

Flexibility Act (Public Law 96–354) which requires the preparation of a regulatory flexibility analysis for any regulation that will have a significant economic impact on a substantial number of small entities (*i.e.*, small businesses and small Governments). The Corps expects that the economic impact of the establishment of this restricted area would have practically no impact on the public, no anticipated navigational hazard or interference with existing waterway traffic and accordingly, certifies that this proposal if adopted, will have no significant economic impact on small entities.

#### *c. Review Under the National Environmental Policy Act*

An environmental assessment has been prepared for this action. We have concluded, based on the minor nature of the proposed additional restricted area regulations, that this action, if adopted, will not have a significant impact to the quality of the human environment, and preparation of an environmental impact statement is not required. The environmental assessment may be reviewed at the District office listed at the end of **FOR FURTHER INFORMATION CONTACT**, above.

#### *d. Unfunded Mandates Act*

This proposed rule does not impose an enforceable duty among the private sector and, therefore, is not a Federal private sector mandate and is not subject to the requirements of Section 202 or 205 of the Unfunded Mandates Act. We have also found under Section 203 of the Act, that small Governments will not be significantly and uniquely affected by this rulemaking.

#### **List of Subjects in 33 CFR Part 334**

Danger zones, Marine safety, Restricted areas, Waterways.

For the reasons set out in the preamble, the Corps proposes to amend 33 CFR Part 334, as follows:

### **PART 334—DANGER ZONE AND RESTRICTED AREA REGULATIONS**

1. The authority citation for Part 334 continues to read as follows:

**Authority:** 40 Stat. 266 (33 U.S.C. 1) and 40 Stat. 892 (33 U.S.C. 3).

2. Section 334.81 would be added to read as follows:

#### **§ 334.81 Naragansett Bay, East Passage, Coddington Cove, Naval Station Newport, Newport, Rhode Island, Restricted Area.**

(a) *The area.* All of the navigable waters of Coddington Cove east of a line that connects Coddington Point at latitude 41° 31' 24.0" N, longitude 071°

19' 24.0" W; with the outer end of the Coddington Cove Breakwater on the north side of the cove at latitude 41° 31' 55.7" N, longitude 071° 19' 28.2" W.

(b) *The regulation.* All persons, swimmers, vessels and other craft, except those vessels under the supervision or contract to local military or Naval authority, vessels of the United States Coast Guard, and local or state law enforcement vessels, are prohibited from entering the restricted areas without permission from the Commanding Officer Naval Station Newport, USN, Newport, Rhode Island or his authorized representative.

(c) *Enforcement.* (1) The regulation in this section, promulgated by the United States Army Corps of Engineers, shall be enforced by the United States Navy, Commanding Officer Naval Station Newport, Newport, Rhode Island and/or other persons or agencies as he/she may designate.

(2) Federal and State Law enforcement vessels and personnel may enter the restricted area at any time to enforce their respective laws.

Dated: June 26, 2002.

**Karen Durham-Aguilera,**  
Chief, Operations Division, Directorate of Civil Works.

[FR Doc. 02–19588 Filed 8–1–02; 8:45 am]

**BILLING CODE 3710–24–P**

### **ENVIRONMENTAL PROTECTION AGENCY**

#### **40 CFR Part 52**

[LA–61–3–7561; FRL–7254–6]

#### **Approval and Promulgation of Implementation Plan; State of Louisiana; 1-Hour Ozone Attainment Demonstration; Attainment Date Extension, and Withdrawal of Nonattainment Determination and Reclassification**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** EPA proposes to approve the Baton Rouge 1-hour ozone Attainment Plan and Transport State Implementation Plan (hereinafter referred to as Attainment Plan/Transport SIP) for the Baton Rouge serious ozone nonattainment area (hereinafter referred to as the Baton Rouge area). The attainment demonstration SIP, showing attainment by November 15, 2005, was submitted by the Governor of Louisiana on December 31, 2001. In conjunction with its proposed approval of the attainment

demonstration, EPA proposes: extending the ozone attainment date for the Baton Rouge area to November 15, 2005, while retaining the area's current classification as a serious ozone nonattainment area; and withdrawing EPA's June 24, 2002, rulemaking determining nonattainment and reclassification of the Baton Rouge area. EPA is also proposing to find that the Baton Rouge area meets the reasonably available control measures (RACM) requirements of the Act.

In proposing to approve the attainment demonstration, EPA is also proposing to approve the State's enforceable commitment to perform a mid-course review and submit a SIP revision to EPA by May 1, 2004, to approve the motor vehicle emissions budget (MVEB) and an enforceable commitment to submit revised budgets using MOBILE6, and an enforceable transportation control measure (TCM).

This proposed rule also addresses SIP submittals relating to corrections to the 1990 Base Year Emissions Inventory, the 9% Rate-of-Progress Plan, and the 15% Rate-of-Progress Plan.

**DATES:** Written comments must be received on or before September 3, 2002.

**ADDRESSES:** All comments should be addressed to Mr. Thomas H. Diggs, Chief, Air Planning Section, Environmental Protection Agency, Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733.

Copies of the Louisiana submittals addressed in this proposed rule, and other relevant documents in support of this proposal are available for public inspection during normal business hours at the following addresses: U.S. Environmental Protection Agency, Region 6, Air Planning Section, 1445 Ross Avenue, Dallas, Texas 75202; Louisiana Department of Environmental Quality, 7920 Bluebonnet Boulevard, Baton Rouge, Louisiana 70884. Please contact the appropriate office at least 24 hours in advance.

**FOR FURTHER INFORMATION CONTACT:** Ms. Maria L. Martinez, Air Planning Section (6PD–L), EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–2230.

**SUPPLEMENTARY INFORMATION:** The use of “we,” “us,” or “our” in this document refers to EPA.

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## I. Background

### A. Basis for State's Attainment Demonstration

#### What Are the Relevant Clean Air Act Requirements?

The Clean Air Act (Act or CAA) requires EPA to establish National Ambient Air Quality Standards (NAAQS) for certain widespread pollutants that cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. Clean Air Act sections 108 and 109. In 1979, EPA promulgated the 1-hour ground-level ozone standard of 0.12 parts per million (ppm) (120 parts per billion (ppb)). 44 FR 8202 (February 9, 1979).

Ground-level ozone is not emitted directly by sources. Rather, VOC and Nitrogen oxides (NO<sub>x</sub>), emitted by a wide variety of sources, react in the presence of sunlight to form ground-level ozone. NO<sub>x</sub> and VOC are referred to as precursors of ozone.

Ozone formation is accelerated or enhanced under certain meteorological conditions, such as high temperatures and low wind speeds. Higher ozone concentrations occur downwind of areas with relatively high VOC and NO<sub>x</sub> concentrations or in areas subject to

relatively high background ozone and ozone precursor concentrations (ozone and ozone precursors entering an area as the result of transport from upwind source areas).

VOC emissions are produced by a wide variety of sources, including stationary and mobile sources. Significant stationary sources of VOC include industrial solvent usage, various coating operations, industrial and utility combustion units, petroleum and oil storage and marketing operations, chemical manufacturing operations, and personal solvent usage. Significant mobile sources of VOC include on-road vehicle usage and off-road vehicle and engine usage, such as farm machinery, aircraft, locomotives, and motorized, lawn care and garden implements.

NO<sub>x</sub> emissions are produced primarily through combustion processes, including industrial and utility boiler use, process heaters and furnaces, and on-road and off-road mobile sources.

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 in any given day (only the highest 1-hour ozone concentration at the monitor during any 24 hour day is considered when determining the number of exceedance days at the monitor). An area violates the ozone standard if, over a consecutive 3-year period, more than 3 days of exceedances occur at any monitor in the area. 40 CFR part 50, appendix H.

The highest of the fourth-highest daily peak ozone concentrations over the 3 year period at any monitoring site in the area is called the ozone design value for the area. The Act, 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 for the 3 year period from 1987 through 1989 period. Clean Air Act section 107(d)(4); 56 FR 56694 (November 6, 1991). The Act further classified these areas, based on the areas' ozone design values, as marginal, moderate, serious, severe, or extreme. Marginal areas were suffering the least significant ozone nonattainment problems, while the areas classified as severe and extreme had the most significant ozone nonattainment problems.

The control requirements and date by which attainment is to be achieved vary with an area's classification. Marginal areas were subject to the fewest mandated control requirements and had the earliest attainment date, November 15, 1993. Severe and extreme areas are

subject to more stringent planning requirements but are provided more time to attain the standard. Serious areas were 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, depending on each area's ozone design value for the period from 1987 through 1989. The Baton Rouge area was classified as serious and its attainment date was November 15, 1999. The Baton Rouge area encompasses East Baton Rouge, West Baton Rouge, Ascension, Iberville, and Livingston Parishes (40 CFR 81.319).

The requirements of the Act for ozone attainment demonstrations for serious ozone nonattainment areas are specified in several sections of the Act. Section 182(c) sets forth the requirements for serious areas. Section 172(c)(6) of the Act requires all nonattainment area SIPs to include enforceable emission limitations, and such other control measures, means or techniques as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment by the applicable attainment date. Section 172(c)(1) requires the implementation of all reasonably available control measures (including, at a minimum, Reasonably Available Control Technology (RACT)) and requires the SIP to provide for attainment of the NAAQS. Section 182(c) incorporates Section 182(b)(1)(A) and requires the SIP for serious areas to provide for reductions in emissions of VOC and NO<sub>x</sub> from the baseline emissions of at least 3 percent averaged over each consecutive 3-year period until the applicable attainment date. Finally, section 182(c)(2)(A) requires the use of photochemical grid modeling or other methods judged to be at least as effective to demonstrate attainment of the ozone NAAQS by the applicable attainment date. EPA's "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (57 FR 13498, April 16, 1992) provides the interpretative basis for EPA's rulemakings under the nonattainment plan provisions of the Act (hereinafter referred to as the General Preamble). As part of today's proposal, EPA is proposing action on the attainment demonstration SIP revisions submitted by the State of Louisiana for the Baton Rouge area and its associated ozone modeling domain. See Section I.B. below.

In general, an attainment demonstration SIP includes a modeling analysis showing how an area will achieve the standard by its attainment date and the emission control measures

necessary to achieve attainment. The attainment demonstration SIPs must include motor vehicle emission budgets for transportation conformity purposes. Transportation conformity is a process required by Section 176(c) of the Act for ensuring that emissions from all on-road sources are consistent with the attainment of the standard. Ozone attainment demonstrations must include the estimates of motor vehicle VOC and NO<sub>x</sub> emissions that are consistent with attainment, which then act as a budget or ceiling for the purposes of determining whether transportation plans, programs, and projects conform to the attainment SIP. Refer to Section II.A.4. for more details.

#### What Is the History and Time Frame for the State Attainment Demonstration SIP?

On May 10, 2000, the Governor of Louisiana requested an attainment date extension for the Baton Rouge area. On May 9, 2001, EPA proposed its finding that the Baton Rouge area did not attain the 1-hour ozone NAAQS by the applicable attainment date (66 FR 23646). The proposed finding was based upon ambient air quality data from the years 1997, 1998, 1999. These data show that the 1-hour ozone NAAQS of 0.12 parts per million (ppm) was exceeded on an average of more than one day per year over this three-year period. Furthermore, the area did not qualify for an attainment date extension under section 181(a)(5) as the area had more than 1 exceedance of the 1-hour standard in 1999. EPA also proposed that the appropriate reclassification of the area was too severe.

In that proposed action, we also stated that Louisiana was seeking an extension of its attainment date pursuant to EPA's July 16, 1998, guidance memorandum entitled "Extension of Attainment Dates for Downwind Transport Areas," published in a March 25, 1999, **Federal Register** notice (64 FR 14441) (hereinafter referred to as EPA's extension policy). EPA's extension policy includes EPA's interpretation of the Act regarding the extension of attainment dates for ozone nonattainment areas that have been classified as moderate or serious for the 1-hour ozone standard and which are downwind of areas that have interfered with their ability to demonstrate attainment of the ozone standard by dates prescribed in the Act.

EPA proposed to take final action on the determination of nonattainment and reclassification of the Baton Rouge area only after the area had received an opportunity to qualify for an attainment date extension under the extension

policy. Louisiana submitted an Attainment Plan/Transport SIP on December 31, 2001, for the Baton Rouge area. EPA was in the process of reviewing the Attainment Plan/Transport SIP when the United States District Court for the Middle District of Louisiana entered a Judgment on March 7, 2002, ordering EPA to determine, by June 5, 2002, whether the Baton Rouge area had attained the applicable ozone standard under the CAA. *LEAN v. Whitman*, No. 00-879-A. In compliance with Court's Order, on June 24, 2002, (67 FR 42688) we published in the **Federal Register** our determination that the Baton Rouge area did not attain the 1-hour ozone standard by November 15, 1999. By operation of law, that determination results in the Baton Rouge area being reclassified from a serious to a severe nonattainment area on the effective date of that rule. EPA concurrently proposed to extend the effective date of our determination from August 23, 2002, to October 4, 2002 (67 FR 42697, June 24, 2002). In the June 24, 2002, proposed rulemaking, EPA also set forth its intent to withdraw the final determination and reclassification, if EPA granted the State an attainment date extension before the effective date of the determination and reclassification rule.

#### What Is the Time Frame for Taking Action on the Attainment Demonstration SIPs?

Louisiana submitted the attainment demonstration SIP revisions and supporting documentation between December 2001 and July 2002. EPA believes that it is important to keep the process moving forward in evaluating these plans and, as appropriate, approving them. In today's **Federal Register**, EPA is proposing to approve the Attainment Demonstration SIP. EPA is taking separate actions on other related revisions to the Baton Rouge SIP, including the Inspection and Maintenance Program (67 FR 44410, July 2, 2002), NO<sub>x</sub> regulations (67 FR 30638, May 7, 2002, and 67 FR 48095, July 23, 2002), New Source Review (see 67 FR 48090, July 23, 2002), emissions reductions credit banking (see 67 FR 48083, July 23, 2002), Contingency Measures (see 67 FR 35468, May 20, 2002), and SIP revisions dealing with VOC emissions from industrial wastewater (67 FR 41840, June 20, 2002). EPA will not take final action to approve the attainment demonstration and extension of the attainment data unless and until it completes action on all other required rules.

The anticipated schedule for actions on the State's submittals has been set

forth in a recent proposed rulemaking June 24, 2002, (67 FR 42697). EPA intends to complete rulemaking on the attainment demonstration and attainment date extension for the Baton Rouge area after it completes action on the submittals from Louisiana of the additional measures necessary to support the attainment demonstration and necessary to address the criteria of the extension policy. Provided EPA has taken final action on all other required rules, EPA plans to send a notice of final rulemaking on the attainment demonstration and attainment date extension to the Office of the Federal Register no later than October 4, 2002, for publication.

#### What Action Is EPA Proposing Regarding the Determination of Nonattainment as of November 15, 1999, and Reclassification Published on June 24, 2002?

EPA is here proposing to withdraw the June 24, 2002, Notice of Nonattainment and Reclassification, if EPA issues a final rulemaking granting an attainment date extension prior to the effective date of the Notice of Nonattainment. EPA believes this is appropriate for a number of reasons. Section 181(b)(2)(A) of the Act requires that EPA determine attainment within six months of the attainment date. If the attainment date were extended, there would be a new deadline for the determination. See section I.D. below. Thus if the attainment date were extended, EPA's obligation to determine attainment would not yet have occurred and EPA could withdraw the published nonattainment determination and the consequent reclassification, which would not yet have gone into effect. Such a course would harmonize the need to allow the Agency to fulfill its duty to take into account upwind transport, while adhering to a fixed and very near-term schedule. See EPA's rulemaking in St. Louis, Missouri, 66 FR 33995 (June 26, 2001). See also EPA's recent granting of an attainment date extension in Atlanta, Georgia. 67 FR 30,574 (May 7, 2002).

On July 2, 2002, the U.S. Court of Appeals for the District of Columbia vacated EPA's approval of an attainment date extension for the Washington, DC ozone nonattainment area. *Sierra Club v. EPA*, Nos. 01-1070 and 01-1158 (D.C. Cir., 2002). EPA is currently evaluating this decision and considering what impact it may have on EPA's future actions concerning the Baton Rouge area.

### *B. Components of a Modeled Attainment Demonstration*

EPA provides guidance (GUIDELINE FOR REGULATORY APPLICATION OF THE URBAN AIRSHED MODEL, July 1991; Guidance on the Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS, EPA-454/B-95-007, June 1996; and Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled, November 1999) to which States may refer when developing a modeled attainment demonstration and supplementing it with additional evidence to demonstrate attainment. To have a complete modeling demonstration submission, States should have submitted the modeling analyses and identified any additional evidence that EPA should consider in evaluating whether the area will attain the standard. Additional components are discussed below.

#### *What EPA Guidelines Apply to the Attainment Demonstration Submittals?*

The following documents, among others, contain EPA's guidelines affecting the content and review of ozone attainment demonstration submittals:

1. 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. Memorandum, "The Ozone Attainment Test in State Implementation Plan (SIP) Modeling Demonstrations," from Joseph A. Tikvart, Office of Air Quality Planning and Standards, December 16, 1992.
3. Guidance on Urban Airshed Model (UAM) Reporting Requirements for Attainment Demonstrations, EPA-454/R-93-056, March 1994. Web site: <http://www.epa.gov/ttn/scram/> (file name: "UAMRPTRQ").
4. Memorandum, "Ozone Attainment Demonstrations," from Mary D. Nichols, Assistant Administrator for Air and Radiation, March 2, 1995. Web site: <http://www.epa.gov/ttn/oarpg/t1pgm.html>.
5. Guidance on the 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").
6. Memorandum, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM10 NAAQS," from Richard Wilson, Office of Air and Radiation, December 29, 1997. Web site: <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

7. Memorandum, "Extension of Attainment Dates for Downwind Transport Areas," from Richard D. Wilson, Acting Assistant Administrator for Air and Radiation, July 16, 1998.

8. Memorandum, "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations," from Merrylin Zaw-Mon, Acting Director of the Regional and State Programs Division, November 3, 1999. Web site: <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

9. Memorandum, "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas," from John S. Seitz, Director of Office of Air Quality Planning and Standards, November 30, 1999.

10. Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled, Office of Air Quality Planning and Standards, November 1999. Web site: <http://www.epa.gov/ttn/scram/> (file name: "ADDWOE1H");

11. Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources (Revised) (1992);

12. User's Guide to MOBILE5 (Mobile Source Emission Factor Model), May 1994;

13. Memorandum, "Ozone Attainment Dates for Areas Affected by Overwhelming Transport," from Mary D. Nichols, Assistant Administrator for Air and Radiation, Environmental Protection Agency, September 1994.

#### *What Are the Modeling Requirements for the Attainment Demonstration?*

For purposes of demonstrating attainment, the Act requires States containing serious or above ozone nonattainment areas to use photochemical grid modeling or an analytical method judged by EPA to be at least as effective. The photochemical grid model is set up using meteorological conditions conducive to the formation of ozone in the nonattainment area and its modeling domain. Emissions for a base year are used to evaluate the model's ability to reproduce actual monitored air quality values. Following validation of the modeling system for a base year, emissions are projected to an attainment year 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 ozone concentrations inside the modeling

domain are at or below the ozone standard or an acceptable upper limit above the standard under certain conditions provided in EPA's guidance. When the predicted concentrations are above the standard or upper limit, EPA guidance provides for the use of an optional weight-of-evidence determination which incorporates other analyses, such as air quality and emissions trends, to address uncertainty inherent in the application of photochemical grid models. This latter approach may be used under certain circumstances to support the demonstration of attainment.

EPA guidance identifies the features of a modeling analysis that are essential to obtain credible results. First, the State develops and implements 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, the regulated community, and public interest groups). Second, for purposes of developing the information to put into the model, the State selects air pollution days, *i.e.*, days in the past with high ozone concentrations exceeding the standard, that are representative of the ozone pollution problem for the nonattainment area. Third, the State identifies the appropriate dimensions of the area to be modeled, *i.e.*, the modeling domain size. The domain should be larger than the designated nonattainment area to reduce uncertainty in the boundary conditions and should include any 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. Alternatively, a much larger modeling domain may be established, addressing the impacts of both local and regional emission control measures on a number of ozone nonattainment areas. In both cases, the attainment determination is based on the review of ozone predictions within the local area where control measures are most beneficial to bring the area into attainment (referred to as the local modeling domain). Fourth, the State determines the grid resolution. The horizontal and vertical resolutions in the model can significantly affect the modeled results of 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 generates meteorological and emissions data that describe atmospheric conditions and emissions inputs reflective of the selected high ozone days. Finally, the State verifies that the modeling system is properly simulating the chemistry and atmospheric conditions through diagnostic analyses and model performance tests (generally referred to as model validation). 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 ozone concentrations in all grid cells for the attainment year to the level of the ozone standard. A predicted peak ozone concentration above 0.124 ppm (124 ppb) indicates that the area is expected to exceed the standard in the attainment year. This type of test is often referred to as an exceedance test. EPA's June 1996 guidance recommends that States use either of two exceedance tests for the 1-hour ozone standard: a deterministic test or a statistical test.

Under the deterministic test, the State compares predicted 1-hour daily maximum ozone concentrations for each modeled day<sup>1</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 3 year period, the area has an average of 1 or fewer ozone standard exceedances per year at any monitoring site, the area is not violating the standard. Thus, if the State models a severe day (considering meteorological conditions that are very conducive to high ozone levels and that should lead to fewer than 1 exceedance per year at any location in the nonattainment area and in the modeling domain over a 3 year period), 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 acceptable upper limit above 0.124 ppm is determined by examining the size of exceedances at monitoring sites which meet or attain the 1-hour standard. For example, a monitoring site for which the 4 highest 1-hour average concentrations over a 3 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 level observed at a location on a single day and it would be the only reading above that standard that would be expected to occur no more than an average of once a year over a 3 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 standard. Thus, these upper limits are rarely significantly higher than the attainment level of 0.124 ppm.

**What Are the Additional Analyses That May Be Considered When the Modeling Fails To Show Attainment?**

When the modeling does not conclusively demonstrate that the area will attain, 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. EPA's guidance recognizes these limitations and provides a means for considering other evidence to help assess whether attainment of the standard is likely. The process by which this is done is called a weight-of-evidence determination.

Under a weight-of-evidence determination, the State can rely on and EPA will consider factors such as: model performance and results, episode selection, other modeled attainment tests, *e.g.*, relative reduction factor 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 emission 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 exhaustive list of factors that may be considered and these factors could vary from case to case. EPA's guidance contains no limit on how close a modeled

attainment test must be to passing to conclude that other evidence besides a modeled attainment test is a sufficiently compelling case for attainment. However, the further a modeled attainment test is from being passed, the more compelling the weight-of-evidence needs to be.

### *C. Framework for Proposing Action on the Attainment Demonstration SIP*

In addition to the modeling analysis and weight-of-evidence determination demonstrating attainment, EPA has identified the following key elements which must be present in order for EPA to approve the 1-hour attainment demonstration SIP.

#### **1. Clean Air Act Measures and Other Measures Relied on in the Attainment Demonstration State Implementation Plan**

The attainment demonstration must incorporate the emission impacts of any emission control measures needed to achieve attainment. The rules for these emission controls must also have been adopted by the State and approved by EPA as part of the SIP no later than the time EPA finally approves the attainment demonstration. The emission controls for these sources must be implemented as expeditiously as practicable but not later than the applicable attainment date.

For purposes of fully approving the State's attainment demonstration SIP, the State must adopt and submit all VOC and NO<sub>x</sub> control regulations for affected sources within the State and within the local modeling domain as reflected in the adopted emission control strategy and as reflected in the attainment demonstration.

The measures required for serious ozone nonattainment areas by section 182(c) of the CAA include: (1) Attainment and reasonable further progress demonstrations; (2) enhanced vehicle inspection and maintenance (I/M) programs; (3) clean-fuel vehicle programs; (4) RACT for VOC and NO<sub>x</sub>; (5) New Source Review (NSR) regulations for VOC and NO<sub>x</sub>, including an offset ratio of 1.2:1 and a major VOC and NO<sub>x</sub> source size cutoff of 50 tons per year (TPY); (6) an enhanced air monitoring program; and (7) contingency provisions. These requirements are specified in sections 182(c) and 182(f) of the Act.

To receive an extension of the attainment date, under the extension policy, the State must have adopted the emission control measures required under the Act for the area's classification or must have established negative declarations for the source

<sup>1</sup> The initial, "ramp-up" days for each episode are excluded from this determination.

categories for which the area has no major sources that are subject to Clean Air Act requirements.

## 2. Motor Vehicle Emissions Budget

An attainment demonstration SIP must estimate the motor vehicle emissions that will be produced in the attainment year and must demonstrate that this emissions level, when considered with emissions from all other sources, is consistent with attainment. Generally when a state makes an initial SIP submittal, EPA conducts an expedited review, including an opportunity for public comment, to determine if the submitted budgets meet the adequacy criteria contained in the transportation conformity rule (40 CFR 93.118). A motor vehicle emissions budget contained in an initial SIP submittal cannot be used to determine the conformity of the transportation plans and programs to the SIP, as required by section 176(c) of the Act, until it is found adequate. EPA then conducts a review of the entire SIP submittal to determine if the SIP, including the attainment motor vehicle emissions budgets, can be approved. An appropriately identified motor vehicle emissions budget is a necessary part of an attainment SIP.

### D. Criteria for Attainment Date Extensions

What Is EPA's Policy With Regard to an Ozone Attainment Date Extension?

EPA's policy regarding an extension of the ozone attainment date for the Baton Rouge area is addressed in EPA's notice of proposed rulemaking dated May 9, 2001. 66 FR 23646. In the May 9, 2001, document, EPA proposed to reclassify the Baton Rouge area to a severe ozone nonattainment area, but also provided notice of the area's potential eligibility for an attainment date extension based on the July 16, 1998 EPA guidance memorandum. In today's document, EPA proposes to approve the State's request for an attainment date extension under that policy provided that EPA issues a final approval of the State's attainment demonstration and any other required local measures. The specifics of the attainment date policy are repeated below for clarity.

That memorandum stated that EPA will consider extending the attainment date for an area or a State that:

(1) Has been identified as a downwind area affected by transport from either an upwind area in the same State with a later attainment date or an upwind area in another State that

significantly contributes to downwind ozone nonattainment;

(2) Has submitted an approvable attainment demonstration with any necessary, adopted local measures and with an attainment date that shows it will attain the 1-hour standard no later than the date that the emission reductions are expected from upwind areas under the final NO<sub>x</sub> SIP call (by 2003) and/or the statutory attainment date for upwind nonattainment areas, i.e., assuming the boundary conditions reflecting those upwind emission reductions;

(3) Has adopted all applicable local measures required under the area's current ozone classification and any additional emission control measures demonstrated to be necessary to achieve attainment, assuming the emission reductions occur as required in the upwind areas; and

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

Once an area receives an extension of its attainment date based on ozone/precursor transport impacts, the area would no longer be subject to reclassification to a higher ozone nonattainment classification. If the Baton Rouge area is granted an attainment date extension, it would no longer be subject to a reclassification to severe nonattainment for ozone and no longer subject to the additional emission control requirements that would result from the reclassification to severe nonattainment.

Louisiana has requested an extension of the attainment date for the Baton Rouge area in conjunction with the ozone attainment demonstration submittals. The ozone attainment demonstration uses November 15, 2005, as the appropriate ozone attainment date. EPA is proposing to extend the attainment date for the Baton Rouge area to November 15, 2005, if EPA takes final action to approve the attainment demonstration and any other required local measures. For a discussion of how the Baton Rouge area satisfies the criteria for the attainment date extension, see section II.D. below.

## II. Technical Review of the Submittals

### A. Summary of the State Submittals

#### 1. General Information

When Were the Ozone Attainment Demonstration State Implementation Plan Revisions Submitted to the Environmental Protection Agency?

Louisiana has made the following submittals, which in whole or in part concern the ozone attainment demonstration and an extension of the attainment date for the Baton Rouge area:

- (a) On December 31, 2001, LDEQ submitted an ozone attainment demonstration and transport SIP revision. The SIP revision included:
  - i. A revision to the 15% ROPP for the control of VOC emissions in the Baton Rouge area. The 15% Rate ROPP was approved by EPA on October 22, 1996 (61 FR 54737).
  - ii. Revisions to the 1990 base year emissions inventory. The inventory was approved on July 2, 1999 (64 FR 35930).
  - iii. Revisions to the Post-1996 ROPP. The Post-1996 ROPP was approved on July 2, 1999 (64 FR 35930).
  - iv. Revisions to the I/M program.
  - v. Attainment MVEBs for 2005 for VOCs and NO<sub>x</sub>.
  - vi. An enforceable commitment to submit revised MVEBs within 24 months after the release of MOBILE6.
  - vii. An enforceable commitment for mid-course review.
  - viii. An enforceable transportation control measure referred to as the Advanced Transportation Management System.
  - ix. An emissions control strategy that incorporates federal, state, and local control measures.
  - x. Revisions to Louisiana's New Source Review rules.

(b) On February 1, 2002, LDEQ submitted the changes to the proposed rule for the control of NO<sub>x</sub> emissions.

(c) On February 27, 2002, LDEQ submitted final rules for the emission reductions credit banking program and for the control of NO<sub>x</sub> emissions.

(d) On February 27, 2002, LDEQ also submitted final revisions to the contingency measures proposed in the December 31, 2002, SIP submittal.

(e) On April 8, 2002, LDEQ submitted a letter requesting parallel processing of revisions to the State's NO<sub>x</sub> regulations.

(f) On May 20, 2002, LDEQ submitted a letter concerning the revisions to the rulemaking dealing with VOC emissions from industrial wastewater.

EPA is taking separate actions on certain revisions to the Baton Rouge SIP, including the Inspection and Maintenance Program (67 FR 44410,

July 2, 2002), NO<sub>x</sub> regulations (67 FR 30638, May 7, 2002, and 67 FR 48095, July 23, 2002), New Source Review (see 67 FR 48090, July 23, 2002), emissions reductions credit banking (see 67 FR 48083, July 23, 2002), Contingency Measures (see 67 FR 35468, May 20, 2002), and SIP revisions dealing with VOC emissions from industrial wastewater (67 FR 41840, June 20, 2002). In this proposed rulemaking the following are considered: the ozone attainment demonstration plan and its associated MVEBs; the transport SIP related materials; the RACM analysis; and the revisions to the 1990 base year inventory, the 15% ROPP, and the Post-1996 ROPP.

When Was the Submittal Addressed in a Public Hearing, and When Was the Submittal Formally Adopted by the State?

LDEQ held a public hearing on the attainment plan and transport SIP on November 26, 2001, and adopted it on December 27, 2001.

## 2. Modeling Procedures, Input Data, and Results

What Modeling Approach Was Used in the Analyses?

The attainment modeling approach is documented in Louisiana's December 31, 2001, ozone attainment demonstration SIP and information Louisiana previously submitted to EPA on May 10, 2000. EPA's technical analysis discussed later in this document is based on data from this modeling domain. For additional information, see the Technical Support Document (TSD) and the State's submittal.

Besides being able to model ozone and other pollutants in nested horizontal grids, the UAM-V photochemical model (used by LDEQ) can also model individual elevated source plumes within the modeling grid. Gaussian dispersion models are used to grow plumes until the plumes essentially fill grid cells. At these points, the numerical dispersion and advection components of UAM take over to address further downwind dispersion and advection.

The following input data systems and analyses were also used as part of the combined modeling system:

Emissions: UAM-V requires the input of an emissions inventory of gridded, hourly estimates of CO, NO<sub>x</sub>, and speciated VOC emissions (speciated based on carbon bond types). The State provided regional and local emission inventories, which were processed through the Emissions Preprocessor

System, Version 2.5 (EPS-2.5) to prepare UAM-V emissions data input files.

Louisiana has also made changes to the 1996 emission inventory as documented in the December 31, 2001, submittal. The State submittals describe in detail the procedures used to develop, and then project, the base year emission inventories to the 1997/1999 period and to project emissions to account for growth and control through November 15, 2005.

What High Ozone Periods Were Selected for the Modeling Demonstration?

EPA's Guideline sets forth a recommended procedure for selecting ozone exceedance episodes appropriate for conducting a modeling demonstration. This procedure, in part, considers wind rose analyses based upon the four morning hours of 0700 to 1000 standard time. LDEQ's episode selection for the Baton Rouge 1-hour ozone modeling analysis was based on a review of historical meteorological and air quality data, and application of a procedure for optimizing representation of the key meteorological regimes. The results for 1-hour ozone for Baton Rouge overlap with the Gulf Coast Ozone Study (GCOS) modeling episodes for two of the four GCOS episode periods. The Baton Rouge 1-hour ozone modeling analysis also includes a third episode that is not a part of the GCOS study. The selected episode periods were:

- a. August 24–31, 1997 (Sunday–Sunday)
- b. September 10–18, 1997 (Wednesday–Thursday)
- c. August 1–8, 1999 (Sunday–Sunday)

With respect to the considerations listed above, the three episode periods included:

- a. Six 1-hour exceedance days that represent five different types of meteorological regimes.
- b. Eleven days with ozone concentrations within 10 ppb of the design value for Baton Rouge (these include several days that represent the three most frequently occurring exceedance meteorological regimes).
- c. A range of ozone concentrations among the 1-hour exceedance days from 126 to 143 ppb (with a mean of 131 ppb).

Based on observed ozone concentrations and meteorological conditions, and considering the EPA guidance procedures, LDEQ chose September 13, 1997, August 31, 1997, and August 7, 1999 as the three primary episode days for the Baton Rouge 1-hour ozone modeling analysis.

For the September 1997 episode period, September 13 is a key exceedance day with a maximum ozone concentration near the 1997–1999 design value (126 ppb) and meteorological conditions representative of a key exceedance meteorological regime (the “continental high” regime). Wind directions (near the surface and aloft) are primarily from the north.

For the August 1997 episode period, August 31 is the only exceedance day (with a peak of 127 ppb) and the key episode day. Meteorological conditions transition from a key exceedance meteorological regime (the “gulf high” regime) to a disturbance regime during this day. Light and variable winds are associated with a high-pressure system that is located over Baton Rouge on the 31st and the local conditions reflect the influence of high pressure.

For the August 1999 episode period, the 7th stands out as the best day for use in the attainment demonstration. This is due to high ozone and, partially, representative meteorological conditions. It also complements the other key days (from the August and September 1997 episode periods) with southerly to southeasterly winds (with this day, the key three episode days combined include northerly, southerly, and light and variable wind components). The maximum ozone concentration (143 ppb) is more than 10 ppb greater than the design values for 1997–1999 and 1999–2001.

What Procedures and Sources of Projection Data Were Used To Project the Emissions to Future Years?

The 2005 future-year basecase episode incorporates the effects of population and industry growth (or, in some cases, decline) as well as national and statewide control measures or programs that should be in place by 2005. The future-year basecase emissions inventory is based on typical summer day emissions, with adjustments for source-specific and episode-specific information. Growth and control factors (for the entire modeling domain) were obtained from the Bureau of Economic Analysis (BEA) and applied based on 2-digit Standard Industrial Code (SIC) for point sources and on the EPS 2.5 default projection factor assignments by source category code for area and mobile sources. Employment was used as the basis for the growth factors for Louisiana. The control factors represent reductions in emissions that should occur as a result of required control requirements. The 2005 basecase emissions inventory also incorporates the expected emission reductions



associated with EPA's NO<sub>x</sub> SIP Call and Tier II vehicle standards and fuel sulfur program, as well as emissions reductions associated with the 2007 SIPs for the Houston/Galveston and Beaumont/Port Arthur, Texas, areas. For the Baton Rouge subdomain (Grid D), projection of the emissions to 2005 resulted (approximately) in a one percent increase in NO<sub>x</sub> emissions and a corresponding 15 percent decrease in VOC emissions compared to the base year (1997/1999). The offshore area and point sources were projected to 2005 using the information provided by Mineral Management Services (MMS) reflecting expected future activity. The offshore oil platforms were modeled as point sources, and other source categories were modeled as area sources. Details of the above methods are discussed further in the TSD and Louisiana's submittals.

#### How Did the State Validate the Photochemical Modeling Results?

The LDEQ SIP modeling analysis included the application of the UAM-V modeling system for basecase year episode periods and a future year of 2005. LDEQ selected three basecase episodes for this attainment demonstration modeling. They were the August 24–31, 1997, September 10–18, 1997 and August 1–8, 1999 episodes. Model performance evaluations were conducted for each of these episodes.

Model performance evaluation based upon diagnostic and sensitivity analyses consisted of testing the response of modeled ozone to changes in the various model inputs (*i.e.*, meteorology, emission inventory, and initial & boundary conditions). The model performance evaluation based upon graphical measures consisted of comparing time series of monitored and modeled ozone and ozone precursor concentrations, and comparing modeled ozone concentration contours with monitored ozone data. The model performance evaluation based upon statistical measures consisted of comparing the modeled versus monitored ozone "Unpaired Peak Accuracy", "Normalized Bias", and "Gross Error" with EPA's recommended ranges for acceptable model performance. These evaluation methods and performance measurement analyses were utilized to pick representative ozone episode days for which the model could sufficiently replicate the episode day.

The key simulation days for the Baton Rouge 1-hour ozone attainment demonstration are: September 13, 1997, August 31, 1997, and August 7, 1999. These are exceedance days for which

acceptable model performance was achieved. They also represent a range of meteorological conditions and, in particular, a variety of wind directions, which makes them especially suitable, in combination, for use in the attainment demonstration (*i.e.*, a variety of wind directions and thus, potential source-receptor relationships are represented by the key modeling episode days). Further discussion of the choice of these days as the episode days is included in the individual episode discussions below. The 1-hour ozone attainment demonstration analysis presented focuses on these three primary episode days. The analysis of results for these days is supplemented by weight of evidence.

#### What Were the Ozone Modeling Results for the Base Period and for the Future Attainment Period?

The basecase modeling analysis results indicate that the MM5/UAM-V modeling system can be used to successfully simulate the complex processes leading to high ozone in the Baton Rouge area, although in some cases it is difficult for the model to replicate site-specific details. Key findings related to model performance include:

- Model performance varies by day, and among the modeling episode periods.
- Statistical measures for Grid D are generally within the EPA recommended ranges.
- For the episodes modeled there is no consistent bias toward over- or under estimation on a domain-wide or site-specific basis.
- Gradients in the concentration fields, especially along the coastline, influence sites-specific model performance (especially when using the maximum values in the vicinity of sites to calculate the performance measures).
- Changes to the UAM-V inputs (emissions, meteorological, initial and boundary conditions) produce expected (and moderate) responses.

The simulated high ozone concentrations for the three primary episode days occur in Baton Rouge (September 13, 1997), to the south of Baton Rouge (August 31, 1997), and to the northwest of Baton Rouge (August 7, 1999). From evaluation of meteorological conditions, these three primary episode days appear to represent the three key types of ozone episode meteorological patterns that typically occur in the Baton Rouge area. Because the meteorological conditions for August 7th represent a distinct wind pattern that is representative of ozone

episodes, this episode day truly compliments the other two days. These three primary episode days represent the three key types of ozone episode meteorological patterns that typically occur in the Baton Rouge area. Acceptable basecase model performance is achieved that meets EPA statistical guidance for the two 1997 episode days. The August 7, 1999, episode day basecase modeling is slightly outside of EPA statistical guidance parameters, but can still be utilized to evaluate control strategy impacts based upon other evaluation techniques. Specifically, the 1999 episode day has generally good performance for sites within Baton Rouge and to the north of the urban area, but the simulated ozone profiles are flatter than observed at some of the outlying monitoring sites. The normalized bias value for August 7, 1999 is –16.8% (Grid D), which is just outside the preferred range of  $\pm 15\%$ . The Gross Tete monitoring site is one of the significant reasons the bias is off, and if this location were not included the bias would be within desired parameters. For further information concerning the Gross Tete monitoring site see the TSD.

#### Do the Modeling Results Demonstrate Attainment of the Ozone Standard?

The modeling results for the Baton Rouge 5-parish nonattainment area were 123.4, 124.0, and 121.3 ppb for the three episode days. The maximum simulated ozone concentrations for Grid D (a rectangular area 112 km  $\times$  148 km that includes the Baton Rouge nonattainment area) were 123.4, 124.0, and 127.4 ppb. The 127.4 ppb peak is predicted to occur outside of the Baton Rouge nonattainment area for the 1999 episode day. The two 1997 episode days demonstrated attainment utilizing the deterministic test. Therefore, Louisiana has demonstrated with these two episodes that the Baton Rouge nonattainment area will attain the standard by November 15, 2005. Since the 1999 episode does not meet the deterministic test because it predicts a level slightly above the standard occurring in an attainment parish outside of the Baton Rouge nonattainment area, to ensure that the chosen control strategy for the Baton Rouge nonattainment area will not cause an exceedance of the standard to occur in an attainment parish, Louisiana supplemented the attainment demonstration with weight-of-evidence. With weight-of-evidence for the 1999 episode, these modeling results indicate that the Baton Rouge nonattainment area will attain (and the surrounding area will continue to attain) the ozone



standard by November 15, 2005, with the proposed rules control scenario and other reductions occurring within the domain.

#### What Weight-of-Evidence Analyses and Determinations Are Used In This SIP?

The modeling by itself does demonstrate attainment in the Baton Rouge nonattainment area, but the modeling for the 1999 episode day by itself does not conclusively demonstrate attainment in Grid D, an area outside the nonattainment area but downwind of it and within the State and part of the modeling domain. The modeling for both of the 1997 episode days do show attainment within Grid D. The results for the 1999 episode day, however, are close enough to warrant the consideration of weight of evidence arguments that support the modeling demonstration of attainment. EPA's guidance on the use of modeled results to demonstrate attainment of the ozone NAAQS (June, 1996) allows for the use of alternative analyses as weight-of-evidence. The alternative analyses should provide compelling evidence that a specific control strategy, even if it is not capable of demonstrating modeled attainment utilizing modeling, is nonetheless expected to achieve monitored attainment by the attainment date. In this case, the modeling does demonstrate attainment in the Baton Rouge nonattainment area and Grid D for the two 1997 episodes, but weight of evidence provides additional support that is needed to determine that the attainment parishes within Grid D will stay in attainment for all three episode days (including the 1999 episode day). The EPA's 1999 guidance document entitled "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled" addressed additional weight-of-evidence approaches, one of which considers methods that relate modeled ozone concentrations to monitored design values for a particular area.

LDEQ's weight-of-evidence determination includes:

- Consideration of certain factors that are also the benchmarks for the statistical determination approach.
- Consideration of uncertainties associated with the modeling system.
- Application of relative-reduction procedures for 1-hour ozone on a site-specific basis (attainment and screening tests).
- Assessment of simulation results relative to 8-hour ozone.
- Application of relative-reduction procedures for 1-hour ozone on a domain-wide basis.

- Analysis of observed and simulated ozone trends.

Using the statistical approach included in the 1996 guidance, Benchmark Test #1, which limits the number of exceedances within each subregion of the modeling domain according to the severity of the modeled primary episode days, is not met. One of the primary episode days (August 7, 1999) is characterized as severe, which is when the expected frequency of occurrence of the meteorological conditions associated with the episode is less than 2 times per year. The characterization of the episode determines the number of exceedances allowed using this method. The Grid D domain was divided into subregions, with each subregion containing 64 2-km grid cells, for this analysis. The number of allowable exceedances in each subregion is zero; for one subregion, one exceedance is simulated.

Benchmark Test #2, which limits the extent to which the simulated concentrations for the severe primary episode days may exceed 124 ppb, is met. For the August 7, 1999 episode day, the maximum simulated value (Grid D) of 127.4 ppb is within the range of the estimated allowed maximum values of 124 to 129 ppb.

Benchmark Test #3, provides that, for a composite of all primary episode days, the number of grid cell hours with simulated ozone concentrations greater than 124 ppb should be reduced by at least 80 percent. The value of this parameter is reduced by 97.6 percent. This test is passed by a significant margin.

The results from application of the statistical approach did not pass Benchmark Test #1. However, components of the statistical approach analyses do show improvements and thus this data can be used as one of the weight-of-evidence components.

Additional weight of evidence was also considered. Uncertainties associated with modeling system were considered as part of the weight of evidence. Overestimation of the Baton Rouge nonattainment area domain-wide (Grid D) 1-hour maximum ozone concentration for the three episode days adds to the weight-of evidence that the results demonstrate attainment, since both the deterministic and (to a lesser extent) statistical methods for the 1-hour ozone attainment demonstration emphasize the reduction of the simulated peak concentration. The good model performance achieved for the September 13, 1997, and August 31, 1997, primary episode days adds to the credibility of the attainment test results for these two days, which in both cases

clearly indicate that attainment has been demonstrated (using both the deterministic and statistical methods). Poorer model performance for the August 7, 1999 episode supports use of greater caution in interpreting the results for this day than those for the other episode days. Additional weight-of-evidence is used to determine that the episode day demonstrates attainment.

Despite the differences in simulated and observed ozone concentrations and model performance among the primary episode days, the response of the modeling system to the emission reductions is consistent among the simulation days, both on a percentage and absolute basis. The peak concentration for the attainment strategy simulation is reduced from that for the future year basecase simulation by approximately 7.5 percent for the September 13, 1997 and August 7, 1999 simulation days and by approximately 10 percent for the August 31, 1997 simulation day. The number of grid cell hours greater than 124 ppb and the value of the related 1-hour exceedance exposure metrics are about 95 to 100 percent lower for the attainment strategy simulation. For the three primary episode days, separately and combined, the simulation results indicate emission reductions that comprise the attainment strategy are sufficient to bring the Baton Rouge area into attainment for three different but representative sets of meteorological conditions.

Application of relative-reduction procedures for 1-hour ozone on a site-specific basis showed that for the simulated attainment strategy, the future-year estimated design value (EDV) for all sites is estimated to be less than 124 ppb (less than 120ppb) when the 1997–1999 design value is used for the calculation. Since the episodes modeled are from 1997 and 1999, the 1997–1999 design values is considered to be the representative design values. LDEQ also performed analyses for two other design values periods as additional support. For the 1999–2001 design values the future-year EDVs were all less than 120 ppb. When the 1998–2000 design values are used for the calculation, the EDV for one site (LSU) is greater than 124 ppb and the EDV is less than 120 ppb for all the other sites. The EDV for the LSU site is 126.4 ppb. In summary, LDEQ utilized three different periods (1997–1999, 1998–2000, 1999–2001) for the starting design value of the Baton Rouge area. The relative-reduction-factor (RRF) analysis yielded EDVs below 120 ppb for all three starting design values with the one exception. This exception was for one

monitor (LSU) and only occurred when one of the three latest design values were used. The application of the site-specific relative-reduction method provides additional weight-of-evidence that the emission reductions associated with the attainment strategy will result in attainment of the 1-hour ozone standard by November 15, 2005. This method complements the traditional 1-hour attainment demonstration methods since the modeling results are used in a relative sense and some of the uncertainty associated with traditional 1-hour modeling is therefore avoided.

The results of the site-specific relative-reduction attainment test for 8-hour ozone shows that the attainment-strategy emission reduction measures are also effective in reducing the 8-hour EDVs for all sites. For example, use of the 1997–1999 design values as the basis for the EDV calculation gives a reduction in the average (over all sites) 8-hour design value from 88.1 to 81.4 ppb. The number of sites with design values greater than 84 ppb is reduced from ten (based on the 1997–1999 design value) to four. While the details and schedule for implementation of 8-hour ozone standard and the associated attainment demonstration procedures are not fully known at this time, the modeling results indicate that the emission reductions associated with the 1-hour attainment strategy will also significantly contribute to attainment of an 8-hour ozone standard for Baton Rouge.

Application of relative-reduction procedures for 1-hour ozone on a domain-wide basis, gives an estimated design value for the Baton Rouge nonattainment area of 121.6 ppb. This additional weight-of-evidence test indicates that the attainment strategy will be sufficient to bring the area into attainment by November 15, 2005, and that further emission reductions are not required. Application of the domain-wide relative-reduction procedures provides additional strong support for the attainment strategy.

### 3. Emission Control Strategies

#### What Emission Control Strategies Were Considered in the Attainment Demonstration?

Louisiana's emission control strategy relies on emission control requirements through 2005, including the impacts of the State's ROPPs for the Baton Rouge area, federal emission controls expected to be implemented before or by 2005, and the State's regional NO<sub>x</sub> emission limit.

Louisiana has recently finalized regional NO<sub>x</sub> emission control

regulations to cover this NO<sub>x</sub> limit. EPA has recently proposed approval of these regulations as meeting the RACT requirements of the Act. See 67 FR 48095, July 23, 2002. It should be noted that Louisiana has adopted NO<sub>x</sub> regulations for the Baton Rouge area and is no longer seeking an exemption from NO<sub>x</sub> RACT, NO<sub>x</sub> NSR, or NO<sub>x</sub> general conformity requirements. The modeling used to support the attainment demonstration does consider the impacts of NO<sub>x</sub> emission reductions resulting from NO<sub>x</sub> RACT implementation in the Baton Rouge area. EPA proposed to rescind the NO<sub>x</sub> exemptions for the Baton Rouge area under separate rulemaking actions. See 67 FR 30638, May 7, 2002.

The emission control strategy also considers the emission impacts of the following control measures: VOC emission reductions from implementation of RACT on various sources (see the discussion of the contents of Louisiana's December 31, 2001, submittal above); an improved vehicle I/M program; EPA's rulemakings for the National Low Emission Vehicle Program and the Tier 2 motor vehicle emissions standards and low sulfur gasoline program; and a TCM.

The State included a TCM in its SIP as a control strategy for attainment of the 1-hour ozone NAAQS. The TCM is an Intelligent Transportation System (ITS) initiative which is locally referred to as the Advanced Transportation Management System (ATMS) facility and is described in detail in Chapter 4 and Appendix F of the State's SIP submittal. The SIP includes information about the project's description, implementation date, and emission reductions. This TCM will be incorporated by reference into the Code of Federal Regulations, if EPA takes final action to approve the attainment demonstration.

### 4. Motor Vehicle Emission Budgets

#### What Is a MVEB and Why Is It Important?

The MVEB is the level of total allowable on-road emissions established by a control strategy implementation plan or maintenance plan. In this case, the MVEB establishes the maximum level of on-road emissions that can be produced in 2005, when considered with emissions from all other sources, which demonstrate attainment of the ozone NAAQS. It is important because the MVEB is used to determine the conformity of transportation plans and programs to the SIP, as described by section 176(c)(2)(A) of the Act.

#### What Are the MVEBs Established by This Plan and Proposed for Approval by This Action?

On December 31, 2001, Louisiana submitted motor vehicle emissions budgets for the 2005 attainment year for the Baton Rouge area in their SIP. The attainment year MVEBs established by this plan that the EPA is proposing to approve are 15.48 tons per day for VOC and 34.26 tons per day for NO<sub>x</sub> for the Baton Rouge area. These budgets were posted on the EPA website for public comment. No comments were received and EPA has determined that the emissions budgets meet the adequacy requirements. We notified the State by letter of our determination on July 5, 2002, and notice of our determination was published on July 17, 2002, (67 FR 46970) and is effective 15 days after that publication. In addition, we find the MVEBs consistent with all pertinent SIP requirements, and the MVEBs are proposed for approval as limited by the discussion below.

#### What Is the State's Commitment To Revise the MVEBs With MOBILE6?

All States whose attainment demonstration includes the effects of the Tier 2/sulfur program have committed to revise and resubmit their MVEBs after we release MOBILE6. On December 31, 2001, the State submitted an enforceable commitment to perform new mobile source modeling for the Baton Rouge area, using MOBILE6, within 24 months of the model's official release. In addition, the enforceable commitment includes a provision stating that if a transportation conformity analysis is to be performed between 12 months and 24 months after the release of MOBILE6, transportation conformity will not be determined until the State submits an MVEB which is developed using MOBILE6 and which we find adequate. LDEQ informed the Capital Region Planning Commission (CRPC) and the Louisiana Department of Transportation and Development of these commitments, and that conformity cannot be determined during the second year until the MOBILE6-based budgets are submitted to EPA and found adequate.

We are proposing that if we finalize this action, the current MOBILE5-based budgets will only be effective for conformity until revised motor vehicle emissions budgets are submitted and found adequate. We are proposing to limit the duration of our approval in this manner because we are only proposing to approve the attainment demonstration and the budgets because the State has committed to revise them

using MOBILE6. Therefore, if we confirm that the revised budgets are adequate, they will be more appropriate than the budgets we are proposing to approve today. Therefore we are proposing to approve the motor vehicle emission budgets and the enforceable commitment to submit revised budgets using MOBILE6 within 24 months after MOBILE6's release.

If future changes to the budgets raise issues about the sufficiency of the attainment demonstration, we will work with the State. If the revised budgets show that motor vehicle emissions are lower than the budgets we approve, a reassessment of the attainment demonstration's analysis will be necessary.

This action does not propose any change to the existing transportation conformity rule or to the way it is normally implemented with respect to other submitted and approved SIPs, which do not contain commitments to revise the budget.

If the State fails to meet its commitment to submit revised budgets using MOBILE6, we could make a finding of failure to implement the SIP, which would start a sanctions clock under section 179 of the Act.

#### What Is the Applicable MVEB To Use for Conformity Analysis After 2005?

When evaluating transportation plans and programs, emissions in years after 2005 must be less than the 2005 attainment MVEBs being proposed for approval here.

We are proposing to approve the attainment MVEBs, pursuant to the State's commitments related to MOBILE6, only until revised MVEBs are submitted and we have found them adequate for transportation conformity purposes.

#### 5. RACM Analysis and Determination of Availability

Section 172(c)(1) of the Act requires SIPs to provide for the implementation of all RACM as expeditiously as practicable and for attainment of the standard. EPA has previously provided guidance interpreting the RACM requirements of 172(c)(1) in the General Preamble. *See* 57 FR 13498, 13560 (April 16, 1992). In the General Preamble, EPA indicated its interpretation of section 172(c)(1), under the 1990 Amendments, as imposing a duty on States to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the particular nonattainment area. EPA also retained its pre-1990 interpretation of the RACM provisions,

stating that we would not consider it reasonable to require implementation of measures that might in fact be available for implementation in the nonattainment area, but could not be implemented on a schedule that would advance the date for attainment in the area. EPA indicated that a State could reject certain measures as not reasonably available for various reasons related to local conditions. A State could include area-specific reasons for rejecting a measure as RACM such as, but not limited to, the rejected measure would not advance the attainment date, or would not be technologically or economically feasible for the area.

The EPA also issued a recent memorandum reaffirming its position on this topic, "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, dated November 30, 1999. In this memorandum, we state that in order to determine whether a state has adopted all RACM necessary for attainment as expeditiously as practicable, the state will need to provide a justification as to why measures within the arena of potentially reasonable measures have not been adopted. The justification would need to support that a measure was not reasonably available for that area and could be based on technological or economic grounds, or a showing that it would not advance the attainment date.

EPA has reviewed the RACM analysis provided in LDEQ's SIP submittal for the Baton Rouge nonattainment area and believes that the State has included sufficient documentation concerning the rejection of certain available measures as RACM for the specific Baton Rouge area.

LDEQ conducted a mobile source analysis that consisted of a broad range of TCMs. As part of this analysis, LDEQ relied on an in-depth TCM evaluation study performed for the Baton Rouge area. LDEQ concluded that, relative to the total NO<sub>x</sub> reductions required for attainment of the 1-hour ozone NAAQS, additional TCMs that could potentially be implemented in the Baton Rouge area were only a small percentage (approximately 1%) of the emissions reductions needed for attainment and did not advance the attainment date. For more information regarding LDEQ's mobile source RACM analysis, including a description of the basic methodology employed to analyze TCM RACM, and a copy of the TCM evaluation study, please refer to the RACM TSD for this proposed action.

An additional mobile source measure, the Vehicle Inspection and Maintenance (I/M) program has been implemented in the area. On-Board Diagnostics testing will be implemented in 2002. There is a state statute prohibiting the expansion of the I/M program beyond the five-parish area [La. R.S. 30:2054.B(8)(a)]. The 2002 Louisiana legislative session is a "fiscal only" session. The next legislative session where expansion of the I/M program area could be considered would be the Regular Legislative Session of 2003. LDEQ concludes that the State has applied RACM for the I/M program because legislative authority is needed for any I/M program expansion, and that opportunity is not available until 2003, and because the fleet in the Baton Rouge area is small (approximately 400,000 subject to the I/M program), LDEQ concludes that the state has applied RACM for the I/M program, in that expansion of the I/M program could not be accomplished so as to advance the attainment date for the Baton Rouge nonattainment area. LDEQ also considered off-road mobile RACM. In view of local feasibility and the economic impact of use restrictions, LDEQ has determined that further off-road measures are not RACM.

LDEQ conducted a stationary source RACM analysis. A VOC major source analysis concluded that a 30% "across the board" reduction in VOCs yielded less than 1 ppb decrease in the ozone peak in all three episodes modeled in the attainment demonstration. Furthermore, Louisiana has implemented RACT on all major stationary sources of VOC in the Baton Rouge area. LDEQ concluded that further VOC reductions at this time are deemed as not cost effective and would not advance the attainment date for the Baton Rouge area.

LDEQ conducted a NO<sub>x</sub> major source RACM analysis. Chapter 4, Section 4.3 of the SIP submittal contains the proposed Baton Rouge NO<sub>x</sub> control strategy. In the Baton Rouge area the plan will reduce NO<sub>x</sub> by approximately 77 tons per day. LDEQ has adopted rule revisions, which are the subject of a separate EPA rulemaking (67 FR 48095, July 23, 2002), to control emissions from point sources of NO<sub>x</sub> in the Baton Rouge area. (LAC 33:III, Chapter 22, "Control of Emissions of Nitrogen Oxides"). RACT is defined by EPA as the lowest achievable emission rate considering technical and economic feasibility. Based on the revised rule, LDEQ will be controlling emissions beyond levels that EPA has previously approved as RACT for such sources. Therefore, LDEQ concluded that the

Baton Rouge area NO<sub>x</sub> control plan meets RACM for major NO<sub>x</sub> sources.

Area sources were also evaluated by LDEQ. The evaluation identified 17 tons per day of "potentially controllable" VOC emissions reductions but this estimate was considered to be an overestimation in the Baton Rouge area because it did not take into account specific federal and state rules and regulations that are in effect to control such emissions. Based on its analysis that these categories are already controlled in the Baton Rouge area, LDEQ concluded that the amount of reduction available from additional controls on area sources were minimal, that there are little or no remaining potentially available emissions reductions, and that additional controls would not advance the attainment date for the Baton Rouge area.

LDEQ also noted that NO<sub>x</sub> area sources were smaller and more numerous than the VOC area sources. Therefore, LDEQ concluded that control of NO<sub>x</sub> area sources would be expensive and would require an intensive effort. As a result, controls on these categories of sources was not considered reasonably available.

Based on these analyses, LDEQ concluded that the additional set of evaluated measures are not reasonably available for the Baton Rouge area, because: (a) Some would require an intensive and costly effort for numerous small area sources, (b) the measures would not produce emission reductions sufficient to advance the attainment date in the Baton Rouge area and, therefore, should not be considered RACM for the Baton Rouge area. Please refer to the RACM TSD and LDEQ's RACM analysis for further information.

6. Revisions to the 15% ROPP, for the Control of VOC Emissions, the 1990 Base Year Emissions Inventory, and the Post-1996 ROPP

Under the 1990 Clean Air Act Amendments (CAAA), States have the responsibility to inventory emissions contributing to NAAQS nonattainment, to track these emissions over time, and to ensure that control strategies are being implemented that reduce emissions and move areas towards attainment. The CAAA require ozone nonattainment areas designated as moderate, serious, severe, and extreme to submit a plan within three years of 1990 to reduce VOC emissions by 15 percent within six years after 1990. The baseline level of emissions, from which the 15 percent reduction is calculated, is determined by adjusting the base year inventory to exclude biogenic emissions and to exclude certain emission

reductions not creditable towards the 15 percent. The 1990 base year emissions inventory is the primary inventory from which the periodic inventory, the Reasonable Further Progress projection inventory, and the modeling inventory are derived.<sup>2</sup> The base year inventory plays an important role in modeling demonstrations for areas classified as moderate and above.

The air quality planning requirements for marginal to extreme ozone nonattainment areas are set out in section 182(a)–(e) of Title I of the CAAA. EPA has issued a General Preamble describing EPA's preliminary views on how EPA intends to review SIP revisions submitted under Title I, including requirements for the preparation of the 1990 base year inventory (see 57 FR 13502; April 16, 1992, and 57 FR 18070; April 28, 1992). Because EPA is describing its interpretations here only in broad terms, the reader should refer to the General Preamble (57 FR 18070, Appendix B, April 28, 1992) for a more detailed discussion of the interpretations of Title I advanced in today's action and the supporting rationale.

States containing ozone nonattainment areas classified as marginal to extreme are required under section 182(a)(1) of the 1990 CAAA to submit a final, comprehensive, accurate, and current inventory of actual ozone season, weekday emissions from all sources by November 15, 1992. This inventory is for calendar year 1990 and is denoted as the base year inventory. It includes both anthropogenic and biogenic sources of VOC, NO<sub>x</sub>, and carbon monoxide (CO).

The inventory is to address actual VOC, NO<sub>x</sub>, and CO emissions for the area during a peak ozone season, which is generally comprised of the summer months. All stationary point and area sources, as well as highway mobile sources within the nonattainment area, are to be included in the compilation. Available guidance for preparing emission inventories is provided in the General Preamble (57 FR 13498, April 16, 1992). EPA approved the Louisiana 1990 Base Year Emissions Inventories on March 15, 1995 (60 FR 13911).

Section 182(c)(2)(B) of the Act requires each State having one or more ozone nonattainment areas classified as serious or worse to develop a plan by November 15, 1994, that provides for

<sup>2</sup> Further information on these inventories and their purpose can be found in the "Emission Inventory Requirements for Ozone State Implementation Plans," U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, March 1991.

additional actual VOC reductions of at least three percent per year, averaged over each consecutive three year period, beginning six years after enactment of the Act, until such time as these areas have attained the NAAQS for ozone. These plans are referred to hereafter as Post-1996 ROPP. EPA approved the revisions to the Post-1996 ROPP for the Baton Rouge area on July 2, 1999 (64 FR 35930).

The current revisions to the 1990 Base Year Emissions Inventory, the 15% Rate-of-Progress Plan, and the 9% Rate-of-Progress Plan were submitted as part of the December 31, 2001, Attainment Plan/Transport SIP. Specifically, they were submitted as part of the substitute contingency measures. The substitute contingency measures are the subject of a separate EPA rulemaking action (see 67 FR 35468, May 20, 2002).

The current revisions consist of emission reductions resulting from the installation of VOC emission controls at the Trunkline Gas Company—Patterson Compressor Station (hereinafter referred to as Trunkline or Trunkline facility) in St. Mary Parish. The Trunkline facility is located approximately 40 kilometers from the Baton Rouge ozone nonattainment area. In 1997, EPA issued a policy allowing 1-hour ozone nonattainment areas to take credit in their Post-1996 ROPP<sup>3</sup> for emission reductions obtained from sources outside the designated nonattainment area, provided the sources are no farther away than 100 km (for VOC sources) or 200 km (for NO<sub>x</sub> sources) away from the nonattainment area.<sup>4</sup>

The Trunkline Gas Company had not accounted for 13.4 tons per day of VOC emissions. As a result, the VOC emissions from this facility had not been included in the point source emissions inventory for 1990. Emissions reported in a corrected 1992 annual emissions inventory submitted to LDEQ June 6, 1997, are the best estimate of the source's 1990 base year emissions. These emissions were added back to the 1990 base year emissions inventory. The revised 1990 VOC base year inventory that included these Trunkline emissions would result in a 204.6 tons per day revised 1990 base year inventory.

<sup>3</sup> EPA has historically allowed a surplus emission reduction in ROPP to be credited towards meeting the section 172 and section 182 requirements. EPA's rationale is that not allowing excess emission reductions to be used as contingency measures discourages areas from reducing emissions "as expeditiously as practicable" and is, therefore, inconsistent with section 172 of the CAA.

<sup>4</sup> EPA memorandum, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM<sub>10</sub> NAAQS," from Richard D. Wilson, Acting Assistant Administrator for Air and Radiation, December 23, 1997.

An additional 2.0 tons per day of emission reductions required were identified in the 15% ROPP revisions. The additional 2.0 tons per day were offset by 1.4 tons per day "surplus" 9% ROPP reduction from the Trunkline permit plus 0.6 tons per day of point source reductions (163 tons per year or 0.45 tons per day of VOCs from the Dow Chemical permit and 56 tons per year or 0.15 tons per day of VOCs from the BASF Corporation permit).

There was also an additional 1.2 tons per day of reductions required for the 9% ROPP identified in the revisions. These were taken from the 13.0 tons per day Trunkline emissions reductions that were netted from the post-90 emissions growth.

See Table 1 below for a listing of the revisions to the emissions inventory. Table 2 below contains the revisions to the ROPPs. Table 3 below itemizes the Trunkline emissions reductions. For further detail on the calculation of these emissions inventories please see the related prior rulemaking actions referenced above.

TABLE 1.—1990 EMISSIONS INVENTORY  
[Tons per day]

Trunkline 1990 Base Year Emissions Inventory .....	13.4
1990 Adjusted VOC Base Year Inventory .....	<sup>1</sup> 191.2
Revised 1990 Adjusted VOC Base Year Inventory .....	<sup>2</sup> 204.6

<sup>1</sup> From the approved 9% ROPP.

<sup>2</sup> Includes Trunkline permit emissions.

TABLE 2.—REVISIONS TO ROPPs  
[Tons per day]

Revised 3% Contingency Requirement .....	<sup>1</sup> 6.1
Additional 9% ROPP Reductions Required .....	<sup>2</sup> 1.2
Additional 15% ROPP Reductions Required .....	<sup>3</sup> 2.0

<sup>1</sup> Three percent requirement times the total emissions inventory or  $0.03 \times 204.6$  tons per day.

<sup>2</sup> Nine percent requirement times the Trunkline 1990 base year emissions inventory or  $0.09 \times 13.4$  tons per day.

<sup>3</sup> Fifteen percent requirement times the Trunkline 1990 base year emissions inventory or  $0.15 \times 13.4$  tons per day.

a—Sources of additional 15% ROPP reductions is from approved 9% ROPP "surplus" (1.4 tons per day), plus point source reductions of 163 tons per year or 0.45 tons per day of VOCs from Dow Chemical permit and 56 tons per year or 0.15 tons per day of VOCs from the BASF Corporation permit, totaling 2.0 tons per day.

TABLE 3.—TRUNKLINE EMISSIONS REDUCTIONS  
[Tons per day]

Trunkline Emissions Reductions ..	113.0
3% Contingency Requirement .....	<sup>2</sup> 6.1
Additional 9% ROPP Requirement "Surplus" 9% ROPP Reductions from Trunkline .....	<sup>3</sup> 1.2
	5.7

<sup>1</sup> Trunkline 1990 base year emissions inventory of 13.4 tons per day minus 0.4 tons per day of new allowables.

#### B. Environmental Protection Agency Review of the Submittals

##### 1. Adequacy of the State's Demonstration of Attainment

Did the State Adequately Document the Techniques and Data Used To Derive the Modeling Input Data and Modeling Results?

The submittals from the State adequately documented the techniques and data used to derive the modeling input data. The submittals adequately summarized the modeling outputs and the conclusions drawn from these model outputs. The submittals adequately documented the State's weight-of-evidence determinations and the bases for concluding that these determinations adequately support the attainment demonstration.

Did the Modeling Procedures and Input Data Used Comply With the Environmental Protection Agency Guidelines and Clean Air Act Requirements?

Yes. The modeling procedures, and input data (including evaluation of the emissions inventory input and procedures), validation of the modeling results, and selection of episode days, meet the CAA requirements and are consistent with EPA's guidance.

Does the Weight-of-Evidence Determination Support the Attainment Demonstration?

Yes, the weight-of-evidence determination, when viewed in aggregate with the modeling, shows attainment of the standard and thus EPA is proposing approval of the attainment demonstration.

##### 2. Adequacy of the Emission Control Strategies

Do the Emission Control Strategies Meet the Requirements of the Clean Air Act?

The selected emission control strategy, based upon modeling and the weight-of-evidence techniques, plus additional information regarding the effect of southeast Texas upon Baton Rouge, demonstrates attainment of the 1-hour ozone standard.

##### 3. Adequacy of the Request for Extension of the Attainment Date

The policy for the extension of an ozone attainment date is discussed above. How the State addressed it is discussed here.

##### a. Identification of the Area as a Downwind Area Affected by Ozone Transport

The State submitted its Transport Demonstration on May 10, 2000, and provided supplemental information in the December 31, 2001, package. The State provided transport demonstration modeling and meteorological analyses. LDEQ applied the procedures used in the Ozone Transport Assessment Group (OTAG) modeling for evaluating "significant contribution" for the NO<sub>x</sub> SIP Call. This procedure has been used for other areas' transport demonstrations under the attainmentment date extension policy. The OTAG procedures appeared to equate a "significant contribution" with a "Zero-out" modeling analysis of the upwind area's emissions resulting in a 2 ppb or greater impact to the downwind area. LDEQ used Urban Airshed Model V (UAM-V) to model an episode representing the most frequently occurring exceedance meteorological regime (*i.e.*, the August 17–19, 1993 ozone episode) to quantify the contribution from southeast Texas (Houston/Galveston and Beaumont/Port Arthur areas). LDEQ "Zero-out" modeling analysis indicated a "significant contribution," since the modeling results showed a contribution of approximately 2 to 6 ppb from the Houston/Galveston nonattainment area to the five-parish Baton Rouge nonattainment area.

The OTAG procedures for evaluating "significant contribution" also include a demonstration that the impact is large and/or frequent. To address the issues of the frequency of transport, LDEQ presented the analysis of meteorological and air quality data. LDEQ used the Classification and Regression Tree (CART) analysis technique to classify and analyze meteorological and air quality data for a five-year period (1996–2000). The results indicated that 7 percent of the Baton Rouge exceedance days (*i.e.*, 2 out of 28 exceedance days) were potentially associated with transport of ozone and/or precursor pollutants from the Houston area. For more information about the transport demonstration modeling, please refer to the Modeling TSD prepared for this document.

In the information submitted in 2000, the modeling showed that emissions from the Houston/Galveston area of

southeast Texas resulted in impacts in a 1993 modeling episode. In the December 31, 2001 package, the air flow into Baton Rouge was not particularly conducive to showing transport from southeast Texas for the episodes modeled, but LDEQ submitted a model run that still showed a "significant contribution" of emissions from southeast Texas (Houston/Galveston and Beaumont/Port Arthur areas). We have reviewed LDEQ's submittals and are proposing to agree that LDEQ has demonstrated that on some occasions, emissions from the Houston/Galveston and Beaumont/Port Arthur areas have significant impacts on exceedances in the Baton Rouge area. This transported pollution happens frequently enough to adversely affect the area's ability to attain by its current attainment date, since the area is only allowed 3 exceedances in a three-year period. Thus for Baton Rouge to attain, controls in both the Houston/Galveston area and the Beaumont/Port Arthur area are necessary.

In conclusion, EPA is proposing that Louisiana has demonstrated that during some Baton Rouge area exceedances, ozone levels are influenced by emissions from the Houston/Galveston and Beaumont/Port Arthur areas, and that the Houston/Galveston area and Beaumont/Port Arthur area emissions affect the Baton Rouge area's ability to meet attainment of the 1-hour ozone standard by November 15, 1999. Therefore, EPA proposes to find that the State's demonstration of ozone transport is consistent with the criteria in EPA's attainment date extension policy and meets the technical requirements established by the NO<sub>x</sub> SIP Call for a "significant contribution". Please refer to the TSD for more details.

#### b. Submittal of an Approvable Attainment Demonstration

Based on our review of the attainment demonstration submitted by the State in December 31, 2001, EPA believes Louisiana has submitted an approvable attainment demonstration. As a part of this action, EPA is proposing to approve Louisiana's ground-level one-hour ozone attainment demonstration SIP for the Baton Rouge area. In addition, the State has adopted all of the emission control measures relied upon in the attainment demonstration but for one rule. On April 8, 2002, the Governor of Louisiana submitted rule revisions to LAC:33:III, Chapter 22, "Control of Emissions of Nitrogen Oxides," (AQ224), as a revision to the Louisiana SIP for lean burn engines in the BR ozone nonattainment area and requested that EPA act on the rule revision

concerning NO<sub>x</sub> RACT for lean burn engines through "parallel processing." See 40 CFR Part 51, Appendix V for more information on "parallel processing" process. EPA has agreed to parallel process this rule revision and will complete its rulemaking on this revision before taking final action on the attainment demonstration or an attainment date extension. EPA is proposing to extend the attainment date for the Baton Rouge area, only if EPA takes final action to approve the attainment demonstration and any other required local measures.

LDEQ has requested that the EPA grant an extension of the attainment date for the 1-hour ozone NAAQS for the Baton Rouge area to November 15, 2005. In keeping with EPA's attainment date extension policy, the November 15, 2005 date is well before the Houston/Galveston attainment date of November 15, 2007. The Baton Rouge attainment demonstration relies heavily on NO<sub>x</sub> controls to be implemented as expeditiously as possible, but no later than May 1, 2005. It is expected that the Houston/Galveston area and the Beaumont/Port Arthur area will have achieved sufficient emissions reductions to lower the background concentration of ozone and ozone precursors in the Baton Rouge area. LDEQ feels that with a combination of local and federal controls, and with the expected emissions reductions from the upwind area, the Baton Rouge nonattainment area can attain by November 15, 2005. Thus, EPA believes that the November 15, 2005, attainment date is as "expeditiously as practicable" for the Baton Rouge area.

#### c. Adoption of All Applicable Local Measures Required Under the Area's Current Ozone Classification

As noted above, Louisiana has completed the adoption of all local measures required by the Act for the area's current classification with the exception of NO<sub>x</sub> RACT, and has submitted these revisions to EPA for approval. EPA is proposing to extend the attainment date for the Baton Rouge area, only if EPA takes final action to approve all applicable required local measures.

#### d. Implementation of All Adopted Measures as Expeditiously as Practicable and No Later Than the Time Upwind Controls Are Expected

In anticipation of the implementation of certain upwind controls in the Houston/Galveston and Beaumont/Port Arthur areas, Louisiana has adopted State regional NO<sub>x</sub> controls requiring implementation as expeditiously as

practicable, but no later than May 1, 2005. As a part of the Attainment Demonstration/Transport SIP submitted by Louisiana, the State has committed to implementing all adopted measures as expeditiously as practicable and no later than the time upwind controls are expected. For more information please refer to the Modeling TSD and to the State's Control Strategy (Chapter 4 of the SIP). Therefore, EPA proposes that the State's submittals are consistent with this criterion of the extension policy.

EPA concludes that, at the present time, the State has addressed the conditions for an attainment date extension. EPA believes that Louisiana has met the criteria for obtaining an attainment date extension under the conditions contained in EPA's July 16, 1998, attainment date extension policy, provided that EPA approves the attainment demonstration and any local measures which require EPA approval to qualify for the extension. Therefore, EPA proposes to extend the attainment date for the Baton Rouge area to November 15, 2005.

To the extent that comments received on EPA's March 25, 1999 document, "Extension of Attainment Dates for Downwind Transport Areas," 64 FR 14441, are applicable to this rulemaking, EPA will address and respond to these comments in its final rulemaking action.

#### 4. Determination of RACM Availability

EPA has reviewed LDEQ's SIP submittal and LDEQ's analysis to evaluate emission levels of NO<sub>x</sub> and VOC and their relationships to the application of current and anticipated control measures expected to be implemented in the five-parish Baton Rouge serious nonattainment area.

Based on this review, EPA proposes to conclude that the additional set of evaluated measures are not reasonably available for the Baton Rouge area, because: (a) The additional set of measures would require an intensive and costly effort for numerous small area sources, and (b) the measures would not produce emission reductions sufficient to advance the attainment date in the Baton Rouge area and, therefore, should not be considered RACM for the specific area.

EPA reached this conclusion primarily because the reductions expected to be achieved by the potential RACM measures are very small. These potential reductions are far less than the emissions reductions needed to advance the date for attainment in the Baton Rouge area. LDEQ has concluded from its modeling analysis, and we agree, that NO<sub>x</sub> emission reductions in Baton

Rouge are the most effective way to reduce ozone in the Baton Rouge area. VOC reductions are not as effective as NO<sub>x</sub> in reducing ozone, and further local VOC reductions in this area would not produce significant ozone reductions in the Baton Rouge area. EPA agrees with LDEQ that VOC reductions would not advance the attainment date and are not as effective in reducing ozone in the Baton Rouge area, as demonstrated in the modeling.

Furthermore, as shown in the modeled attainment demonstration, the Baton Rouge area also relies upon emissions reductions from outside of the nonattainment area and from federal rules with implementation dates prior to 2005. There are no other reasonably available control measures that could advance the attainment date for the Baton Rouge area prior to full implementation, by 2005, of all measures in Louisiana's SIP control strategy for the Baton Rouge area.

Although EPA encourages areas to implement available RACM measures as potentially cost-effective methods to achieve emissions reductions in the short term, EPA does not believe that section 172(c)(1) requires implementation of potential RACM measures that either require costly implementation efforts or produce relatively small emissions reductions that will not be sufficient to allow the Baton Rouge area to achieve attainment in advance of full implementation of all other required measures. Therefore, EPA proposes to conclude that the additional set of evaluated measures are not reasonably available for the Baton Rouge area and should not be considered RACM for the specific area.

#### 5. Adequacy of ROPPs and the 1990 Base Year Inventory

We are proposing approval of the revised 1990 Base Year Emissions Inventory, the 15% Rate-of-Progress Plan, and the 9% Rate-of-Progress Plan submitted as part of the December 31, 2001, Attainment Plan/Transport SIP.

These plans demonstrate that ozone forming emissions are reduced from the baseline emissions by 15% during the time period of 1990–1996 and by 9% during the time period of 1996–1999. We are also proposing to approve the MVEBs associated with the revisions to these plans. Additionally, we are proposing to approve the changes to the 1990 base year emissions inventory for the Baton Rouge area.

#### 6. Completeness Finding

The Baton Rouge area Attainment Plan and Transport SIP is deemed to be complete by operation of law. Section

110(k)(1)(B) of the CAA states that a plan or plan revision that has not been determined by the Administrator to have failed to meet the minimum criteria by the date 6 months after receipt of the submission shall on that date be deemed by operation of law to meet such minimum criteria. The Baton Rouge area SIP was deemed complete by operation of law as of June 30, 2002.

#### III. Proposed Action

EPA proposes to approve the following actions on the submittal of the Attainment Plan/Transport SIP (December 31, 2001) and related submittals (May 10, 2000, February 27, 2002, February 1, 2002, April 8, 2002, and May 20, 2002):

1. EPA is proposing to approve the ground-level one-hour ozone attainment demonstration SIP for the Baton Rouge area, which shows attainment by November 15, 2005, provided that EPA issues a final approval of all other required local measures.

2. EPA is proposing to approve the Transport Demonstration and the State's request to extend the ozone attainment date for the Baton Rouge area to November 15, 2005, while retaining the area's current classification as a serious ozone nonattainment area, provided that EPA issues a final approval of the State's attainment demonstration and any other required local measures.

3. EPA is proposing to approve the Attainment Demonstration SIP's associated MVEBs, only until the MVEBs are revised according to the State's enforceable commitment.

4. EPA is proposing to approve the RACM Analysis for the Baton Rouge area.

5. EPA is proposing to approve the State's TCM.

6. EPA is proposing to approve the revisions to the 15% ROPP for the control of VOC emissions, the 1990 base year emissions inventory, and the Post-1996 ROPP emissions.

7. EPA is proposing to withdraw our June 24, 2002, rulemaking action entitled "Determination of Nonattainment as of November 15, 1999, and Reclassification of the Baton Rouge Ozone Nonattainment Area."

8. EPA is proposing to approve the State's enforceable commitments regarding MOBILE6.

9. EPA is proposing to approve the State's enforceable commitment to conduct and submit a mid-course review by May 1, 2004. If the subsequent analyses conducted by the State as part of the mid-course review indicates additional reductions are needed for the Baton Rouge area to attain the ozone standard, EPA will

require the State to implement additional controls as soon as possible until attainment is demonstrated through an approvable attainment demonstration.

#### IV. Administrative Requirements

##### A. Executive Order 12866

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

##### B. Executive Order 13045

Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have 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 rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or 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, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to 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 officials 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 proposed 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*

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, 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*

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 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 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).

#### *F. Unfunded Mandates*

Under sections 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 costs to State, local, or tribal governments in the aggregate; or to the 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 approval action proposed does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action proposes to approve 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.

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

Environmental protection, Air pollution control, Hydrocarbons, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements.

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

Dated: July 25, 2002.

**Gregg A. Cooke,**  
*Regional Administrator, Region 6.*

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

Environmental protection, Air pollution control, Hydrocarbons, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements.

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

Dated: July 25, 2002.

**Gregg A. Cooke,**  
*Regional Administrator, Region 6.*  
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**BILLING CODE 6560-50-P**

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## **DEPARTMENT OF TRANSPORTATION**

### **Maritime Administration**

#### **46 CFR Part 221**

[Docket No. MARAD-2002-12842]

#### **General Approval of Time Charters**

**AGENCY:** Maritime Administration, DOT.

**ACTION:** Policy review with request for comments.

**SUMMARY:** Section 9 of the Shipping Act of 1916 requires prior approval of the Secretary of Transportation of U.S. vessel charters to persons who are not U.S. citizens. In 1992, the Maritime Administration (MARAD, we, us, or our), which is charged with responsibility for administering section 9, issued regulations that granted general prior approval of time charters and other forms of temporary use agreements to persons who are not U.S. citizens.

Pursuant to this notice, we are requesting public comment on whether the policy of granting general approval of time charters should be changed.

**DATES:** Interested parties are requested to submit comments on or before September 3, 2002.

**ADDRESSES:** Comments should refer to docket number MARAD-2002-12842. Written comments may be submitted by mail to the Docket Clerk, U.S. DOT Dockets, Room PL-401, Department of