstated the applicability of the one-hour ozone standard in all areas. See 65 FR 45132 (Jul 20, 2000). EPA, however, did not modify its determination that the Boston-Lawrence-Worcester, MA-NH area had attained the one-hour ozone standard prior to its attainment date.
there were no areas in any portion of New Hampshire or Maine that violated the one-hour ozone standard.

The Boston-Lawrence-Worcester, MA–NH nonattainment area continued to have air quality meeting the one-hour ozone standard in 1999 (based on data from 1997–1999) and in 2000 (based on data from 1998–2000). Based on data collected in 1999–2001, however, the Boston-Lawrence-Worcester, MA–NH area now has air quality violating the one-hour ozone standard. The violating monitors are in the southern portion of the multi-state nonattainment area in Fairhaven and Truro, Massachusetts, which are at least 75 miles from the Massachusetts-New Hampshire state border. The other nine ozone air quality monitors in the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area (i.e., in the Massachusetts cities and towns of Easton, Stow, Boston (two sites), Lynn, Lawrence, Worcester, and Newbury, and in Nashua, New Hampshire) continue to show attainment of the one-hour ozone NAAQS, based on 1999–2001 data. Preliminary (not quality assured) ozone data readings from the monitors for the area from the summer of 2002 show only the Truro monitor registering a violation of the one-hour ozone NAAQS for the three-year period 2000–2002.

III. History and Time Frame for the State’s Attainment Demonstration SIP

A. Ozone Transport Assessment Group and the NOX SIP Call

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 under the Act because emissions of NOx 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. 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) 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 NOx is significant and should be reduced regionally to enable states in the eastern half of the country to attain the ozone NAAQS.

In recognition of the length of the OTAG process, in a December 29, 1997 memorandum, Richard Wilson, EPA’s then Acting Assistant Administrator for Air and Radiation, provided until April 1998 for states to submit the following elements of their attainment demonstration SIPs for serious and severe 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 expedient course to being adopted and implemented; (2) a list of measures needed to meet the remaining rate-of-progress (ROP) emissions reduction requirement and to reach attainment; (3) for severe areas only, a commitment to adopt and submit target calculations for post-1999 ROP and the control measures necessary for attainment and ROP plans through the attainment year by the end of 2000; (4) a commitment to implement the SIP control programs in a timely manner and to meet ROP emissions reductions and attainment; and (5) evidence of a public hearing on the state submittal. 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 motor vehicle emissions budgets.

Building upon the OTAG recommendations and technical analyses, in November 1997, EPA proposed action addressing the ozone transport problem. In its proposal, 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 ozone standard because they did not regulate NOx emissions that significantly contribute to ozone transport. 62 FR 60318 (November 7, 1997). The EPA finalized that rule in September 1998, calling on the 23 jurisdictions to revise their SIPs to require NOx emissions reductions within the state to a level consistent with a NOx emissions budget identified in the final rule. 63 FR 57356 (October 27, 1998). This final rule is commonly referred to as the NOx SIP Call.

B. New Hampshire Ozone Attainment Demonstration Submittal

On June 30, 1998, New Hampshire DES submitted an ozone attainment demonstration for the New Hampshire portion of the Boston-Lawrence-Worcester, MA–NH serious ozone nonattainment area as a revision to its SIP. On June 9, 1999, however, EPA determined that the Boston-Lawrence-Worcester, MA–NH serious ozone nonattainment area had attained the 1-hour ozone standard (64 FR 30911). This determination was based on data collected from 1996–1998. Consistent with then current EPA policy, since the Boston-Lawrence-Worcester, MA–NH area had attained the standard by November 15, 1999, its statutory attainment date, EPA took no action on the New Hampshire attainment demonstration SIP submittal for the Boston-Lawrence-Worcester, MA–NH area. The Boston-Lawrence-Worcester, MA–NH nonattainment area continued to have air quality meeting the one-hour ozone standard through the summer of 2000. As mentioned above, based on data collected in 1999–2001, the Boston-Lawrence-Worcester, MA–NH area now has air quality violating the one-hour ozone standard. Thus, this nonattainment area is once again required to have an approved attainment demonstration and 9% ROP plan with respect to section 182(c)(2) of the Clean Air Act.

Footnotes:


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


6 Policy guidance contained in a May 10, 1995 memorandum from John Seitz, Director of EPA’s Office of Air Quality Planning and Standards, entitled “Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard” recommends that ROP and attainment demonstration requirements, along with certain other related requirements, of Part D of Title I of the Clean Air Act are no longer applicable to an area once it has air quality data indicating that the one-hour ozone standard has been attained.
IV. 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. 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.

A. Modeling Requirements

For purposes of demonstrating attainment, section 182(c) of the CAA requires serious 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 consistent with conditions specified by EPA’s guidance. When the predicted concentrations are above the NAAQS, an optional Weight of Evidence (WOE) 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 poor 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 indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to attain the standard. This type of test is often referred to as an exceedance test. The EPA’s guidance recommends that states use either of two modeled attainment or exceedance tests for the one-hour ozone NAAQS: a deterministic test or a statistical test.

The deterministic test requires the state to compare predicted one-hour daily maximum ozone concentrations
for each modeled day 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 ozone 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.

B. Additional Analyses Where Modeling Fails To Show Attainment

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

Under a WOE determination, the state can rely on and EPA will consider factors such as: other modeled attainment tests, e.g., a rollback analysis; other modeled outputs, e.g., changes in the predicted frequency and persuasiveness 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 mid-course review as a means for addressing uncertainty in the modeling results. Because of the uncertainty in long term projections, EPA believes a viable attainment demonstration that relies on WOE needs to contain provisions for periodic review of monitoring, emissions, and modeling data to assess the extent to which refinements to emission control measures are needed. The mid-course review is discussed below.

V. What Is the Framework 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 generally must be present in order for EPA to approve the one-hour attainment demonstration SIPs. These elements are: control measures required by the CAA that provide reductions towards attainment and measures relied on in the modeled attainment demonstration SIP; NOx reductions affecting boundary conditions; motor vehicle emissions budgets; any additional measures needed for attainment; and a Mid-Course Review (MCR).

A. 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. In addition, a state may have included control measures in its attainment strategy that are in addition to measures required in the CAA. For purposes of fully approving the state’s SIP, the state needs to adopt and submit all VOC and NOx 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 should be met for a serious area for the one-hour ozone NAAQS. These requirements are specified in section 182 of the CAA. EPA must have taken final action approving all measures relied on for attainment, including the required ROP control measures and target calculations, before EPA can issue a final full approval of the attainment demonstration as meeting CAA section 182(c)(2). This was done for all measures relied on in the attainment demonstration for New Hampshire.

Table 1—CAA Requirements for Serious Areas

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSR for VOC and NOx 11, including an offset ratio of 1.2:1 and a major VOC and NOx source cutoff of 50 tons per year</td>
</tr>
<tr>
<td>Reasonable Available Control Technology (RACT) for VOC and NOx</td>
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<tr>
<td>Enhanced Inspection and Maintenance (I/M) program for large population centers</td>
</tr>
<tr>
<td>15% volatile organic compound plans</td>
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<tr>
<td>Emissions inventory</td>
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<tr>
<td>Emission statements</td>
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<tr>
<td>Periodic inventories</td>
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<tr>
<td>Attainment demonstration</td>
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<tr>
<td>9 percent ROP plan through 1999</td>
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<tr>
<td>Clean fuels program or substitute</td>
</tr>
<tr>
<td>Enhanced monitoring Photochemical Assessment Monitoring Stations</td>
</tr>
<tr>
<td>Stage II vapor recovery</td>
</tr>
<tr>
<td>Contingency measures</td>
</tr>
</tbody>
</table>

10 As discussed in detail below, the New Hampshire attainment demonstration shows attainment without the need for additional measures beyond what has already been adopted into the SIP or will be required by federal regulations. Therefore additional measures are not required for New Hampshire.

11 Unless the area has in effect a NOx waiver under section 182(f). The New Hampshire portion of the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area is not such an area.
— Reasonably Available Control Measures Analysis

1. Control Measures Adopted by New Hampshire

Adopted and submitted rules for all previously required CAA mandated measures for the specific area classification that are being relied on in the attainment demonstration are required. 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. As explained in Table 2, New Hampshire has submitted SIPs for all of the measures they are relying on for attainment.

### Table 2.—Control Measures in the One-Hour Ozone Attainment Plan for the New Hampshire Portion of the Boston-Lawrence-Worcester, MA-NH Serious Ozone Nonattainment Area

<table>
<thead>
<tr>
<th>Name of control measure</th>
<th>Type of measure</th>
<th>Approval status</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-board Refueling Vapor Recovery</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 86.</td>
</tr>
<tr>
<td>Federal Motor Vehicle Control program</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 86.</td>
</tr>
<tr>
<td>Heavy Duty Diesel Engines (On-road)</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 86.</td>
</tr>
<tr>
<td>Federal Non-road Heavy Duty diesel engines</td>
<td>Federal rule</td>
<td>Promulgated at engines 40 CFR part 89.</td>
</tr>
<tr>
<td>Federal Non-road Gasoline Engines</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 90.</td>
</tr>
<tr>
<td>Federal Marine Engines</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 91.</td>
</tr>
<tr>
<td>AIM Surface Coatings</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 95.</td>
</tr>
<tr>
<td>Automotive Refinishing</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 95.</td>
</tr>
<tr>
<td>Consumer &amp; commercial products</td>
<td>Federal rule</td>
<td>Promulgated at 40 CFR part 95.</td>
</tr>
<tr>
<td>Inspection &amp; Maintenance</td>
<td>Federal rule</td>
<td>SIP approved (66 FR 1868; 1/10/01).</td>
</tr>
</tbody>
</table>

**NO\textsubscript{x} RACT**

- VOC RACT pursuant to sections 182(a)(2)(A) and 182(b)(2)(B) of CAA.
- VOC RACT pursuant to section 182(b)(2)(A) and (C) of CAA.
- Stage II Vapor Recovery
- Refurbished Gasoline
- National Low Emission Vehicle
- Clean Fuel Fleets
- New Source Review
- Base Year Emissions Inventory—5% VOC Reduction Plan
- 9% rate of progress plan
- Emissions Statements
- Enhanced Monitoring (PAMS)
- OTC NO\textsubscript{x} MOU Phase II and III
- Stage II Vapor Recovery or comparable measures section OTR requirement.

**B. NO\textsubscript{x} Reductions Consistent with the Modeling Demonstration**

On October 27, 1998, EPA completed rulemaking on the NO\textsubscript{x} SIP call, which required states to address transport of NO\textsubscript{x} and ozone to other states. To address transport, the NO\textsubscript{x} SIP call established emissions budgets for NO\textsubscript{x} that 23 jurisdictions were required to show they would meet by 2007 through enforceable SIP measures adopted and submitted by September 30, 1999. The NO\textsubscript{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. The courts have largely upheld EPA’s NO\textsubscript{x} SIP Call, Michigan v. United States Env. Prot. Agency, 213 F.3d 663 (D.C. Cir. 2000), cert. denied, U.S., 121 S.Ct. 1225, 149 L.Ed. 135 (2001). Appalachian Power v. EPA, 251 F.3d 1026 (D.C. Cir. 2001). Although a few issues were vacated or remanded to EPA for further consideration, states subject to the NO\textsubscript{x} SIP call have largely adopted the controls necessary to meet the budgets set for them under the NO\textsubscript{x} SIP call rule. The controls to achieve these reductions should be in place by May 2004.

New Hampshire used the best available NO\textsubscript{x} SIP Call information in its modeling analysis. The modeling analysis is discussed in more detail below. New Hampshire itself, however, was not one of the states required to adopt enforceable SIP measures to meet EPA’s NO\textsubscript{x} SIP call. New Hampshire has adopted regulations consistent with the NO\textsubscript{x} Memorandum of Understanding (NO\textsubscript{x} MOU) adopted by the Ozone Transport Commission on September 27, 1994. When the NO\textsubscript{x} MOU was developed, New Hampshire voluntarily assigned their largest utility NO\textsubscript{x} source, the Merrimack Station, to the zone where reductions of 65 percent in 1999 and 75 percent in 2003 are required. This measure is significant because otherwise there would be no requirements for this plant under the NO\textsubscript{x} MOU until 2003, at which time a 55 percent reduction is required. EPA approved the regulation New Hampshire adopted pursuant to the NO\textsubscript{x} MOU on June 2, 1999 (64 FR 29567).

### C. Motor Vehicle Emissions Budgets (MVEBs)

The EPA believes that attainment demonstration SIPs must necessarily estimate the level of motor vehicle emissions, which when considered with emissions from all other sources (stationary, area and other mobile source), 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 effectivly demonstrate attainment unless it identifies the level of motor vehicle emissions that can be produced while still demonstrating attainment.

D. Mid-Course Review

A mid-course review (MCR), which generally is performed midway between approval of the attainment demonstration and the attainment date, 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.

E. Reasonably Available Control Measures (RACM) Analysis

Section 172(c)(1) of the CAA requires SIPs to contain all RACM and provide for attainment as expeditiously as practicable. EPA has previously provided guidance interpreting the requirements of 172(c)(1). See 57 FR 13498, 13560. In that guidance, EPA indicated its interpretation that potentially available measures that would not advance the attainment date for an area would not be considered RACM. EPA also indicated that guidance that states should consider all potentially available measures to determine whether they were reasonably available for implementation in the area, and whether they would advance the attainment date. Further, states should indicate in their SIP submittals whether measures considered were reasonably available or not, and if measures are reasonably available they must be adopted as RACM. Finally, EPA indicated that states could reject measures as not being RACM because they would not advance the attainment date, would cause substantial widespread and long-term adverse impacts, would be economically or technologically infeasible, or would otherwise be inappropriate for local reasons, including costs. The EPA also issued a memorandum re-confirming the principles in the earlier guidance, entitled, “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.

When EPA presented its statutory argument in support of its RACM policy to the U.S. Court of Appeals for the DC Circuit in defense of its approval of the Washington, DC, ozone SIP, the DC Circuit found reasonable EPA’s interpretation that measures must advance attainment to be RACM. Sierra Club v. EPA, 294 F.3d 155, 162 (D.C.Cir. 2002). Specifically, the Court found that:

- EPA reasonably concluded that because the Act “use[s] the same terminology in conjunction with the RACM requirement” as it does in requiring timely attainment, compare 42 U.S.C. § 7502(c)(1) (requiring implementation of RACM “as expeditiously as practicable but no later than” the applicable attainment deadline), with id. § 7511(a)(1) (requiring attainment under same constraints), the RACM requirement is to be understood as a means of meeting the deadline for attainment.

Id. Moreover, the D.C. Circuit rejected, as a “misreading of both text and context,” Sierra Club’s arguments that EPA’s interpretation of RACM conflicts with the Act’s text and purpose and lacks any rational basis. The D.C. Circuit also found reasonable EPA’s interpretation that it could consider costs in a RACM analysis and that measures may be rejected if they would require an intensive and costly effort for regulation of many small sources, Sierra Club v. EPA, 294 F.3d at 162,163.

VI. What Are the Relevant Policy and Guidance Documents?

This proposal has cited several policy and guidance memoranda. 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.

Relevant Documents


VII. How Does the New Hampshire Submittal Satisfy the Framework?

This section provides a review of New Hampshire’s submittal and an analysis of how this submittal satisfies the framework discussed in Section V. of this notice.

A. What Did the State Submit?

The attainment demonstration SIP submitted by the New Hampshire DES for the Boston–Lawrence–Worcester, MA–NH area includes a modeling analysis using the CALGRID model.
The CALGRID model, which was approved by EPA for use in the attainment demonstration submittal, used the photochemical grid modeling required by the CAA. The demonstration is the photochemical grid nonattainment area. Boston-Lawrence-Worcester, MA—NH ozone nonattainment area as well as the New Hampshire Portsmouth-Dover-Rochester serious area. EPA is only acting on the attainment demonstration as it applies to the New Hampshire portion of the Boston-Lawrence-Worcester, MA—NH nonattainment area.

The key element of the attainment demonstration is the photochemical grid point modeling required by the CAA. The New Hampshire attainment demonstration submittal used the CALGRID model which was approved for use by EPA since it was found to be at least as effective as the guideline model which is UAM–IV. The modeling domain for CALGRID extends from southwest Connecticut, northward 340 km to northern Vermont, and eastward to east of Nantucket, Massachusetts. For the Boston-Lawrence-Worcester, MA—NH ozone nonattainment area, the domain meets EPA guidance since it contains adequate areas both upwind and downwind of the nonattainment area. The domain also includes the monitors with the highest measured peak ozone concentrations in Massachusetts and coastal Maine and New Hampshire. Since the original modeling was done for a much larger domain that includes not only all of the Boston-Lawrence-Worcester, MA—NH ozone nonattainment area but also includes all of Rhode Island, most of Connecticut, all of Massachusetts, southern Vermont, and most of southern Maine, the CALGRID model has several “source” areas and several receptor areas. The receptor area of importance for the New Hampshire SIP submittal is the Boston-Lawrence-Worcester, MA—NH ozone nonattainment area. For the purposes of this notice, only model results in this geographic area will be used, unless otherwise noted. As shown below, EPA believes the modeling portion of the attainment demonstration meets EPA guidance.

The model was run for 10 days during four distinct episodes (August 14–17, 1987, June 21–22, 1988, July 7–8, 1988 and July 10–11, 1988). These episodes represent a variety of ozone conducive weather conditions, and also include the three worst ranked ozone episodes (1987 to 1998) for the domain. The episodes selected reflect days with high measured ozone in a variety of areas within the entire domain. This is because, as stated above, the domain covers several nonattainment areas, and in order to model the meteorology that causes high ozone, several different episodes were needed. The model results for the first day of each episode are not used for attainment demonstration purposes, because they are considered “ramp-up days.” Ramp-up days help reduce impacts of initial conditions; after ramp-up days, model results are more reflective of actual emissions being emitted into the atmosphere. Since the first day of each episode was not considered, this leaves six days for strategy assessment. August 16, 1987 was also not used for strategy assessment. This leaves five strategy assessment days: August 15, 1987; August 17, 1987; June 22, 1988; July 8, 1988 and July 11, 1988.

The CALGRID model was run using the CALMET meteorological processor. This processor took actual meteorological data collected by the National Weather Service and the State Air Pollution Agencies and using extrapolation and other analysis techniques provided winds, temperatures and other meteorological parameters at approximately 400 specific grid points for each hour of the episode at up to 14 levels (i.e., from the surface to top of the model which is about 5000 feet). CALMET is described in detail in the New Hampshire attainment demonstration, and was approved by EPA for use in the CALGRID modeling system.

The CALGRID model was run with emissions data prepared by EPA Region I and/or a contractor working with EPA Region I. The data were taken from the EPA Aerometric Informational Retrieval System (AIRS) data base in late 1993 and reflect the emission data supplied from the six New England States. The emission data for the small portion of New York state that forms the western edge of the domain was supplied by New York. EPA Region I quality assured all the New England AIRS data, the New York supplied data and all necessary modifications to the data. The data was further processed through the Emissions Preprocessor System (EPS Version 2.0). To more accurately model ozone in New England, day specific emissions were simulated for on-road mobile sources (cars, trucks, buses, etc.), and for large fossil-fueled fired power plants in New England. The base case CALGRID model is consistent with EPA guidance on model performance.

Future emissions were projected to 1999 and 2007 accounting for both emission increases due to industrial growth, population growth and growth in the number of miles traveled by cars, as well as emission reductions due to cleaner gasoline, cleaner cars and controls on industrial pollution. Growth factors were derived using the EPA-approved Bureau of Economic Analysis (BEA) factors and all the emissions were processed using the EPS 2.0 system. Model runs were performed for the year 2007. The runs employed 2007 emission estimates inside the New England Domain, along with boundary conditions files reflecting EPA’s NOX SIP Call emission estimates in upwind areas. Year 2007 emissions estimates for the states inside the modeling domain reflected EPA’s NOX SIP call as well as other federal and state control strategies being implemented by the beginning of the 2007 ozone season. This was accomplished using a two-step process. The first step was to project emissions using growth factors to account for increases or decreases in economic activity by industrial sector. In general, the states projected their emissions using the same growth factors that were used in the OTAG modeling effort. The second step involved applying control factors to source categories that would be regulated by the year 2007. States used a combination of information for control levels: those used for the OTAG modeling effort, and state-specific information relating to the effectiveness of control programs planned or in place. These 2007 emission estimates also included, however, the Tier 2/Gasoline Sulfur program that was subsequently adopted by EPA on February 10, 2000 (65 FR 6698).

C. What Are the Conclusions From the Modeling?

EPA guidance for approval of the modeling aspect of a one-hour ozone attainment demonstration is to use the one-hour ozone grid modeling to apply one of two modeled attainment tests (deterministic or statistical) with optional weight of evidence analyses to
supplement the modeled attainment test results when the modeled attainment test is failed. Neither the 1999 or 2007 modeling performed for the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area shows attainment of the one-hour ozone standard (0.124 parts per million) at every grid cell for every hour of every strategy day modeled (August 15, 1987; August 17, 1987; June 22, 1988; July 8, 1988 and July 11, 1988). The maximum predicted base case concentration in the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area for the modeled episodes is 0.230 ppm, for the August 15, 1987 episode. The strategy run for this episode shows a future value in 1999 of 0.186 ppm. For the July 1988 episodes, which are modeled for both 1999 and 2007, New Hampshire looked at the predicted peaks for 1999 and 2007 in the portion of the modeling domain directly influenced by New Hampshire emissions (i.e., southern New Hampshire and northeastern Massachusetts). Those peaks remain above the one-hour ozone standard, with a peak concentration of 0.188 ppm in 1999, and 0.177 ppm in 2007. None of the future case strategy modeling runs pass the strict deterministic test. Since the CALGRID model, as run for the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area, does not pass the strict deterministic attainment test, additional weight of evidence analyses are performed. When these additional weight of evidence analyses are considered, attainment is demonstrated for the Boston-Lawrence-Worcester, MA–NH area.

The paramount element in the New Hampshire weight of evidence analysis is the actual air quality monitoring data. The air quality monitoring data show that the area attained the one-hour NAAQS in 1998, based on 1996–1998 ozone data. The area remained in attainment until the summer of 2001. In the summer of 2001, the violations of the standard occurred to the south of New Hampshire. Both trajectory analyses and zero-out model runs show that the source regions for these violations is not New Hampshire, and there is nothing New Hampshire can do to eliminate or reduce these violations. This information is, in itself, enough to pass a weight-of-evidence test. However, for thoroughness, EPA analyzed more information.

Another element in a weight of evidence analysis is use of the model predicted change in ozone to estimate a future air quality design value. This uses the air quality modeling in a relative sense. An analysis of the modeled ozone data, from the CALGRID model used in the New Hampshire attainment demonstration, in conjunction with monitored air quality data shows that, with the planned emission reductions in the two precursor emissions (VOC and NOx), ground-level ozone concentrations will be below the ambient standard by the 2007 attainment date. More specifically, EPA used the New Hampshire attainment demonstration in a relative sense to estimate a future design value. EPA compared base case CALGRID runs to future case CALGRID runs to estimate the improvement in ozone air quality levels between the base and future cases. Four strategy days (August 15 and 17 1987; July 8, 1988 and July 11, 1988)13 are used in this analysis, which compared the improvement in modeled air quality between the base and future modeling cases. The following procedure is applied. First, base case CALGRID runs are examined to discern the maximum one-hour ozone concentration modeled in the area of concern, in this case a large area to the north of Boston. This is the only area which New Hampshire has any chance of affecting during meteorological conditions that result in one-hour ozone exceedances in New England. The four strategy days are all examined. Next, the same area is used to determine future modeled ozone values. The modeled maximum results of the four strategy days are averaged and a reduction factor calculated from the base case to the future case. This reduction factor represent the amount of ozone reduced in this area, as the result of the emission reductions modeled. This reduction factor is used to adjust the average ozone design value for this part of the model domain, as monitored between 1985 and 1990. This monitored design value represent both the base case model years of 1987 and 1988 and also the design values used in 1991 to classify one-hour nonattainment areas.

This analysis shows that air quality design values can reasonably be expected to be reduced below 0.124 ppm based on continued additional reductions within the domain (e.g., areas in CT, RI and MA) and reductions upwind, reflected in the future year boundary conditions. Furthermore, the emissions sensitivity modeling performed by the State of New Hampshire indicates that ozone reductions from emission reductions within the New England domain will be greater when boundary conditions become cleaner. So emission reductions from future programs like the Tier 2/ sulfur gasoline program and the NOx SIP call will further aid in achieving attainment of the one-hour ozone standard within the nonattainment area.

In addition to this analysis performed by EPA, the New Hampshire DES ozone attainment demonstration also contains a future design value analysis which shows similar results. The New Hampshire DES used a different set of design values than the EPA analysis. The New Hampshire DES analysis used 1995–1997 design values for all of the ozone monitors in New Hampshire. For each monitor, New Hampshire DES calculated the percent improvement in air quality necessary to bring these monitors into attainment of the NAAQS. Then, using the 1999 and 2007 CALGRID modeling runs for the July 8 and July 11 episode,14 the New Hampshire DES calculated the percent improvement between 1999 and 2007. If this percent model improvement is greater than the improvement needed to achieve the one-hour ozone NAAQS, then the New Hampshire DES contends that attainment is shown. The results of the analysis show that New Hampshire can achieve attainment of the one-hour standard by 2007. This analysis by the New Hampshire DES adds to the weight of evidence.

In summary, the CALGRID modeling submitted by the New Hampshire DES for the New Hampshire portion of the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area, when analyzed using the future design value approach, shows attainment of the one-hour NAAQS will be achieved by 2007. This modeling is consistent with EPA guidance. Other information, which provides additional favorable evidence that the Boston-Lawrence-Worcester, MA–NH area, will attain in 2007, are the ambient ozone data trends, a trajectory analysis of exceedence days in the area, and zero-out modeling for New Hampshire.

D. Do the Ambient Ozone Data Show Any Trends?

In total, there are 11 ozone air quality monitors in the Boston-Lawrence-Worcester, MA–NH nonattainment area that have data from 1999–2001, ten in Massachusetts and only one in New Hampshire. They are in the Massachusetts cities and towns of Boston (two sites), Easton, Fairhaven, Lawrence, Lynn, Newbury, Stow, Truro, and Worcester, and Nashua, New

13The June 22, 1988 strategy day is not used because of problems re-analyzing the base case model run for this episode.

14Only the July 8 and 11 episode are included in this analysis because of the limited availability of appropriate 2007 boundary condition for the other episodes.
data. Furthermore, preliminary ozone data for the Boston-Lawrence-Worcester, MA–NH area collected during the summer of 2002, a hot summer, show that of the 11 monitors that have recorded ozone data for the past three years, only the Truro, MA monitor has an ozone design value of 0.125 ppm or above. Truro’s preliminary design value for 2000–2002 is 0.130 ppm, a drop of 0.006 ppm from 2001. During 2000–2002, the fifth highest value at the Truro site is below the level of the one-hour ozone standard.

Based on the overall downward trend in one-hour ozone concentrations in this area, and because precursor emissions are projected to keep falling, both within the nonattainment area and upwind from it, there is no reason to believe that the downward trend in ozone concentrations will not continue over the near term, based on the projected emission reductions. The future emission reductions will be a result of the following: continued benefits from tighter standards on vehicles due to fleet turnover (California Low Emission Vehicles (CA LEV) in Massachusetts and New York and National Low Emission Vehicles in New Hampshire and other upwind areas); the reductions from large point sources due to the OTC NO\textsubscript{X} Budget Program and EPA’s NO\textsubscript{X} SIP call; other federal control measures such controls on non-road engines; and the Tier 2 vehicle and low sulfur gasoline program.

The State of New Hampshire performed many emission sensitivity model runs for the four ozone episodes (August 15–17, June 22, July 8 and July 11). A sensitivity run is a model run to determine how the model reacts to certain controlled changes to one of its inputs. An emission sensitivity run shows how the model reacts to changes in anthropogenic ozone precursor emissions (VOC, NO\textsubscript{X} and carbon monoxide (CO)). For example, how does the CALGRID model respond to a drop in ozone precursor emissions of 50 percent. Some of the most useful, although not achievable in actuality, of these emission sensitivity runs are the so-called zero-out runs, where instead of lowering emissions by 50 or 75 percent, the emissions are completely eliminated from within a certain portion of the domain (i.e., the anthropogenic emissions are set to zero). The CALGRID zero-out runs (model runs that assume no anthropogenic emissions in a given area) show that anthropogenic ozone precursor emissions (VOC, NO\textsubscript{X} and Carbon monoxide (CO)) are set to zero in the State of New Hampshire for each of the four episodes modeled, there is no change in predicted ozone in the Cape Cod and southeastern Massachusetts region. The model does show decreases in ozone concentrations along the New Hampshire coast and over inland sections of New Hampshire and Maine, and in northeastern Massachusetts, but no change over Cape Cod and southeastern Massachusetts, the portion of the nonattainment area still recording ozone violations. This is to be expected on these days since the surface winds were primarily blowing from the southwest toward the northeast. But to have this shown definitively by the CALGRID model is important, because it adds to the argument that there is nothing more New Hampshire can do to lower ozone concentrations over southeastern Massachusetts, and nothing New Hampshire can presently do to advance the attainment date of the nonattainment area. To achieve attainment throughout the entire Boston-Lawrence-Worcester, MA–NH ozone nonattainment area, New Hampshire is beholden to emissions reductions from other states.

F. What Do the Trajectory Analyses Show?

One question that the zero-out modeling runs discussed above, do not answer is “Does New Hampshire contribute to ozone exceedances on Cape Cod on other days not modeled?” In order to answer this question, EPA looked at all days on which there were exceedances of the one-hour ozone standard on Cape Cod, in southeastern Massachusetts, and/or in Rhode Island, over the last three years when we have quality assured and quality controlled ozone data (1999–2001). This area encompasses the ozone monitoring sites in Truro, MA; Fairhaven, MA; Narragansett, RI; East Providence, RI; and West Greenwich, RI. The exceedance days at these sites during 1999–2001 are as follows: June 7, 1999, July 6, 1999, July 16, 1999, June 10, 2000, June 30, 2001, July 25, 2001, August 7, 2001, and August 9, 2001. In order to determine the most probable source region of emissions for the exceedances measured on these days, EPA performed a trajectory analysis for each day.

A trajectory is the path a parcel of air follows from point A to point B (e.g. from New York to Cape Cod). A backward trajectory is the reverse, where did a parcel of air come from (where did the ozone on Cape Cod most likely originate)? The path and/or trajectory depends mostly on the wind
speed and direction, but other weather parameters do come into play, such as how sunny it is, and whether the air is rising or sinking as it moves. One way of determining trajectories is with trajectory models. The model EPA used to compute backward trajectories is the HYSPLIT–4 (Hybrid Single-Particle Lagrangian Integrated Trajectory) model, developed by NOAA Air Resources Lab. Input meteorological data fields were from the National Centers for Environmental PredictionEta Data Assimilation System. Details of this analysis are found in the technical support document for this action. EPA’s trajectory analysis of the days with ozone exceedances at these sites (Truro, MA, Fairhaven, MA, Narragansett, RI, East Providence, RI and West Greenwich, RI) support the CALGRID modeling which shows that the most probable source region of the exceedances at these sites is southern New England and areas to the south and west of New England. In none of the cases modeled, do the HYSPLIT trajectories show New Hampshire as a probable source region for this ozone. This confirms the zero-out runs discussed above, and adds to the weight-of-evidence analysis.

G. Are the Causes of the Recent Violation Being Addressed?


Based on zero-out modeling performed by the New Hampshire DES, the emissions that are causing these violations are not emanating from New Hampshire, but rather from sources near and upwind of these monitors.

Massachusetts, the other state in this multi-state nonattainment area, has performed additional analyses with regard to the remaining violations in the Boston-Lawrence-Worcester, MA–NH nonattainment area. Those additional analyses were submitted to EPA by the Massachusetts DEP on September 6, 2002. Those additional analyses concluded that the emission reductions that upwind states will achieve under the NOX SIP Call, beginning in 2003, should help bring the area back into attainment. Massachusetts also analyzed how reductions from the EPA’s Tier 2 vehicle and low sulfur gasoline program promulgated on January 10, 2000 (65 FR 6697) will benefit the area. In a separate action, EPA has proposed approval of the Massachusetts attainment demonstration for this nonattainment area based on the conclusion that attainment will be achieved in the future once scheduled federal and local control measures are implemented.

Even though the upwind reductions are most critical in ensuring that this area is brought back into attainment, EPA notes that there are additional control strategies and emission reductions within New Hampshire that will not fully be implemented until 2003 and beyond. These measures include: the State of New Hampshire NOx budget and allowance trading program, additional reductions from fleet turn-over and non-road equipment turnover. These reductions will continue to help ensure that air quality improves in the area, and that maintenance of the ozone standard in southern New Hampshire is continued.

H. What Attainment Date Is Being Established for the Nonattainment Area?

The Boston-Lawrence-Worcester, MA–NH area attained the one-hour ozone standard as of 1999, its statutory deadline under the CAA. Moreover, the Boston-Lawrence-Worcester, MA–NH nonattainment area continued to have air quality meeting the one-hour ozone standard until the 1999 through 2001 time period. In the Massachusetts DEP attainment demonstration supplement that was submitted to EPA on September 6, 2002, Massachusetts provides evidence that the entire nonattainment area will once again attain by an attainment date of November 15, 2007, once a variety of scheduled control strategies are more fully implemented. In a separate action, EPA has proposed approval of the Massachusetts attainment demonstration for this nonattainment area and has proposed an attainment date of November 15, 2007. This attainment date will be for the entire nonattainment area including the New Hampshire portion.

I. What About the Mid-course Review?

As discussed above, the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area attained the ozone standard based on ozone data collected in 1997–1999 and 1998–2000, and is now violating the standard only in the southern portion of the multi-state nonattainment area, in Massachusetts. As described in EPA’s proposed approval of the Massachusetts attainment demonstration for this area, the Massachusetts Department of Environmental Protection has committed to perform a mid-course review for this area by December 31, 2004. As discussed above, EPA has concluded that based on ozone modeling and trajectory analyses performed by New Hampshire DES and EPA, that New Hampshire emissions are not contributing to the continued violations in the nonattainment area. Nevertheless, New Hampshire in its attainment demonstration SIP submittal has committed to “work with neighboring states and EPA Region 1 to determine the magnitude and geographic location of emission reductions required in order to most effectively attain and maintain ozone attainment for the 1-hour and then the 8-hour ozone standards.” EPA interprets this to mean that New Hampshire will work with Massachusetts in performing a mid-course review for this area by December 31, 2004. EPA believes this mid-course review will be sufficient to determine if the nonattainment area’s control strategy is resulting in emission reductions and air quality improvements needed to attain the ozone standard in the nonattainment area as expeditiously as practicable.

J. What About the Requirement for RACM?

The EPA has reviewed the SIP submittal for the New Hampshire portion of the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area to determine if it includes sufficient documentation concerning available RACM measures. In its June 30, 1998 attainment demonstration, New Hampshire DES describes the control measures that it is implementing to assure attainment. New Hampshire DES also analyzes how effective additional VOC and NOX reductions in various parts of the modeling domain would be at reducing predicted elevated concentrations of ozone.

As explained above, the analyses done by the New Hampshire DES included “zero-out” modeling runs for five separate episode days. In those model runs, all New Hampshire anthropogenic emissions of NOX and VOC are removed from the analysis.

Those “zero-out” modeling runs shows the contribution that New Hampshire anthropogenic emissions have to various parts of the modeling domain. As explained above, ozone monitoring data from 1999 through 2001 for the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area shows that only ozone monitors in extreme southeastern Massachusetts currently violate the one-hour ozone NAAQS. A look at those “zero-out” modeling runs
With this in mind shows that even if the State of New Hampshire eliminated all anthropogenic sources of ozone precursors (NO\textsubscript{x} and VOC), there would be no impact to the area in southeastern Massachusetts still recording NAAQs violations.

Furthermore, EPA performed a trajectory analysis of each of the days during 1999 through 2001 when exceedances of the one-hour ozone NAAQS were monitored in the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area. That analysis shows that the source region for these exceedances is southern New England and areas to the south and west of New England. None of the trajectories implicate the State of New Hampshire.

Therefore, EPA concludes based on the available information, that there are no additional emission control measures in New Hampshire that will advance the attainment date for the New Hampshire portion of the Boston-Lawrence-Worcester, MA–NH ozone nonattainment area. Thus no potential measure can be considered RACM for purposes of section 172(c)(1) for southern New Hampshire for its one-hour ozone attainment demonstration. The EPA therefore proposes that the New Hampshire SIP meets the requirements for RACM.

Although EPA does not believe that section 172(c)(1) requires implementation of additional measures for this area, this conclusion is not necessarily valid for other areas.

K. What About Motor Vehicle Emissions Budgets?

New Hampshire’s 15 percent plan submitted on February 3, 1994 included a year 1996 VOC motor vehicle emissions budget of 17.96 tons per summer day. On September 27, 1996 New Hampshire submitted its post-1996 plan which included a more stringent 1999 VOC motor vehicle emissions budgets of 16.56 tons per summer day VOC, as well as identified a new NO\textsubscript{x} budget of 22.96 tons per summer day of NO\textsubscript{x}. These 1999 motor vehicle emissions budgets were formally determined adequate by EPA New England for use in transportation conformity on April 29, 1999. Subsequent to the rate-of-progress SIPs, on June 30, 1998, New Hampshire submitted its ozone attainment demonstration to EPA which establishes motor vehicle emissions budgets for both VOC and NO\textsubscript{x} for 2003. The 2003 VOC and NO\textsubscript{x} budgets (10.72 tons per summer day and 21.37 tons per summer day respectively) established by the New Hampshire ozone attainment demonstration were formally determined adequate by EPA on August 19, 1998. These budgets are currently the controlling budgets for conformity determinations for 2003 and later years because the 2003 MVEBs are more stringent than the 1999 budget.

New Hampshire’s current level of VOC and NO\textsubscript{x} emissions are consistent with a level required to attain and maintain the one-hour ozone NAAQS in New Hampshire and downwind areas. No ozone monitor in the New Hampshire portion of the Boston-Lawrence-Worcester, MA–NH serious ozone nonattainment area has experienced a violation of the one-hour ozone NAAQS since the three year period from 1996–1998. Additional VOC and NO\textsubscript{x} emission reductions within the New Hampshire portion of the nonattainment area would not likely speed up attainment in the nonattainment area nor reduce elevated ozone levels measured in southeastern Massachusetts, the portion of the nonattainment area that still violates the one-hour ozone standard. This conclusion is justified by the zero-out modeling and trajectory analysis discussed above.

The 2003 MVEBs adopted by the State of New Hampshire are lower than the current level of motor vehicle emissions estimated in the New Hampshire portion of the Boston-Lawrence-Worcester, MA-NH nonattainment area.\textsuperscript{15} While the 2003 MVEBs are not as stringent as the currently projected 2007 motor vehicle emissions for the area,\textsuperscript{16} the motor vehicle emission budgets must only demonstrate that its emission level is sufficient to attain and maintain the one-hour NAAQS for ozone. For example, the projected 2007 motor vehicle emission levels can have an additional quantity of “safety margin” emissions to accommodate future growth added to them to create the attainment-level motor vehicle emission budgets, provided that the area continues to demonstrate attainment. The important criteria is that the motor vehicle emission level established in the attainment demonstration, when added to the stationary, area and other mobile sources are consistent with attainment of the one-hour NAAQS for ozone.

Since New Hampshire’s current level of VOC and NO\textsubscript{x} emissions are consistent with a level required to attain the one-hour ozone NAAQS, the lower 2003 MVEBs adopted by the State of New Hampshire represent acceptable attainment-level MVEBs with a safety margin included. Since the State of New Hampshire has such discretion when setting motor vehicle emissions budgets provided its budgets are consistent with the measures in the SIP, EPA is proposing to approve the budgets submitted by New Hampshire. The attainment-level MVEBs are shown in Table 3 below.

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**Table 3. Attainment-Level Emissions Budgets for On-road Mobile Sources in Tons per Summer Day (TPSD)**

<table>
<thead>
<tr>
<th>Area</th>
<th>Attainment VOC budget</th>
<th>Attainment NO\textsubscript{x} budget</th>
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\textsuperscript{15} New Hampshire estimated motor vehicle source emissions in the area for 2002 to be 11.99 tons per summer day of VOC and 26.02 tons per summer day of NO\textsubscript{x}. The estimates were done using MOBILE6 and estimated vehicle miles traveled (VMT) data for 2002.

\textsuperscript{16} New Hampshire estimated motor vehicle source emissions in the area for 2007 to be 8.64 tons per summer day of VOC and 19.31 tons per summer day of NO\textsubscript{x}. The estimates were also done using MOBILE6 and used estimated 2007 VMT data as well control strategies expected to be in place in 2007 including EPA’s Tier 2/Sulfur gasoline program.

November 15, 2007 is established for the entire nonattainment area, New Hampshire will be required to use 2007 as a milestone year in future transportation conformity determinations.
L. What Are the Contingency Measures for This Area?

The EPA believes the contingency measure requirements of sections 172(c)(9) and 182(c)(9) of the CAA are independent requirements from the attainment demonstration requirements under sections 172(c)(1) and 182(c)(2)(A) and the rate-of-progress (ROP) requirements under sections 172(c)(2) and 182(c)(2)(B). The contingency measure requirements are to address the event that an area fails to meet a ROP milestone or fails to attain the ozone NAAQS by the attainment date established in the SIP. The contingency measure requirements have no bearing on whether a state has submitted a SIP that projects attainment of the ozone NAAQS or the required ROP reductions toward attainment. The attainment or ROP SIP provides a demonstration that attainment or ROP requirements are fulfilled, but the contingency measure SIP requirements concern what is to happen only if attainment or ROP is not actually achieved. The EPA acknowledges that contingency measures are an independently required SIP revision, but does not believe that submission of contingency measures is necessary before EPA may approve an attainment or ROP SIP. New Hampshire remains obligated to submit the contingency measures required by 172(c)(9) and 182(c)(2)(A), but EPA may approve this attainment demonstration at this time even though they have not yet been done.

VIII. Proposed Action

EPA is proposing to fully approve as meeting CAA section 182(c)(2) the ground-level one-hour ozone attainment demonstration State Implementation Plan for the New Hampshire portion of the Boston-Lawrence-Worcester, MA-NH ozone nonattainment area submitted by New Hampshire on June 30, 1998, as demonstrating that the area will attain the one-hour ozone standard. We are also proposing that no potential measures can be considered RACM for New Hampshire for purposes of section 172(c)(1). This notice also proposes to approve the attainment-level motor vehicle emissions budgets submitted by New Hampshire into the SIP.

EPA is soliciting public comments on the issues discussed in this proposal. 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 document.

IX. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a “significant regulatory action” and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does 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. This rule also is not subject to Executive Order 13045 “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA’s role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the state to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Nitrogen dioxide, Ozone, Volatile organic compounds.

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

Dated: October 11, 2002.

Carl F. Dierker,
Acting, Regional Administrator, New England Region.

[FR Doc. 02–26709 Filed 10–18–02; 8:45 am]
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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 271

[FRL–7393–7]

Ohio: Proposed Authorization of State Hazardous Waste Management Program Revision

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Ohio has applied to EPA for final authorization of certain changes to its hazardous waste program under the Resource Conservation and Recovery