

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[DC039-2019, VA090-5036, MD073-3045; FRL-6502-8]

#### Approval and Promulgation of Air Quality Implementation Plans; District of Columbia, Maryland, Virginia; One-Hour Ozone Attainment Demonstration for the Metropolitan Washington D.C. Ozone Nonattainment Area

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

**ACTION:** Proposed rule.

**SUMMARY:** The EPA is proposing to approve the State Implementation Plans (SIPs) consisting of the 1-hour ozone attainment demonstration for the Metropolitan Washington D.C. serious nonattainment area (the Washington area) submitted by the District of Columbia's Department of Health on April 24, 1998, and October 27, 1998, by the Maryland Department of the Environment on April 29, 1998 and August 17, 1998, and by the Virginia Department of Environmental Quality on April 29, 1998, and August 18, 1998; we are also proposing to approve a request to extend the area's attainment date from November 15, 1999 to November 15, 2005, because the Washington area is affected by transported pollution from upwind areas. We are also proposing, in the alternative, to disapprove these demonstrations if Maryland, Virginia and the District do not submit an adequate motor vehicle emissions budget consistent with attainment, adopted rules needed to ensure that nonattainment area 2005 emissions levels are less than the modeled 1999 control strategy levels and in the case of the District of Columbia adopt and submit rules for the NO<sub>x</sub> reductions consistent with the modeling demonstration and a national low emissions vehicle program. For purposes of an adequate motor vehicle emissions budget, Maryland, Virginia and the District each will need to reaffirm that its previously submitted enforceable commitment to adopt the measures needed for attainment would apply to the additional measures to reduce emissions to demonstrate that nonattainment area 2005 emissions levels are less than the modeled 1999 control strategy levels. Each reaffirmation must also include a commitment to the performance of a mid-course review and to revisions to the SIP and motor vehicle emissions budget after MOBILE6 (the most recent

model for estimating mobile source emissions) is released. The Washington area is comprised of the entire District of Columbia (the District), a portion of Maryland (namely, Calvert, Charles, Frederick, Montgomery, and Prince Georges Counties), and a portion of Virginia (namely, Alexandria, Arlington County, Fairfax, Fairfax County, Falls Church, Manassas, Manassas Park, Prince William County, and Stafford County).

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

**ADDRESSES:** Written comments may be mailed to David L. Arnold, Chief, Ozone & Mobile Sources Branch, Mailcode 3AP21, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; District of Columbia Department of Public Health, Air Quality Division, 51 N Street, N.E., Washington, DC 20002; Maryland Department of the Environment, 2500 Broening Highway, Baltimore, Maryland 21224; and the Virginia Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.

**FOR FURTHER INFORMATION CONTACT:** Christopher Cripps, (215) 814-2179, at the EPA Region III address above, or by e-mail at [cripps.christopher@epa.gov](mailto:cripps.christopher@epa.gov).

**SUPPLEMENTARY INFORMATION:** This document provides background information on attainment demonstration SIPs for the 1-hour ozone national ambient air quality standard (NAAQS) and an analysis of the 1-hour ozone attainment demonstration SIPs submitted by the District of Columbia's Department of Health (DoH) on April 24, 1998, and October 27, 1998, by the Maryland Department of the Environment (MDE) on April 29, 1998 and August 17, 1998, and by the Virginia Department of Environmental Quality (VADEQ) on April 29, 1998, and August 18, 1998 for the Washington area. This document addresses 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 Attainment Demonstrations for the Serious 1-Hour Ozone Nonattainment Areas?

What are the Relevant Policy and Guidance Documents?

How Do the District's, Maryland's, and Virginia's Submittals Satisfy the Frame Work?

### I. Background

#### A. What Is the Basis for the 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 1-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<sub>x</sub>) and volatile organic compounds (VOCs) react in the presence of sunlight to form ground-level ozone. NO<sub>x</sub> and VOC are referred to as precursors of ozone.

An area exceeds the 1-hour ozone standard each time an ambient air quality monitor records a 1-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 1-hour ozone standard, generally based on air quality monitoring data from the three-year period from 1987-1989. CAA section 107(d)(4); 56 FR 56694 (Nov. 6, 1991). The CAA further classified these areas, based on the area's design value, as marginal, moderate, serious, severe or extreme. CAA section 181(a). Marginal areas were suffering the least significant air pollution problems while the areas classified as severe and extreme had the most significant air pollution problems.

The control requirements and dates by which attainment needs to be achieved vary with the area's classification. Marginal areas are subject to the fewest mandated control requirements and have the earliest attainment date. Severe and extreme areas are subject to more stringent planning requirements but are provided more time to attain the standard. Serious areas are required to attain the 1-hour standard by November 15, 1999 and severe areas are required to attain by November 15, 2005 or November 15, 2007. The Washington area is classified as serious and its attainment date is November 15, 1999.

Under section 182(c)(2) and (d) of the CAA, serious and severe areas were required to submit by November 15, 1994, demonstrations of how they would attain the 1-hour standard and how they would achieve reductions in VOC emissions of 9 percent for each three-year period until the attainment year (rate-of-progress or ROP). (In some cases, NO<sub>x</sub> 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 District of Columbia's Department of Health (DoH), the Maryland Department of the Environment (MDE) and the Virginia Department of Environmental Quality (VADEQ) for the Washington area. EPA will take action on the District's, Maryland's and Virginia's ROP plans for the Washington area in separate rulemaking actions. In addition, elsewhere in this **Federal Register**, EPA is today proposing to take action on attainment demonstration and, in some cases, ROP SIPs for nine other serious or severe 1-hour ozone nonattainment areas. The additional nine areas are Greater Connecticut (CT), Springfield (Western Massachusetts) (MA), New York-North New Jersey-Long Island (NY-NJ-CT), Baltimore (MD), Philadelphia-Wilmington-Trenton (PA-NJ-DE-MD), 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<sup>1</sup> 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.

<sup>1</sup> Under the CAA, the District of Columbia has the same attainment planning authorities and responsibilities as any other of the fifty States.

## 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<sub>x</sub> and VOC 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.<sup>2</sup> 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)<sup>3</sup> 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<sub>x</sub> 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 expeditious course to being adopted and implemented; (2) a list of measures

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

<sup>3</sup> Letter from Mary A. Gade, Director, State of Illinois Environmental Protection Agency to Environmental Council of States (ECOS) Members, dated April 13, 1995.

needed to meet the remaining ROP emissions reduction requirement and to reach attainment; (3) for severe areas only, a commitment to adopt and submit target calculations for post-1999 ROP and the control measures necessary for attainment and ROP plans through the attainment year by the end of 2000; (4) a commitment to implement the SIP control programs in a timely manner and to meet ROP emissions reductions and attainment; and (5) evidence of a public hearing on the State submittal.<sup>4</sup> 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 1-hour standard because they did not regulate NO<sub>x</sub> 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<sub>x</sub> emissions reductions within the State to a level consistent with a NO<sub>x</sub> emissions budget identified in the final rule. 63 FR 57356 (Oct. 27, 1998). This final rule is commonly referred to as the NO<sub>x</sub> SIP Call.

## 3. Attainment Date Delays Due to Transport

On July 16, 1998, EPA's then Acting Assistant Administrator, Richard Wilson, issued a guidance memorandum intended to provide further relief to areas affected by ozone transport.<sup>5</sup> The memorandum recognized that many moderate and serious areas are affected by transported pollution from either an upwind area in the same State with a higher classification and later attainment date,

<sup>4</sup> Memorandum, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM 10 NAAQS," issued December 29, 1997. A copy of this memorandum may be found on EPA's web site at <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

<sup>5</sup> Memorandum, "Extension of Attainment Dates for Downwind Transport Areas," issued July 16, 1998. This memorandum is applicable to both moderate and serious ozone nonattainment areas. A copy of this policy may be found on EPA's web site at <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

and/or from an upwind area in another State that is significantly contributing to the downwind area's nonattainment problem. The policy recognized that some downwind areas may be unable to meet their own attainment dates, despite doing all that was required in their local area, because an upwind area may not have adopted and implemented all of the controls that would benefit the downwind area through control of transported ozone before the downwind area's attainment date. Thus, the policy provided that upon a successful demonstration that an upwind area has interfered with attainment and that the downwind area is adopting all measures required for its local area<sup>6</sup> for attainment but for this interference, EPA may grant an extension of the downwind area's attainment date.<sup>7</sup> Once an area receives an extension of its attainment date based on transport, the area would no longer be subject to reclassification to a higher classification and subject to additional requirements for failure to attain by its original attainment date provided it was doing all that was necessary locally.

A request from the State of Maryland, the Commonwealth of Virginia and the District of Columbia for such an extension of the attainment date for the Washington nonattainment area and EPA's proposed response is discussed in this action.

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

The States generally submitted the SIPs between April and October of 1998; some States are still submitting additional revisions as described below. Under the CAA, EPA is required to approve or disapprove a State's submission no later than 18 months following submission. (The statute provides up to 6 months for a completeness determination and an

additional 12 months for approval or disapproval.) The EPA believes that it is important to keep the process moving forward in evaluating these plans and, as appropriate, approving them. Thus, in today's **Federal Register**, EPA is proposing to take action on the 10 serious and severe 1-hour ozone attainment demonstration SIPs (located in 13 States and the District of Columbia) and intends to take final action on these submissions over the next 6–12 months. The reader is referred to individual dates in this document for specific information on actions leading to EPA's final rulemaking on these plans.

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

Depending upon 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 on the part of the State.

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

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 upon a modeled attainment demonstration supplemented with additional evidence to demonstrate attainment.<sup>8</sup> 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

<sup>6</sup>Local area measures would include all of the measures within the local modeling domain that were relied on for purposes of the modeled attainment demonstration.

<sup>7</sup>The policy provides that the area must meet four criteria to receive an attainment date extension. In summary, the area must: (1) Be identified as a downwind area affected by transport from either an upwind area in the same State with a later attainment date or an upwind area in another State that significantly contributes to downwind nonattainment; (2) submit an approvable attainment demonstration with any necessary, adopted local measures and with an attainment date that reflects when the upwind reductions will occur; (3) adopt all local measures required under the area's current classification and any additional measures necessary to demonstrate attainment; and (4) provide that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved.

<sup>8</sup>The EPA issued guidance on the air quality modeling that is used to demonstrate attainment with the 1-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").

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 1-hour daily maximum concentrations in all grid cells for the attainment year to the level of the NAAQS. A predicted concentration above 0.124 ppm ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to attain the standard. This type of test is often referred to as an exceedance test. The EPA's guidance recommends that States use either of two modeled attainment or exceedance tests for the 1-hour ozone NAAQS: a deterministic test or a statistical test.

The deterministic test requires the State to compare predicted 1-hour daily maximum ozone concentrations for each modeled day<sup>9</sup> 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 1-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 1-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 1-hour NAAQS. For example, a monitoring site for which the four highest 1-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

<sup>9</sup>The initial, "ramp-up" days for each episode are excluded from this determination.

a single day and it would be the only reading above the standard that would be expected to occur no more than an average of once a year over a three-year period. Therefore, if the maximum ozone concentration predicted by the model is below the acceptable upper limit, in this case 0.136 ppm, then EPA might conclude that the modeled attainment test is passed. Generally, exceedances well above 0.124 ppm are very unusual at monitoring sites meeting the NAAQS. Thus, these upper limits are rarely substantially higher than the attainment level of 0.124 ppm.

## 2. Additional Analyses Where Modeling Fails to Show Attainment

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

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

The EPA's 1996 modeling guidance also recognizes a need to perform a mid-

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

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

In addition to the modeling analysis and WOE support demonstrating attainment, the EPA has identified the following key elements which must be present in order for EPA to approve or conditionally approve the 1-hour attainment demonstration SIPs. These elements are listed below and then described in detail.

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

*NO<sub>x</sub> Reductions Consistent With the Modeling Demonstration*

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

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

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

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

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

The States should have adopted the control measures already required under the CAA for the area classification. Since these 10 serious and severe areas need to achieve substantial reductions from their 1990 emissions levels in order to attain, EPA anticipates that these areas need all of the measures required under the CAA to attain the 1-hour ozone NAAQS.

In addition, the States may have included more control measures in its attainment strategy that are in addition to measures required in the CAA. (For serious areas, these should have already been identified and adopted, whereas severe areas have until December 2000 to submit measures necessary to achieve ROP through the attainment year and to attain.) For purposes of fully approving the State's SIP, the State will need to adopt and submit all VOC and NO<sub>x</sub> controls within the local modeling domain that were relied on for purposes of the modeled attainment demonstration.

The information in Table 1 is a summary of the CAA requirements that need to be met for each serious nonattainment area for the 1-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 this table. EPA will need to take final action approving all measures relied on for attainment, including the required ROP control measures and target calculations, before EPA can issue a final full approval of the attainment demonstration as meeting CAA section 182(c)(2).

TABLE 1.—CAA REQUIREMENTS FOR SERIOUS AREAS

- NSR for VOC and NO<sub>x</sub><sup>1</sup>, including an off-set ratio of 1.2:1 and a major VOC and NO<sub>x</sub> source cutoff of 50 tons per year (tpy).
- Reasonable Available Control Technology (RACT) for VOC and NO<sub>x</sub><sup>1</sup>.
- Enhanced Inspection and Maintenance (I/M) program.
- 15% volatile organic compound (VOC) plans.
- Emissions inventory.
- Emission statements.
- Attainment demonstration
- 9 percent ROP plan through 1999.
- Clean fuels program or a substitute.
- Enhanced Monitoring—Photochemical Assessment Monitoring Stations (PAMS).

TABLE 1.—CAA REQUIREMENTS FOR SERIOUS AREAS—Continued

—Stage II vapor recovery.

<sup>1</sup> Unless the area has in effect a NO<sub>x</sub> waiver under section 182(f). The Washington area is not such an area.

*2. NO<sub>x</sub> Reductions Consistent With the Modeling Demonstration*

The EPA completed final rulemaking on the NO<sub>x</sub> SIP Call on October 27, 1998, which required States to address transport of NO<sub>x</sub> and ozone to other States. To address transport, the NO<sub>x</sub> SIP Call established emissions budgets for NO<sub>x</sub> that 23 jurisdictions were required to show they would meet through enforceable SIP measures adopted and submitted by September 30, 1999. The NO<sub>x</sub> 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<sub>x</sub> SIP Call rule requiring States to submit rules by September 30, 1999.

The NO<sub>x</sub> SIP Call rule establishes budgets for the States in which 9 of the nonattainment areas for which EPA is proposing action today are located. The 9 areas are: Greater Connecticut, Springfield MA, New York-North New Jersey-Long Island (NY-NJ-CT), Baltimore MD, Philadelphia-Wilmington-Trenton (PA-NJ-DE-MD), Metropolitan Washington, D.C. (DC-MD-VA), Atlanta GA, Milwaukee-Racine WI, and Chicago-Gary-Lake County (IL-IN).

Emission reductions that will be achieved through EPA's NO<sub>x</sub> 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 1-hour attainment demonstrations on which EPA is proposing action have relied, in part, on the NO<sub>x</sub> 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<sub>x</sub> SIP Call rule remains in effect. Therefore, EPA believes it is appropriate to allow States to continue to assume the reductions from the NO<sub>x</sub> SIP Call in areas outside the local 1-hour modeling domains. If States assume control levels and emission reductions other than those of the NO<sub>x</sub> 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<sub>x</sub> SIP Call budgets prior to the time that all States are required to comply with the NO<sub>x</sub> SIP Call. If the reductions from the NO<sub>x</sub> 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<sup>10</sup> for purposes of the modeled attainment demonstration must be adopted and submitted as part of the State's 1-hour attainment demonstration SIP. It is only for reductions occurring outside the local modeling domain that States may assume implementation of NO<sub>x</sub> SIP Call measures and the resulting boundary conditions.

### 3. Motor Vehicle Emissions Budget

The EPA believes that attainment demonstration SIPs must necessarily estimate the motor vehicle emissions that will be produced in the attainment year and demonstrate that this emissions level, when considered with emissions from all other sources, is consistent with attainment. The estimate of motor vehicle emissions is used to determine the conformity of transportation plans and programs to the SIP, as described by CAA section 176(c)(2)(A). For transportation conformity purposes, the estimate of

<sup>10</sup> 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.

motor vehicle emissions is known as the motor vehicle emissions budget. The EPA believes that appropriately identified motor vehicle emissions budgets are a necessary part of an attainment demonstration SIP. A SIP cannot effectively demonstrate attainment unless it identifies the level of motor vehicle emissions that can be produced while still demonstrating attainment.

The EPA has determined that except for the Western MA (Springfield) attainment demonstration SIP, the motor vehicle emission budgets for all areas in today's proposals are inadequate or missing from the attainment demonstration. Therefore, EPA is proposing, in the alternative, 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.<sup>11</sup> 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.<sup>12</sup> 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

<sup>11</sup> 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.

<sup>12</sup> 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.

issued two supplemental notices. 64 FR 35112 (June 30, 1999); 64 FR 57827 (October 27, 1999).

These two supplemental notices provide 1-hour ozone modeling and monitoring information that support EPA's belief that the Tier 2/Sulfur program is necessary to help areas attain the 1-hour NAAQS. Under the proposed rule, NO<sub>x</sub> and VOC emission reductions (as well as other reductions not directly relevant for attainment of the 1-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<sub>x</sub> 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 1-hour standard applies need the Tier 2/Sulfur program reductions to help attain the 1-hour ozone standard. The Washington 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.<sup>13</sup> 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.<sup>14</sup> This memorandum explains that conformity analyses in serious and severe ozone nonattainment areas can begin

<sup>13</sup> Memorandum, "1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking" from Lydia Wegman, Office of Air Quality Planning and Standards and Merrylin Zaw-Mon, Office of Mobile Sources to the Air Division Directors, Regions I-VI, issued November 8, 1999. A copy of this memorandum may be found on EPA's web site at <http://www.epa.gov/oms/transp/traqconf.htm>.

<sup>14</sup> Memorandum, "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations", from Merrylin Zaw-Mon, Office of Mobile Sources, to Air Division Directors, Regions I-VI, issued November 3, 1999. A copy of this memorandum may be found on EPA's web site at <http://www.epa.gov/oms/transp/traqconf.htm>.

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

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

A number of areas for which the EPA is not proposing to determine that additional emission reduction beyond those provided by the SIP submission are necessary for attainment will be taking a partial credit for Tier 2 if they use credit from national low emissions vehicles (NLEV) in their attainment demonstration. These nonattainment areas are the Milwaukee-Racine,

Chicago-Gary-Lake County and Metropolitan Washington, D.C. areas. By regulation, the NLEV standards do not extend beyond the 2003 model year unless EPA promulgates Tier 2 vehicle standards at least as stringent as the NLEV standards. See 40 CFR 86.1701-99(c). Thus, the emission reductions relied upon from 2004 and later model year NLEV vehicles will actually be due to the promulgation of the Tier 2 standards, either through the extension of the NLEV program or a portion of the reduction from vehicles meeting the Tier 2 standards.

If the motor vehicle emissions budget reflects Tier 2/sulfur reductions, then 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 if 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 motor vehicle emissions budgets include the effects of the Tier 2/Sulfur program. 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 if the budgets include the effects of the Tier 2/Sulfur program 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 document, 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.<sup>15</sup>

#### 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, and Atlanta, even considering the Tier II/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<sub>x</sub> 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.

For the Washington area, EPA has not determined that emission reductions are needed. However, in order for EPA to approve the attainment demonstration for the Washington area, Maryland, the District of Columbia and Virginia will need to demonstrate that emissions in 2005 will not exceed the projected emissions for 1999. To do so, the Washington area may need to adopt additional measures to offset any growth.

For purposes of conformity, if the states 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 states will need to amend its commitment by letter to provide two things concerning the additional measures.

<sup>15</sup> 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.

First, the State will need to identify a list of potential control measures (from which a set of measures could be selected) that when implemented, would be expected to provide sufficient additional emission reductions to meet the level of reductions 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<sup>16</sup>.) 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.

For a serious area, such as the Washington area, the State will need to submit adopted rules to achieve the additional reductions, as well as rules for measures relied on in their demonstration but not yet adopted, to EPA as a SIP revision to their attainment demonstration no later than July 1, 2000 in order to allow EPA to promulgate its approval of the revision by November 2000.

*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<sub>x</sub> 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 addition, EPA has posted a copy of the report on its web site at [www.epa.gov/ttn/oarpg/t1main.html](http://www.epa.gov/ttn/oarpg/t1main.html).

In summary, the report provides information in four areas. First, the report contains detailed information on emissions for ozone precursor emissions of NO<sub>x</sub> 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<sub>x</sub> 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/](http://www.epa.gov/ttn/catc/).

The ACT documents for VOC and NO<sub>x</sub> 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 non-major 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 Officials' (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

<sup>16</sup>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>.

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 NO<sub>x</sub> 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 by 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 Washington area, EPA believes that the State of Maryland, the Commonwealth of Virginia and the District must submit an enforceable commitment to perform a MCR as described here.<sup>17</sup>

As part of the commitment, the State should commit 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 serious areas requesting an attainment date extension to 2005, the States and the District must have an enforceable commitment to perform the MCR following the 2003 ozone season and to submit the results to EPA by the end of the review year (e.g., December

31, 2003). EPA believes that an analysis in 2003 would be most robust since some or all of the regional NO<sub>x</sub> 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. In Summary, What Does EPA Expect to Happen With Respect to Attainment Demonstrations for the Metropolitan Washington D.C. 1-Hour Ozone Nonattainment Area?*

The following table shows a summary of information on what EPA expects from Maryland, Virginia, and the District of Columbia to allow EPA to approve the 1-hour ozone attainment demonstration SIPs.

TABLE 2.—SUMMARY SCHEDULE OF FUTURE ACTIONS RELATED TO ATTAINMENT DEMONSTRATION FOR THE WASHINGTON SERIOUS NONATTAINMENT AREA IN MARYLAND, VIRGINIA AND THE DISTRICT OF COLUMBIA

Req'd no later than	Action
12/31/99 .....	States submit the following to EPA: —motor vehicle emissions budget. <sup>1</sup> —Commitments <sup>2</sup> or reaffirmation of a previous commitment to do the following: —Submit in July 2000 measures for additional emission reductions if required in 2005. <sup>3</sup> —Submit revised SIP & motor vehicle emissions budget by July 2000 if additional measures (due by July 2000) affect the motor vehicle emissions inventory. —Submit revised SIP & motor vehicle emissions budget 1 year after MOBILE6 issued. <sup>4</sup> —Perform a mid-course review.

<sup>17</sup> For purposes of conformity, the State needs a commitment that has been subject to public hearing. If the State has submitted a commitment

that has been subject to public hearing and that provides for the adoption of all measures necessary for attainment, the State should submit a letter prior

to December 31, 1999, amending the commitment to include the MCR.

TABLE 2.—SUMMARY SCHEDULE OF FUTURE ACTIONS RELATED TO ATTAINMENT DEMONSTRATION FOR THE WASHINGTON SERIOUS NONATTAINMENT AREA IN MARYLAND, VIRGINIA AND THE DISTRICT OF COLUMBIA—Continued

Req'd no later than	Action
4/15/00 ..... Before EPA final rulemaking .....	—A list of potential control measures that could provide additional emission reductions if needed in 2005. <sup>5</sup> States submit in final any submissions made in draft by 12/31/99. States submit enforceable commitments for any above-mentioned commitments that may not yet have been subjected to public hearing.
7/1/00 .....	—States submit final rules for additional measures for emission reductions as required in the attainment demonstration test. —State revises & submits SIP & motor vehicle emissions budget if the additional measures are for motor vehicle emissions category. —States revise & submit SIP & motor vehicle emissions budget to account for Tier 2 reductions as needed. <sup>6</sup>
Within 1 yr after release of MOBILE6 model ..... 12/31/03 .....	States submit revised SIP & motor vehicle emissions budget based on MOBILE6. States submit mid-course review.

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

<sup>2</sup> 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.

<sup>3</sup> Only if additional rules (except Tier 2) beyond current control strategy are needed in 2005.

<sup>4</sup> The revision for MOBILE6 is only required for SIPs that include the effects of Tier 2. The commitment to revise the SIP after MOBILE6 may be submitted at the same time that the state submits the budget that includes the effects of Tier 2 (no later than 7/1/00).

<sup>5</sup> The State is not required to commit to adopt any specific measures. However, if the State does not do so, the list cannot include any measures that place limits on highway construction.

<sup>6</sup> If the state submits such a revision, it must be accompanied by a commitment to revise the SIP and motor vehicle emissions budget 1 year after MOBILE6 is issued (if the commitment has not already been submitted).

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

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

#### Recent Documents

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

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, "Guidance on Motor Vehicle Emissions Budgets in One-Hour Attainment Demonstrations," from Merrylin Zaw-Mon, Office of Mobile

Sources, to Air Division Directors, Regions I-VI. 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, "1-Hour Ozone NAAQS—Mid-Course Review Guidance." From John Seitz, Director, Office of Air Quality Planning and Standards. Web site: <http://www.epa.gov/ttn/scram/>.

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. EPA's Review and Analysis of the District's, Maryland's and Virginia's Submittals

This section provides a review of Maryland's, Virginia's and the District's submittals and an analysis of how these submittals satisfy the frame work discussed in Section I. of this document.

#### A. Analysis of the Local Modeling and Weight-of-Evidence

The following is a summary of our analysis of the local modeling. A more detailed description of the District's and the state submittals 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.

### 1. Analysis of the Modeling for the Local Modeling Domain

The CAA requires that serious areas and above perform photochemical grid modeling to help determine the emission reductions of VOC and (NO<sub>x</sub>) necessary to achieve the attainment of the 1-hour ozone standard. Maryland, Virginia and the District of Columbia fulfilled this requirement through the VADEQ's application of the Urban Airshed Model, Version 4 (UAM-IV) for the Washington area and through the use of the modeling results from the OTAG application of the Urban Airshed Model, Version 5 (UAM-V).

The ozone attainment demonstration for the Washington area contains local scale modeling that, other than the number of episodes modeled, fulfills EPA recommended modeling procedures. Maryland, Virginia and the District modeled two episodes rather than the three recommended by EPA. EPA modeling guidance requires that a total of three episodes be modeled from at least two meteorological regimes. Given the severe nature of the episodes modeled, even if one more episode was modeled, the two episodes that were modeled (July 15-16, 1991 & July 18-20, 1991), due to their severity, would most likely be the controlling episodes in the determination of the emission reductions needed in the Washington area for attainment. The two episodes that were modeled also represent the most frequently occurring meteorological conditions conducive to high ozone in the Washington area. It should be pointed out, however, that three episodes were analyzed in the design value rollback analysis performed using the modeling results from EPA's NO<sub>x</sub> SIP Call Supplemental Notice of Proposed Rulemaking (SNPR) (63 FR 25901, May 11, 1998).

When the 1999 emission inventory with the control strategy is modeled, peak ozone concentration is reduced by approximately 22 ppb from the modeled peak concentrations in the 1988 and 1991 base cases. When the average modeled ozone reduction is applied to the peak measured concentration for July 16 (137 ppb) and July 19 (132 ppb), the resulting concentrations are 115 ppb and 110 ppb, respectively. This indicates attainment for these days. However, when the modeled ozone reduction is applied to the peak monitored level on July 20 (178 ppb), the resulting concentration is 156 ppb.

Because the ozone forming potential rank is very high for July 20, 1991 (13th most severe day out of approximately the last 50 years with an average reoccurrence of once every 4-5 years) this type of day is not likely to occur often enough to be a major causative factor for nonattainment, especially since the emission controls modeled in this attainment demonstration should eliminate ozone exceedances for all but the most meteorologically severe days.

The local modeling for the Washington area over-predicts ozone concentrations. The local 1991 base case modeling predicts peak concentrations in the Washington area of 167-198 ppb while ozone monitors in the same area during the same time period show peak concentrations ranging from 132 ppb to 178 ppb. This indicates that the model is over-predicting the actual ozone concentrations by an average of 19%. When model over-prediction (approximately 19%) is accounted for in both of the July 1991 episodes, the local scale modeled peak concentrations become 120 ppb for July 16th, 111 ppb for July 19th and 142 ppb for July 20th. The adjusted peak concentration for two out of the three primary episode days indicates attainment. The adjusted concentration for July 20th does not indicate attainment at 142 ppb. However, a concentration of 142 ppb on July 20, 1991 is only 5 ppb greater than the concentration that would be consistent with attainment (137 ppb) according to EPA's alternative attainment test guidance.<sup>18</sup> Furthermore, when the area's design value in the base modeling period (1991) is adjusted for the air quality improvement predicted in the attainment year by the local-scale modeling according to the screening test described in EPA's guidance entitled "Draft Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS", the result is a 1999 projected design value of 119 ppb. These local-scale modeling results are close enough to attainment to warrant the consideration of weight-of-evidence arguments that support the demonstration of attainment.

### 2. Weight of Evidence (WOE) Analyses

A WOE determination is a diverse set of technical analyses performed to assess the confidence one has in the modeled results and to help assess the adequacy of a proposed strategy when the outcome of local scale modeling is close to attainment.

The District, Maryland and Virginia provided WOE arguments in the attainment demonstration to further corroborate that it is likely their attainment demonstrations contained sufficient local measures for the Washington area to attain the 1-hour ozone standard by the statutory date of 1999 but for transport.

The States and the District used EPA-developed design value adjustment factors based on regional scale modeling performed for the NO<sub>x</sub> SIP Call SNPR. These adjustment factors were used to adjust the 1996 area design values. The analysis showed all area adjusted design values below the level needed for attainment (124 ppb). To provide additional information, the EPA's design value adjustment factors were applied to the 1997 and 1998 area design values, again resulting in all area design values below 124 ppb.

Because the local modeling for the Washington area showed some peak concentrations above levels deemed consistent with attainment, we conducted an analysis to determine what additional local emission reductions, if any, would be needed to support ozone attainment in the Washington area. Our analysis determined that the Washington area would not need any additional emission reductions beyond those contained in the area attainment demonstration to ensure attainment of the ozone NAAQS.

### 3. Attainment Delay Due to Transport

Boundary condition sensitivity modeling was performed for the Washington area using OTAG Base 1C and Run I boundary conditions. OTAG Base 1C boundary conditions reflect the boundary conditions that will result from the implementation of all Clean Air Act mandated controls. OTAG Run I boundary conditions closely approximate the boundary conditions that will result from CAA measures and the additional emission reductions anticipated from the NO<sub>x</sub> SIP Call. The Washington area model runs with OTAG Base 1C boundary conditions were compared to the runs with OTAG Run I boundary conditions. The model run with OTAG Run I boundary conditions show a 5 to 10 ppb reduction in peak ozone concentrations in areas with modeled peak concentrations above 124 ppb.

A 5 to 10 ppb increase in ozone concentrations would increase projected design values based upon local modeling over 124 ppb and would increase future predicted exceedances well beyond the range consistent with attainment. The District's, Maryland's and Virginia's submittals for the

<sup>18</sup>Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS, EPA-454/B-95-007, (June 1996)

Washington area only demonstrate attainment of the 1-hour ozone standard by including in their analysis the reduction of ozone and ozone precursor transport that will result from regional NO<sub>x</sub> controls.

The local modeling for the Washington area showed that emission levels in Baltimore affect peak ozone concentrations in the Washington area during two of three most severe episode

days modeled . The Baltimore area has an attainment date of 2005.

*B. Analysis of Submittal Against EPA's Frame Work for Proposing Action on the Attainment Demonstration SIPs*

1. CAA Measures and Measures Relied on in the Current SIP Submission

Tables 3 through 6 contain a summary of the CAA required ozone SIP elements and of any additional measures

included in the attainment demonstration. Table 3 is a listing of the measures or CAA requirements that are common to all three Washington area jurisdictions. Tables 4, 5 and 6 provide a summary of additional control measures that are not common to all three jurisdictions. These Tables indicate if a control measure was part of the modeling demonstration and a summary of the approval or promulgation status.

TABLE 3.—COMMON CONTROL MEASURES IN THE 1-HOUR OZONE ATTAINMENT PLANS FOR THE WASHINGTON NONATTAINMENT AREA

Name of control measure	Type of measure	Included in local modeling	Approval status
On-board Refueling Vapor Recovery .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 86.
Federal Motor Vehicle Control program .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 86.
Federal Non-road Gasoline Engines .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 90.
Federal Non-road Heavy Duty diesel engines .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 89.
AIM Surface Coatings .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 59 subpart D.
Consumer & commercial products .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 59 subpart C.
Enhanced Inspection & Maintenance .....	CAA SIP Requirement.	Yes .....	SIP approved—Virginia & the District. SIP approval pending—Maryland
NO <sub>x</sub> RACT .....	CAA SIP Requirement.	Yes .....	SIP approval pending—Maryland, Virginia, & the District.
VOC RACT to 50 tpy .....	CAA SIP Requirement.	Yes .....	SIP approved—Virginia. SIP approval pending—Maryland & the District.
Stage II Vapor Recovery .....	CAA SIP Requirement.	Yes .....	SIP approved—Maryland & Virginia. SIP approval pending—the District.
Stage I Vapor Recovery .....	CAA SIP Requirement.	Yes .....	SIP approved—Maryland & Virginia. SIP approval pending—the District.
Reformulated Gasoline .....	State Opt-in to federal program.	Yes .....	State opt-ins approved under 40 CFR 80 subpart D.
Clean Fuel Fleets (CFF) or substitute .....	CAA SIP Requirement.	No .....	NLEV SIP submitted as a CFF substitute—Maryland & Virginia. CFF SIP approval pending—the District.
National Low Emission Vehicle (NLEV) .....	State opt-in .....	No .....	Federal program promulgated at 40 CFR 86 subpart R. State opt-in SIP approval pending—Maryland & Virginia; the District will submit by 2/15/2000.
New Source Review .....	CAA SIP Requirement.	N/A .....	SIP approved—Virginia & the District. SIP approval pending—Maryland.
Base Year Emissions Inventory .....	CAA SIP Requirement.	N/A <sup>1</sup> .....	SIP approved—Maryland, Virginia & the District.
15% VOC Reduction Plan .....	CAA SIP Requirement.	Yes <sup>2</sup> .....	SIP approved—the District. SIP approval pending—Maryland & Virginia.
9% rate of progress plan .....	CAA SIP Requirement.	Yes <sup>2</sup> .....	SIP approval pending—Maryland, Virginia & the District.
Emissions Statements .....	CAA SIP Requirement.	N/A .....	SIP approved—Maryland, Virginia & the District.
Photochemical Assessment Monitoring System (PAMS).	CAA Requirement	N/A .....	SIP approved—Maryland, Virginia & the District.

<sup>1</sup> Does not produce emission reductions.  
<sup>2</sup> The measures used to demonstrate rate of progress were modeled.

TABLE 4.—MARYLAND CONTROL MEASURES IN THE 1-HOUR OZONE ATTAINMENT PLAN FOR THE WASHINGTON NONATTAINMENT AREA

Name of control measure	Type of measure	Included in local modeling	Approval status
Autobody refinishing .....	State Rule .....	Yes .....	SIP approved.
Extend State VOC Point Source Regulations to 25 tons/year sources.	State Rule .....	Yes .....	SIP approval pending.
Surface Cleaning/Degreasing .....	State Rule .....	Yes .....	SIP approved.
Municipal Landfills .....	State Rule .....	Yes .....	State plan approved.
Open Burning Ban .....	State Rule .....	Yes .....	SIP approved.
TCMs .....	State Rule .....	Yes .....	SIP approval pending.
Graphic Arts .....	State Rule .....	Yes .....	SIP approved.

TABLE 4.—MARYLAND CONTROL MEASURES IN THE 1-HOUR OZONE ATTAINMENT PLAN FOR THE WASHINGTON NONATTAINMENT AREA—Continued

Name of control measure	Type of measure	Included in local modeling	Approval status
Beyond RACT reductions from large point sources of NO <sub>x</sub> .	State initiative .....	Yes .....	OTC NO <sub>x</sub> MOU Phase II—SIP approval pending.

TABLE 5.—VIRGINIA CONTROL MEASURES IN THE 1-HOUR OZONE ATTAINMENT PLAN FOR THE WASHINGTON NONATTAINMENT AREA

Name of control measure	Type of measure	Included in local modeling	Approval status
Extend State VOC Point Source Regulations to 25 tons/year sources.	State Rule .....	Yes .....	SIP approval pending.
Surface Cleaning/Degreasing .....	State Rule .....	Yes .....	SIP approval pending.
Municipal Landfills .....	Federal Plan .....	Yes .....	Federal plan promulgated at 40 CFR Part 62.
Open Burning Ban .....	State Rule .....	Yes .....	SIP approved.
TCMs .....	State Rule .....	Yes .....	SIP approval pending.
Graphic Arts .....	State Rule .....	Yes .....	SIP approved.
Autobody refinishing .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 59 subpart B.

TABLE 6.—DISTRICT OF COLUMBIA CONTROL MEASURES IN THE 1-HOUR OZONE ATTAINMENT PLAN FOR THE WASHINGTON NONATTAINMENT AREA

Name of control measure	Type of measure	Included in local modeling	Approval status
Name of Control Measure or SIP Element .....	Type of Measure ...	Included in Local Modeling.	Adoption and Approval Status.
Surface Cleaning/Degreasing .....	State Rule .....	Yes .....	SIP approval pending.
Graphic Arts .....	State Rule .....	Yes .....	SIP approval pending.
Autobody refinishing .....	Federal rule .....	Yes .....	Promulgated at 40 CFR 59 subpart B.
Beyond RACT Reductions at large point source of NO <sub>x</sub> .	State initiative .....	Yes .....	State rule not submitted.

The MDE, VADEQ and DoH have submitted all CAA mandated measures. Many, but not all, of these measures have been approved to date. EPA is proposing approval of the attainment demonstrations for the Washington area contingent upon SIP approval of all CAA required measures and other attainment measures before final approval is issued for the attainment demonstration.

The District has not submitted an adopted rule for the 1.8 TPD of NO<sub>x</sub> reduction from major stationary sources of NO<sub>x</sub> reduction beyond RACT which was relied upon in the modeling demonstration. However, Maryland and Virginia have submitted SIP revisions for an opt-in to the NLEV program which was not included in the local modeling. Maryland and Virginia have quantified that this measure will provide 1.8 TPD of NO<sub>x</sub> (plus 1.9 TPD of VOC) reductions in the Washington area by 1999. Therefore, the three Washington area States have provided adopted rules for all the reductions modeled in the attainment demonstration. EPA believes it is reasonable to propose to approve the

attainment demonstrations and attainment date extension requests for the Washington area provided that the States adopt and submit sufficient measures to demonstrate that 2005 emissions considering growth will be less than or equal to the 1999 control strategy levels. Commitments to these measures and submission of adopted rules will have to conform to the schedule discussed in section I.D and Table 2 above.

The Virginia attainment demonstration included a commitment to 23.0 TPD of NO<sub>x</sub> reductions beyond RACT and beyond that contained in the local modeling. The schedule for this measure provided in Commonwealth's attainment demonstration SIP is past, and thus, EPA can not propose approval of this commitment as part of this action. However, because this measure was not included in the local modeling, under the framework for approval discussed in section I.C above, EPA believes that the lack of an adopted rule for this measure does not preclude proposing approval of the Virginia and other States' attainment demonstrations for the Washington area.

EPA is proposing to approve the attainment demonstrations and attainment date extension requests for the Washington area provided that: Virginia can demonstrate that a rule for NO<sub>x</sub> reductions beyond RACT is not required to demonstrate that 2005 emissions will be less than or equal to the 1999 control strategy levels (a demonstration that the rule is not required must accompany an adequate conformity budget which is discussed in section II.B3. below), or, Virginia must submit a revised commitment and adopted rule by July 2000 in accordance to the schedules discussed in section I. and Table 2 above.

2. NO<sub>x</sub> Reductions Consistent with the Modeling Demonstration

Inside the Baltimore-Washington modeling domain, the States modeled only the measures indicated in Tables 3 through 6 above. The only NO<sub>x</sub> measures beyond CAA requirements was additional level of control beyond RACT at large stationary sources of NO<sub>x</sub> in the District's and Maryland's portion of the Washington area. The status of all

measures was discussed in the preceding section of this document.

### 3. Motor Vehicle Emissions Budget

The EPA has found that the motor vehicle emissions budgets in the attainment demonstrations for the Washington area submitted by the MDE, the DoH, and the VADEQ are inadequate for conformity purposes.

On October 26, 1999, Judith M. Katz, Director, Air Protection Division, EPA, Region III, sent a letter to Ms. Ann Marie DeBiase, Director, Air and Radiation Management Administration, Maryland Department of the Environment; Mr. Donald Wambsgans, Program Manager, District of Columbia Department of Health, Air Quality Division and Mr. John Daniel, Director, Air Program Coordination, Virginia Department of Environmental Quality indicating that the motor vehicle emissions budgets in their attainment demonstrations were not adequate for conformity purposes.

The motor vehicle emission budgets in the demonstrations for the Washington area were not found adequate because they did not meet all the adequacy requirements in the conformity rule. See 40 CFR 93.118(e)(4). EPA made this determination for the following reasons: the budget was inconsistently identified; the budget was based upon outdated enhanced I/M control parameters; and there is no budget for the requested extension year of 2005. The following paragraphs provide a summary of each of these findings, of the corrective action required and of EPA's proposed action.

*Inconsistent identification:* The motor vehicle emissions budget are not clearly identified and precisely quantified as required by 40 CFR 93.118(e)(4)(iii). One portion of the attainment demonstration SIP submission shows the area's 1999 budget in total tons per day is: 196.8 tons per day for VOC and 123.5 tons per day for NO<sub>x</sub>. However in another portion of the attainment demonstration SIP, the motor vehicle emissions budget is identified as 199.2 tons per day for VOC and 123.3 tons per day for NO<sub>x</sub>.

*Outdated enhanced I/M program parameters:* The current motor vehicle emissions budget is inadequate because the budget was set assuming parameters inconsistent with the current enhanced I/M programs and thus is not consistent with the control measures in the submitted SIP revisions as required by 40 CFR 93.118(e)(4)(iv).

*No budget for 2005:* The motor vehicle emissions budget when considered together with all other emissions sources are not consistent

with applicable requirements for attainment by 2005 as required by 40 CFR 93.118(e)(4)(iv). EPA is proposing in today's action that the attainment demonstrations for the Washington area contains sufficient local reductions to achieve attainment by 1999 and to extend the attainment date to 2005 due to transport. However, the attainment demonstrations for the Washington area do not contain an adequate motor vehicle emissions budget for 2005.

Before EPA can fully approve the attainment demonstration and attainment date extension to 2005, Maryland, Virginia and the District must submit SIP revisions to amend the attainment demonstrations for the Washington area that contain adequate motor vehicle emissions budget for 2005. In addition, EPA is proposing, in the alternative, to disapprove the attainment demonstration SIPs for those nine areas if Maryland, Virginia and the District do not submit motor vehicle emissions budget for the Washington area that EPA can find adequate by May 31, 2000.

As discussed in section I.C.3 above, a motor vehicle emissions budget is the estimate of motor vehicle emissions in the attainment year that when considered with emissions from all other sources is consistent with attainment. The attainment demonstrations for the Washington area contain levels of modeled emissions that EPA concludes demonstrate attainment once transport from upwind areas is addressed. The basis for this conclusion will not be altered if the Washington area States can demonstrate that the level of nonattainment area emissions in 2005 is equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth. Thus, Maryland, Virginia and the District can demonstrate that revised motor vehicle emissions budgets for 2005 in an amendment to their attainment demonstrations for the Washington area are adequate by showing that overall emissions including the revised motor vehicle emissions budget when considered with emissions from all other sources are less than the 1999 control strategy levels.

Emissions generating activities generally grow over time. However, emissions levels from mobile source categories may actually decrease between 1999 and 2005 due to the effects of replacement of vehicles with older engines with new vehicles and due to the new control programs listed in Tables 7 and 8 below. Tables 7 and 8 list measures that will not and will, respectively, affect the motor vehicle

emissions budget. Table 7 includes measures that were not part of the attainment demonstrations because the implementation dates are after 1999 and will contribute to attainment in 2005. Table 8 lists the measures that will contribute to attainment in 2005 and that will affect the budget and indicates if each measure was included in the 1999 motor vehicle emissions budget or in the local scale modeling. (Several of these measures could not be included in the 1999 budget because the implementation dates are after 1999.) EPA has interpreted the general adequacy criteria with respect to the 1-hour ozone attainment demonstrations to require the motor vehicle emissions budgets to include the effects of all motor vehicle controls, including federal measures and the mobile source control measures assumed in the NO<sub>x</sub> SIP Call, that will be in place in the attainment year, or in the case of a serious area requesting an attainment date extension, in place during the requested extension year.<sup>19</sup> Therefore, the revised motor vehicle emissions budgets presumptively must include all currently promulgated federal measures and state SIP measures and opt-ins shown in Table 8 with the exception of Clean Fuel Fleets (CFF). See section II.B.4 below for discussion concerning the incorporation of the proposed Tier 2 standards into the motor vehicle emissions budgets.

Virginia and Maryland each have submitted an NLEV SIP revision as a substitute for CFF. For the Maryland and Virginia components of the motor vehicle emissions budget NLEV must be used as in lieu of CFF. The District has submitted an adopted CFF SIP, but in a December 16, 1998 letter, requested the use of NLEV as a substitute for CFF. EPA has not acted on the December 16, 1998 request because EPA has not received an NLEV SIP from the District. The motor vehicle emissions budget must include NLEV in the District's component of the revised motor vehicle emissions budget, but need not include CFF if the District submits an adopted NLEV SIP revision with the revised motor vehicle emissions budget in accordance with the schedule specified in sections I.C. and I.D; otherwise, the District must include CFF as well as NLEV in the District's component of the revised motor vehicle emissions budget. Because CFF is a required SIP element for serious areas, the District must

<sup>19</sup> 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.

provide a SIP revision consisting of an adopted NLEV program in order to replace a required SIP element.

TABLE 7.—ADDITIONAL NONROAD MOBILE SOURCE CONTROL MEASURES CONTRIBUTING TO ATTAINMENT OF THE 1-HOUR OZONE NAAQS IN THE WASHINGTON NONATTAINMENT AREA IN 2005

Name of control measure	Type of measure	Included in local modeling	Adoption and approval status
Marine Engine Standards .....	Federal .....	No .....	Promulgated at 40 CFR 91.
Railroad Engine Standards .....	Federal .....	No .....	Promulgated at 40 CFR 92.

TABLE 8.—ON-ROAD MOBILE SOURCE CONTROL MEASURES CONTRIBUTING TO ATTAINMENT OF THE 1-HOUR OZONE NAAQS IN THE WASHINGTON NONATTAINMENT AREA IN 2005

Control measure	Implementation year	In local modeling demonstration?	In the 1999 motor vehicle emissions budget
Federal Motor Vehicle Control Program (FMVCP)			
Tier 1 .....	1994 .....	Tier 1 FMVCP only	Tier 1 FMVCP only.
Tier 2 .....	2004.		
High enhanced I/M (CAA Mandate) .....	1997 .....	Yes .....	Yes.
Reformulated Gasoline (State Opt-in)			
Phase I .....	1995 .....	Phase I only .....	Phase I only.
Phase II .....	2000.		
Clean Fuel Fleets (CAA Mandate) .....	1998 .....	No .....	No.
National Low Emissions Vehicles (NLEV) .....	1999 .....	No .....	No.
Federal Heavy-duty Diesel Vehicle (HDV) 2 gm std.	2004 .....	No .....	No.

If additional emission reductions beyond those in the attainment demonstration or those listed in Tables 7 and 8 are required in 2005 then Maryland, Virginia and the District will need to submit a commitment for the purposes of determining the motor vehicle emissions budget adequate and rules for these measures. Any such adopted measures must provide for implementation as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved.

*Commitment to measures needed to attain the 1-hour ozone NAAQS.* Maryland, Virginia and the District each has previously committed to adopting additional control measures as necessary to attain the one-hour ozone NAAQS as discussed. The District, Maryland, Virginia made these commitments as part of SIP revisions that were submitted on November 3, 1997, December 24, 1997 and December 19, 1997, respectively. EPA believes for the purposes of determining the motor vehicle emissions budget adequate that Maryland, Virginia and the District each already has a commitment to adopt any needed additional measures, but we need reaffirmation by letter from DoH, MDE and VADEQ that the intent of the existing commitment meets all the conditions as stated in section I.C., above. EPA needs to receive this reaffirmation letter by December 31, 1999. If Maryland, Virginia or the District does not reaffirm by December

31, 1999, that its existing commitment to adopt additional measures as necessary to reach attainment is consistent within the framework of this action, then EPA will be unable to determine the area has an adequate conformity budget. Final adopted rules for these additional control measures must be submitted by July 1, 2000 in order to allow EPA to promulgate its approval of the revision by November 2000.

*Motor vehicle emissions budget and EPA's proposed action:* The EPA is proposing to approve the attainment demonstration SIP revisions for the Washington area if the State of Maryland, Commonwealth of Virginia and the District of Columbia correct the deficiencies that cause the motor vehicle emissions budget to be inadequate. In the alternative, EPA is proposing to disapprove the attainment demonstration if by May 31, 2000, EPA has not made a determination that the attainment demonstration SIP revisions for the Washington area contains an adequate motor vehicle emissions budget. Because many States may shortly be submitting revised demonstrations with revised motor vehicle emission budgets, EPA is providing a 60 day comment period on this proposed rule. If the State of Maryland, Commonwealth of Virginia and the District of Columbia submit a revised attainment demonstration with a corrected motor vehicle emissions budget for 2005, EPA will place the

revisions in the docket for this rulemaking action and will post a notice on EPA's website at [www.epa.gov/oms/traq](http://www.epa.gov/oms/traq). By posting notice on the website, EPA will also initiate the adequacy process.

4. Tier 2/Sulfur Program Benefits

EPA concludes that based on the modeling and WOE that the Washington area would not need any additional emission reductions beyond those contained the area attainment demonstration to ensure attainment of the ozone NAAQS by 1999, but for transport. EPA also concludes that the attainment demonstrations for the Washington area collectively have sufficient local measures to have demonstrated attainment by 1999, but that the area could not attain due to transport from other areas.

However, as discussed in section II.B.3 above, Maryland, Virginia and the District must amend the attainment demonstrations to include an adequate conformity budget for 2005.

Like other areas that rely, in part or in full, on Tier 2 reductions in order to demonstrate attainment, the Washington area attainment demonstration may have to be revised by July 1, 2000, to estimate the effects of Tier 2 according to our policy. It must be revised if some or all of the Tier 2 reductions are used to demonstrate that nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment

demonstrations or are used to set the motor vehicle emissions budget.

However, the Washington area may use some of EPA's Tier 2/Sulfur program credit for other purposes. The States and the District must calculate the amount of the Tier 2/Sulfur credit that the Washington area needs to show the overall 2005 emissions levels are less than the 1999 control strategy levels. If they choose to use less Tier 2/Sulfur credit than indicated by this calculation, then these States and the District will have to adopt additional measures to ensure the necessary reductions are achieved. The States and the District would need to submit adopted rules for this amount of additional emission reduction by no later than July 1, 2000, in order to allow EPA to promulgate its approval of the revision by November 2000.

*Revisions to the motor vehicle emissions budget and the attainment demonstration when EPA issues the MOBILE6 model.* Maryland, Virginia and the District each has previously committed to adopting additional control measures as necessary to attain the one-hour ozone NAAQS as discussed in the preceding section II.C.3 of this document. EPA believes for the purposes of determining the motor vehicle emissions budget adequate that Maryland, Virginia and the District each already has a commitment to adopt any needed additional measures, but we need reaffirmation from DoH, MDE and VADEQ that the intent of the existing commitment meets all the conditions as stated in section I.C of this action including revising the mobile vehicle emissions budget when EPA issues the MOBILE6 model. EPA needs to receive this reaffirmation by December 31, 1999 as discussed in section I.C. above. If Maryland, Virginia or the District does not reaffirm by December 31, 1999, that its existing commitment to adopt additional measures as necessary to reach attainment is consistent within the framework of this action, then EPA will be unable to determine the area has an adequate conformity budget. 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 July 1, 2000).

#### 5. Additional Measures To Further Reduce Emissions To Support the Attainment Test

EPA has concluded that the attainment demonstrations for the Washington area collectively have sufficient local measures to have demonstrated attainment by 1999 but did not attain due to transport from

other areas. The area may need measures beyond those in the plan in order to show that 2005 emissions are less than the 1999 control strategy level as discussed in section II.B.3 above. EPA believes that for the purposes of additional measures and determining the motor vehicle emissions budget adequate, Maryland, Virginia and the District have each already submitted a commitment to adopt any needed additional measures. However, we need reaffirmation from DoH, MDE and VADEQ that the intent of their existing commitments meet all of the requirements discussed in section I.C.5 of this document. If Maryland, Virginia or the District does not reaffirm by December 31, 1999, that its existing commitment to adopt additional measures is consistent within the framework of this action, then EPA will be unable to determine that the area has an adequate conformity budget.

#### 6. Mid-Course Review

In accordance with the provisions of section I.C.6., above, EPA must receive an enforceable commitment or a reaffirmation of a previous enforceable commitment to include a mid-course review from each of the three Washington area States before their attainment demonstrations can be approved.

As discussed in section II.C.3 of this document, EPA believes for the purposes of the MCR and determining the motor vehicle emissions budget adequate that Maryland, Virginia and the District each already has a commitment to adopt any needed additional measures to attain the 1-hour ozone NAAQS, but we need reaffirmation from DoH, MDE and VADEQ that the intent of the existing commitment meets all the conditions as stated in section I.C of this action including amending the commitment to include the MCR. If Maryland, Virginia or the District does not reaffirm by December 31, 1999, that its existing commitment is consistent within the framework of this action, then EPA will be unable to determine the area has an adequate conformity budget.

#### 7. Attainment Date Delays Due to Transport

The Washington area has been identified as a downwind area affected by transport from upwind areas in other States that significantly contribute to nonattainment in the Washington area and, in the case of Maryland's portion of the Washington area, from upwind area, Baltimore, in the same State with a later attainment date of 2005.

Maryland, Virginia and the District have adopted all local measures required under the area's current classification.

The Washington area attainment demonstration and attainment date extension request will be approvable once:

(1) Maryland, Virginia and the District adopt and submit adequate conformity budgets for 2005 as discussed in section II.C.3 and II.C.4 above; and

(2) Maryland, Virginia and the District submit and EPA approves adopted additional local measures needed, if any, to demonstrate that emissions in 2005 will not exceed the projected emissions for 1999 (these measures must be implemented as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved); and

(3) Maryland, Virginia and the District adopt and submit the enforceable commitments or reaffirmation of an existing enforceable commitment in accordance with the schedules in Table 2 of section I.D of this document.

### III. 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 submitted by the State. (We are using the phrase "failure to submit" to cover both the situation where a State makes no submission and the situation where the State makes a submission that we find is incomplete in accordance with section 110(k)(1)(B) and 40 CFR part 51, Appendix V.) For purposes of sanctions, there are no sanctions clocks in place based on a failure to submit. Thus, the description of the timing of sanctions, below, is linked to a potential disapproval of the State's submission.

#### A. 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.

*B. 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 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.

#### IV. Proposed Action

##### A. The District of Columbia

###### 1. Proposed Approval

EPA is proposing to approve the District of Columbia's attainment demonstration SIP revision for the Washington area which was submitted on April 24, 1998 and supplemented on October 27, 1998, and to approve a request for an attainment date extension from November 15, 1999 to November 15, 2005, for the Washington area, if the following actions occur in accordance with the schedules in section I.D, Table 2:

(1) The District adopts and submits an adequate motor vehicle emissions budget.

(2) The District submits a list of control measures that, when implemented, would be expected to provide sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth as discussed in II.B.3. The District need not commit to adopt any specific measures on its list at this time, but if it does not do so, it must identify sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels 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.

(3) The District adopts and submits a rule(s) for the NO<sub>x</sub> reductions consistent with the modeling demonstration; NLEV; and additional emission reductions needed, if any, to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels.

(4) The District adopts and submits an enforceable commitment, or reaffirmation of existing enforceable commitment to do the following:

(a) Submit measures by July 1, 2000 for additional emission reductions, if any, as required to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels as discussed in section II.B.3.

(b) Submit a revised SIP and motor vehicle emissions budget by July 1, 2000 if additional measures affect the motor vehicle emissions inventory.

(c) Submit revised SIP and motor vehicle emissions budget 1 year after MOBILE6 issued.

(d) Perform a mid-course review.

###### 2. Proposed Disapproval-in-the-Alternative

EPA is also proposing, in the alternative, to disapprove this SIP revision, if any of the actions listed in IV.A.1, above, do not occur in accordance with the schedules in section I.D, Table 2.

##### B. State of Maryland

###### 1. Proposed Approval

EPA is proposing to approve the State of Maryland's attainment demonstration SIP revision for the Washington area

which was submitted on April 29, 1998 and supplemented on August 17, 1998, and to approve a request for an attainment date extension from November 15, 1999 to November 15, 2005, for the Washington area, if the following actions occur in accordance with the schedules in section I.D, Table 2:

(1) Maryland adopts and submits an adequate motor vehicle emissions budget.

(2) Maryland submits a list of control measures that, when implemented, would be expected to provide sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth as discussed in II.B.3. The State need not commit to adopt any specific measures on its list at this time, but if it does not do so, it must identify sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels 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.

(3) Maryland adopts and submits a rule(s) for additional emission reductions needed, if any, to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels.

(4) Maryland adopts and submits an enforceable commitment, or reaffirmation of existing enforceable commitment to do the following:

(a) Submit measures by July 1, 2000 for additional emission reductions, if any, as required to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels as discussed in section II.B.3.

(b) Submit a revised SIP and motor vehicle emissions budget by July 1, 2000 if additional measures affect the motor vehicle emissions inventory.

(c) Submit revised SIP and motor vehicle emissions budget 1 year after MOBILE6 issued.

(d) Perform a mid-course review.

###### 2. Proposed Disapproval-in-the-Alternative

EPA is also proposing, in the alternative, to disapprove this SIP revision, if any of the actions listed in IV.B.1, above, do not occur in accordance with the schedules in section I.D, Table 2.

### C. Commonwealth of Virginia

#### 1. Proposed Approval

EPA is proposing to approve the Commonwealth of Virginia's attainment demonstration SIP revision for the Washington area which was submitted on April 29, 1998 and supplemented on August 18, 1998, and to approve a request for an attainment date extension for the Washington area from November 15, 1999 to November 15, 2005, if the following actions occur in accordance with the schedules in section I.D, Table 2:

(1) Virginia adopts and submits an adequate motor vehicle emissions budget.

(2) Virginia submits a list of control measures that, when implemented, would be expected to provide sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth as discussed in II.B.3. The Commonwealth need not commit to adopt any specific measures on its list at this time, but if it does not do so, it must identify sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels 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.

(3) Virginia adopts and submits a rule(s) for additional emission reductions needed, if any, to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels.

(4) Virginia adopts and submits an enforceable commitment, or reaffirmation of existing enforceable commitment to do the following:

(a) Submit measures by July 1, 2000 for additional emission reductions, if any, as required to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels as discussed in section II.B.3.

(b) Submit a revised SIP and motor vehicle emissions budget by July 1, 2000 if additional measures affect the motor vehicle emissions inventory.

(c) Submit revised SIP and motor vehicle emissions budget 1 year after MOBILE6 issued.

(d) Perform a mid-course review.

#### 2. Proposed Disapproval-in-the-Alternative

EPA is also proposing, in the alternative, to disapprove this SIP revision, if any of the actions listed in IV.C.1, above, do not occur in accordance with the schedules in section I.D, Table 2.

EPA is soliciting public comments on the issues discussed in this document and any other relevant issues regarding the attainment demonstration for the Washington area. These comments will be considered before taking final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to the EPA Regional Office listed in the **ADDRESSES** this document. 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.

### V. 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).

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 does not affect State-enforceability. Moreover EPA's disapproval of the submittal would 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 the 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 Maryland, the Commonwealth of Virginia or the District of Columbia each of 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 on the One-Hour Ozone attainment demonstration SIP revisions submitted by Maryland, Virginia and the District 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.

**Thomas C. Voltaggio,**

*Acting Regional Administrator, Region III.*

[FR Doc. 99-31718 Filed 12-15-99; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[GA-47-200002; FRL-6502-9]

#### Approval and Promulgation of Implementation Plans; Georgia: Approval of Revisions to the Georgia State Implementation Plan

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

**ACTION:** Proposed rule.

**SUMMARY:** The EPA is proposing to approve the ground-level 1-hour ozone attainment demonstration State implementation plan (SIP) for the Atlanta nonattainment area submitted by the Georgia Environmental Protection Division (GAEPD) on October 28, 1999, and supplemented on November 23, 1999, provided the State follows through on certain commitments discussed in this notice. The November 23 supplemental information includes a clarification of the commitments discussed in this notice and an updated shortfall calculation. The discussion in this notice with respect to the shortfall is based on the supplemental information. The November 22 submittal meets the completeness criteria for parallel processing therefore EPA is proposing approval based on this information as well as the October 28 submittal. We are also proposing, in the alternative, to approve in part and disapprove in part this demonstration, if EPA concludes that the motor vehicle emissions budget submitted by the State is not consistent with attainment and therefore inadequate, or the State does not fulfill commitments to submit the rules to