DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 924

[SPATS No. MS–001–FOR]

Mississippi Regulatory Program

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM), Interior.

ACTION: Proposed rule; withdrawal of proposed amendment.

SUMMARY: OSM is announcing the withdrawal of an amendment to the Mississippi regulatory program (hereinafter the ''Mississippi program'') under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The proposed amendment that is being withdrawn concerned a complete revision of the Mississippi Surface Coal Mining Regulations, and it was intended to revise the Mississippi program to be consistent with the Federal regulations. OSM announced receipt of the amendment in the January 14, 1993, **Federal Register** (58 FR 4387). On March 26, 1998, Mississippi submitted a new amendment which replaces the one that is being withdrawn by this proposed rule document.

FOR FURTHER INFORMATION CONTACT: Arthur W. Abbs, Director, Birmingham Field Office, Office of Surface Mining Reclamation and Enforcement, 135 Gemini Circle, Suite 215, Homewood, Alabama 35209. Telephone: (205) 290–7282. Internet: aabbs@osmre.gov.

SUPPLEMENTARY INFORMATION: By letter dated December 9, 1992 (Administrative Record No. MS–0319), Mississippi submitted a proposed amendment to its program pursuant to SMCRA. The submittal was a complete rewrite of Parts 100 through 250 of the Mississippi Surface Coal Mining Regulations for surface and underground coal mining operations.

OSM announced receipt of the proposed amendment in the January 14, 1993, **Federal Register** (58 FR 4387) and invited public comment on its adequacy. The public comment period ended February 16, 1993. OSM notified Mississippi of deficiencies in the December 9, 1992, submittal, and on February 17, 1994 (Administrative Record No. MS–0322), Mississippi submitted a revised amendment. OSM reopened the public comment period in the March 10, 1994, **Federal Register** (59 FR 11225). This comment period ended April 11, 1994.

Following review of the revisions, OSM notified Mississippi of deficiencies in its February 17, 1994, revised amendment. By letter dated March 26, 1998 (Administrative Record No. MS–0355), Mississippi submitted a new amendment. This amendment replaces both the December 9, 1992, and February 17, 1994, submittals. Therefore, the proposed amendment announced in the January 14, 1993, **Federal Register** is withdrawn.

List of Subjects in 30 CFR Part 924

Intergovernmental relations, Surface mining, Underground mining.

Dated: August 7, 1998.

Brent Wahlquist,

Regional Director, Mid-Continent Regional Coordinating Center.

[FR Doc. 98–22216 Filed 8–17–98; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[LA–29–1–7181; FRL–6144–9]

Approval and Promulgation of Air Quality Implementation Plans; Louisiana: Reasonable-Further-Progress Plan for the 1996–1999 Period, Attainment Demonstration, Contingency Plan, Motor Vehicle Emission Budgets, and 1990 Emission Inventory for the Baton Rouge Ozone Nonattainment Area; Louisiana Point Source Banking Regulations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: In this action, the EPA is proposing to approve revisions to the Louisiana State Implementation Plan (SIP) for the Baton Rouge ozone nonattainment area submitted by the State of Louisiana for the purpose of satisfying the Post-1996 Rate-of-Progress (ROP), Attainment Demonstration, and Contingency Plan requirements of the Federal Clean Air Act (the Act), which will aid in ensuring the attainment of the National Ambient Air Quality Standard (NAAQS) for ozone. The EPA is also proposing approval of the associated 1999 Motor Vehicle Emissions Budgets (MVEBs) for the area.

The EPA proposes to take action on additional SIP revisions submitted by Louisiana including codifying revisions that were made to the 1990 base year emission inventory and submitted to the EPA as part of the Baton Rouge 15 Percent Rate-of-Progress Plan approved on October 22, 1996. Furthermore, the EPA proposes to approve additional revisions to the 1990 base year emissions inventory submitted as part of the Post-1996 Rate-of-Progress Plan. The EPA is also proposing approval of the State's point source banking regulations. This rulemaking action is being taken under sections 110, 301 and part D of the Act.

DATES: Comments must be received on or before October 19, 1998.

ADDRESSES: Written comments on this action should be addressed to Mr. Thomas H. Diggs, Chief, Air Planning Section, at the EPA Regional Office listed below. Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment with the appropriate office at least 24 hours before the visiting day.

Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733.

Louisiana Department of Environmental Quality, Office of Air Quality and Radiation Protection, H. B. Garlock Building, 7290 Bluebonnet Blvd., Baton Rouge, Louisiana, 70810.

FOR FURTHER INFORMATION CONTACT: Ms. Jeanne Schulze, Air Planning Section (6PD–L), Environmental Protection Agency, Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–7254.

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I. Background

A. Clean Air Act Requirements

1. Reasonable Further Progress Requirements

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 additional actual volatile organic compound (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 ROP Plans. These plans were due to be submitted to the EPA as a SIP revision by November 15, 1994.

Section 182(b)(1) of the Act mandates a 15 percent VOC emission reduction, net of growth, between 1990 and 1996 for each State having one or more ozone nonattainment areas classified as moderate or worse. That SIP revision was due to the EPA by November 15, 1993. The plan for these reductions occurring between 1990–1996 is hereafter referred to as the 15% ROP Plan.

Sections 182(b)(1)(C), 182(b)(1)(D) and 182(c)(2)(B) of the Act limit the creditability of certain control measures toward the ROP requirements. Specifically, States cannot take credit for reductions achieved by Federal Motor Vehicle Control Program (FMVCP) measures (e.g., new car emissions standards) promulgated prior to 1990, or for reductions stemming from regulations promulgated prior to 1990 to lower the volatility (i.e., Reid Vapor Pressure) of gasoline. Furthermore, the Act does not allow credit toward ROP requirements for post-1990 corrections to existing motor vehicle Inspection and Maintenance (I/M) Programs or corrections to Reasonably Available Control Technology (RACT) rules, since these programs were required to be in place prior to 1990. Emissions and emissions reductions shall be calculated on a typical weekday basis for the ''peak'' 3-month ozone period (generally June through August).

2. Contingency Measures Requirements

Sections 172(c)(9) and 182(c)(9) of the Act require contingency measures to be included in the ROP and attainment plans. These measures are required to be implemented immediately if reasonable further progress has not been achieved, or if the NAAQS is not met by the deadline set forth in the Act.

3. Motor Vehicle Emissions Budgets

Section 176(c) of the Act, and 40 CFR 51.452(b) of the Federal transportation conformity rule require States to establish motor vehicle emissions budgets in any control strategy SIP that is submitted for attainment and maintenance of the NAAQS.

4. Attainment Demonstration Requirements

Under section 182(c)(2)(A) of the Act, States required to submit Post-1996 ROP Plans, by November 15, 1994, for serious or worse ozone nonattaiment areas, must also submit for those areas an attainment demonstration to provide for achievement of the ozone NAAQS by the statutory deadline. This demonstration is to be based on photochemical grid modeling, such as the Urban Airshed Model (UAM), or an equivalent analytical method. In a March 2, 1995, memorandum from Mary Nichols, Assistant Administrator for the EPA's Office of Air and Radiation, the EPA set forth a phased approach to satisfy the attainment demonstration requirements under section 182(c)(2)(A) of the Act. Under this approach, Louisiana was required to submit a ROP Plan to cover the three year Post-1996 ROP period (i.e., 1996–1999) as part of its ''Phase I'' submittal by December 31, 1995. Pursuant to a December 29, 1997, memorandum from Richard D. Wilson, Acting Assistant Administrator for Air and Radiation, an attainment plan was then due by April 1998, showing how Baton Rouge would attain by its statutory attainment date. As reflected in the following discussion entitled, ''Current SIP Submittals,'' Louisiana made its Post-1996 ROP Plan and Attainment Demonstration submittals ahead of the schedules outlined in the policy memoranda.

The Baton Rouge ozone nonattainment area is classified as ''serious'' and is subject to the section 182(b)(1) 15% ROP requirements, section 182(c)(2)(B) Post-1996 ROP requirements, and section 182(c)(2)(A) attainment demonstration requirements. The Baton Rouge ozone nonattainment area is comprised of the following parishes: East Baton Rouge, West Baton Rouge, Ascension, Livingston, and Iberville. As a serious ozone nonattainment area, Baton Rouge has a statutory attainment date of November 15, 1999. Therefore, the area's Post-1996 ROP requirement is to achieve an overall 9 percent reduction in actual VOCs (net of growth) during the period 1996–1999 pursuant to section 182(c)(2)(B) of the Act.

B. Related SIP Approvals

As stated previously, section 182(b)(1) of the Act requires that moderate and above ozone nonattainment areas reduce their 1990 emissions of VOCs by 15 percent (net of growth) on or before November 15, 1996. The 15% ROP Plan submittals were required to be submitted to the EPA by November 15, 1993. The EPA approved Louisiana's 15% ROP Plan on October 22, 1996 (61 FR 54737). The rulemaking and associated technical support document (TSD), which provide detailed information on the chronology of the 15% ROP Plan submissions, control measures, etc., are available from the EPA Region 6 Office listed above.

The following is a summary of the emissions reductions in the 15% ROP Plan:

Louisiana 15 percent ROP plan required reductions (excluding RVP/FMVCP)	(Tons/Day)
15% ROP Reduction	29.7
I/M Correction	1.3
RACT Correction	0.0
Growth	3.8
Total	34.8
Reductions In the Plan:	
Stage II Vapor Recovery	3.4
Vents to Flares	3.7
Marine Vapor Recovery	8.6
Tank Fitting Controls	7.9
Fugitive Emission Controls	10.4
Federal Rules (Wastewater NESHAP, VOL Storage NSPS)	1.5
Compliance Orders/Permits	1.0
Other (Tank Vent Recovery, Secondary Roof Seal on Tank)	.9
Total	37.4
Surplus Reductions (To Be Carried Over to Post-1996 Rate-of-Progress Plan)	2.6

Louisiana subsequently submitted a site-specific revision to the approved 15% ROP Plan on December 20, 1997. On May 11, 1998, the EPA approved the 15% ROP Plan revision (63 FR 25773). The rulemaking and SIP submittal are available at the EPA Region 6 Office listed above.

In another rulemaking action, the EPA redesignated Pointe Coupee Parish, which was formerly part of the six-parish Baton Rouge nonattainment area, to attainment for the ozone NAAQS (62 FR 648, dated January 6, 1997). The Baton Rouge area was designated nonattainment for ozone and classified as serious pursuant to sections 107(d)(4) and 181(a) of the Act (56 FR 56694, dated November 6, 1991). (Note that the EPA is not reopening or requesting comment on the approval actions described in this section.)

C. Current SIP Submittals

In a letter from the Governor dated November 10, 1994, the State of Louisiana submitted to the EPA the Post-1996 ROP Plan and Attainment Demonstration according to section 182(c)(2). The combined plan submittal addressed both the 9 percent VOC emissions reduction requirement and the requirement to demonstrate attainment of the ozone NAAQS by the area's statutory attainment date, November 15, 1999. The SIP submittal was deemed administratively complete on May 15, 1995, by operation of law pursuant to section 110(k)(1)(B) of the Clean Air Act.

Subsequently, on December 22, 1995, the Governor of Louisiana submitted revisions to the November 10, 1994, submittal. The EPA determined that, in effect, this revised Post-1996 ROP Plan and Attainment Demonstration superseded the previous submittal.[1] The plan was determined to be administratively complete on March 22, 1996. The revisions Louisiana made to the plan substantially modified the mix of control measures utilized to satisfy the 9% ROP requirement, and also made changes to the attainment demonstration based on the EPA's draft guidance document on attainment modeling entitled, ''Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS.'' As provided for by the draft guidance document on modeling, the submittal included a weight-of-evidence determination in support of the urban airshed modeling results.

Finally, on January 2, 1997, the Governor of Louisiana submitted a revision to the December 22, 1995, submittal. The 1997 submittal included significant changes to the 1990 base year emissions inventory (and associated 15% and 9% ROP reductions) to account for the impending redesignation of Pointe Coupee Parish to ozone attainment. Also, the 1997 submittal incorporated into the 1990 base year emissions inventory previously unreported emissions from several point sources. In addition, the 1997 submittal removed the emission reduction credits taken for the vehicle inspection and maintenance control measure in the December 22, 1995, submittal, and replaced them with additional point source emission reductions. The submittal also incorporated enhanced mobile modeling required by Federal conformity regulations. The submittal also included an analysis of how removal of the I/M reductions would impact the attainment modeling results submitted in the December 22, 1995, Attainment Demonstration. The 1997 submittal was determined to be administratively complete on June 20, 1997.

In addition, Louisiana submitted its contingency measure, point source emissions reduction banking regulations, as part of the December 15, 1995, 15% ROP Plan pursuant to sections 172(c)(9) and section 182(c)(9) of the Act. The State subsequently submitted the same contingency measure in both the December 22, 1995, and January 2, 1997, Post-1996 ROP/Attainment Demonstration submittals. The EPA deferred taking action on the regulations in the context of the 15% ROP Plan approval until its rulemaking action on the Post-1996 ROP Plan/Attainment Demonstration SIP. (The rationale is explained in more detail in the rulemaking action and associated TSD for the 15% ROP Plan.)

II. Analysis of the Submittals

The EPA has reviewed the State's submittals for consistency with the Act, and applicable EPA regulations and policy. A summary of the EPA's analysis is provided below. More detailed support and technical discussion is contained in the July 1998 ''TSD for Proposed Clean Air Act Approval and Promulgation of the Post-1996 Rate-of-Progress Plan and Attainment Demonstration for the Baton Rouge Ozone Nonattainment Area.'' This TSD is available from the EPA's Region 6 Office listed above.

[1] In this submittal, the State deleted several of the appendices found in the previous submittal and substantially revised the remaining portion of the plan (i.e., control strategy, modeling demonstration, etc.). The December 22, 1995, submittal is capable of standing alone and does not rely on the November 10, 1994, submittal to be a complete plan. As such, the EPA's legal obligation to act on the State's original Post-1996 ROP Plan/Attainment Demonstration submittal, dated November 10, 1994, is rendered moot.

A. Post-1996 Rate-of-Progress Plan

1. Introduction

Section 182(c)(2)(B) of the Act requires each serious and above ozone nonattainment area to submit a SIP revision by November 15, 1994, which provides for an actual reduction in VOC emissions of at least 3 percent per year averaged over each consecutive 3-year period, beginning 6 years after enactment of the Clean Air Act Amendments of 1990 (CAAA), until the area attains the ozone standard.

2. Base Year Emissions Inventory

Under section 182(b)(1)(B), the baseline from which States determine the required reductions for ROP planning is the 1990 base year emissions inventory. The inventory is broken down into several emissions source categories: stationary, area, on-road mobile, and off-road mobile. The EPA originally approved the Louisiana 1990 base year emissions inventory on March 15, 1995 (60 FR 13911).

Louisiana's December 15, 1995, submittal made a number of adjustments to the base year inventory. The EPA acted upon the revised 1990 base year inventory as part of its rulemaking on the 15% ROP Plan. In that rulemaking, however, the EPA failed to codify its approval of the revised base year inventory in the *Code of Federal Regulations* (specifically, 40 CFR part 52). The EPA proposes to codify its approval of the revised base year inventory (in the context of the rulemaking on the 15% ROP Plan) in this action. (Note that EPA is not reopening or asking for comment on its March 15, 1995, approval of the base year inventory.)

Louisiana's January 2, 1997, submittal made a number of revisions to the 1990 base year emissions inventory. The following table compares the revised 1990 base year VOC emissions cited in the January 2, 1997, submittal, with those cited in the approved 15% Plan rulemaking. (It should be noted that the inventory cited in the December 22, 1995, submittal is identical to the base year inventory cited in the EPA's approval of Louisiana's 15% ROP Plan.)

BATON ROUGE, LOUISIANA, 1990 BASE YEAR INVENTORY

[Ozone Seasonal VOC Emissions (Tons/Day)]

Plan submittal	Point source emissions	Area source emissions	Onroad mobile emissions	Nonroad mobile emissions	Biogenic emissions	Total
12/15/95	115.40	26.30	55.50	23.20	120.91	341.31
1/2/97	115.00	25.40	53.40	21.80	99.60	315.20
Difference	.40	.90	2.10	1.40	21.31	26.11

The changes to the inventory in Louisiana's January 2, 1997, submittal were the result of the following:

1. Removal of Pointe Coupee emissions from the 1990 base year inventory (due to redesignation to attainment):

Point sources	Reduced	5.1 tons/day.
Area sources	Reduced	.9 tons/day.
Mobile sources	Reduced	2.1 tons/day.
Nonroad sources	Reduced	1.4 tons/day.
Biogenic sources	Reduced	21.3 tons/day.
Total Reduced		30.8 tons/day.

2. The VOC emissions of 1.0 tons/day from JN Oil and Gas facility were added to the inventory. This facility was not included in the previously approved 1990 inventory.

3. Borden Chemicals reported an increase in VOC emissions of 3.7 tons/day from its acetylene plant. The adjustment was based on recent studies indicating that the prior inventory reported was understated.

The EPA is proposing to approve the revised 1990 base year emissions inventory submitted on January 2, 1997. (It should be noted that in the January 2, 1997, submittal, these revised 1990 base year numbers have been rounded to the nearest 10th of a decimal place and the non-road and area source emissions have been combined.)

Overall, these revisions to the 1990 base year inventory decrease the ''1990 ROP inventory,'' which is the 1990 base year inventory less the biogenic emissions, for the Baton Rouge nonattainment area from 220.4 tons/day to 215.6 tons/day. The decrease of 4.8 tons/day in the 1990 ROP inventory reduces the 15% ROP Plan reductions requirement by .6 tons/day. Since the reductions in the approved 15% ROP Plan have remained unchanged, Louisiana added the .6 tons/day differential to the 15% Plan surplus reductions resulting in a total surplus of 3.2 tons/day available to be carried over to the Post-1996 ROP Plan. The EPA is proposing to find this revised surplus acceptable for use in the Post-1996 ROP Plan.

3. Adjusted Base Year Inventory

Section 182(c)(2)(B) states that the rate-of-progress reductions must be achieved ''from the baseline emissions described in subsection 182(b)(1)(B).'' This baseline value is termed the 1990 adjusted base year inventory. Section 182(b)(1)(B) defines baseline emissions (for the purposes of calculating each milestone VOC/nitrogen oxides (NO_X) emissions reduction) as ''the total amount of actual VOC or NO_X emissions from all anthropogenic sources in the area during the calendar year of enactment. This section excludes from the baseline the emissions that would be eliminated by FMVCP regulations promulgated by January 1, 1990, and the Reid Vapor Pressure (RVP) regulations promulgated by the time of enactment (at 55 FR 23666, June 11, 1990), which require maximum RVP limits for gasoline to be sold in nonattainment areas during the peak ozone season.

The FMVCP/RVP reduction between 1990 and the target year of 1999 is obtained by subtracting a mobile emission inventory based on projected 1999 fleet emission factors and 1990 vehicle miles travelled (VMT) from the 1990 mobile emission inventory. The EPA is proposing to accept the State's FMVCP/RVP adjustment of 24.4 tons/day. Thus, the 1990 adjusted base year inventory relative to 1999 of 191.2 tons/day (215.6—24.4) is proposed to be

acceptable for the Baton Rouge Post-1996 ROP Plan.

Provided below is a tabular summary of the emissions inventories calculated above.

Emissions inventory	Tons/day
A. 1990 Base Year Emissions Inventory	315.2
B. 1990 Rate-of-Progress Inventory (Base Year—Biogenics)	215.6
C. Emissions Reductions from the Pre-1990 FMVCP and Phase II RVP Expected by 1999	24.4
D. 1990 Adjusted Base Year Inventory (B–C)	191.2

4. Required Rate-of-Progress Reductions

The next step is then to calculate the Post-1996 ROP reductions requirement. In order to do so, the 1990 adjusted base year VOC inventory is multiplied by 9 percent. Thus, the Post-1996 ROP reduction requirement is 17.2 tons/day (.09×191.2). The EPA is proposing to find this Post-1996 ROP reduction (i.e., the 9% ROP reduction) acceptable.

5. Fleet Turnover Correction Term

In the absence of any new requirements of the CAAA, some decrease in motor vehicle emissions will occur automatically due to fleet turnover. States are not allowed to take credit for these reductions for ROP purposes. During the State's calculation of the 1996 target level of emissions, these FMVCP reductions, along with non-creditable RVP reductions that would occur between 1990 and 1996, were subtracted from the 1990 ROP inventory to calculate the 1990 adjusted base year inventory. This 1990 adjusted base year inventory was then used to calculate the required reductions and the 1996 target level of emissions.

Between 1996 and 1999, there will be some additional reductions in emissions due to fleet turnover that are not creditable. These additional, non-creditable reductions are referred to as the fleet turnover correction term. The FMVCP/RVP mobile source reductions for 1999 are calculated above (24.4 tons/day). The FMVCP/RVP mobile source reductions for 1996 (21.4 tons/day) were calculated in the same way. The fleet turnover correction term is the difference between the 1999 and 1996 reductions, or 3.0 tons/day. The EPA is proposing to accept the State's fleet turnover correction term in the Baton Rouge Post-1996 ROP Plan.

6. Calculation of Target Level of Emissions

For the purpose of calculating the 1999 target, the 1996 target inventory (obtained from the 15% ROP Plan calculations) is used. The 1996 target inventory used by the State in this calculation was revised from the target inventory approved as part of the 15% ROP Plan rulemaking in order to account for the changes made to the 1990 base year inventory described above. The EPA is proposing to approve the State's revised 1996 target level of emissions of 163.8 tons/day in this rulemaking.

The 1999 target level of emissions is the amount of VOC emissions that must be achieved in order for the nonattainment area to demonstrate that the 9% ROP requirement has been met. The 1999 target level used by the State in the Post-1996 ROP Plan is the revised 1996 target level (163.8 tons/day), less the 9% ROP reductions (17.2 tons/day), less the fleet turnover correction term (3.0 tons/day), or 143.6 tons/day. The EPA is proposing to approve the State's 1999 target level of emissions of 143.6 tons/day in this rulemaking.

7. Growth Calculations

a. Introduction. The EPA has interpreted the Act to require that States must provide for sufficient control measures in their ROP Plans to offset any emissions growth expected to occur after 1996. Therefore, to meet the ROP requirement, a State must provide for sufficient emissions reductions to offset projected growth in emissions in addition to the 3 percent annual average reduction of VOC emissions. Thus, an estimate of growth in emissions from 1996 to 1999 is required for determining the total amount of required reductions in the Post-1996 ROP Plan. The estimate is made by taking the 1990 base year inventory for each of the various source categories and multiplying it by a factor which estimates growth from 1990 to 1999. The growth of each source is calculated separately since the sources typically grow at different rates. The following is a discussion of the State of Louisiana's growth projections for 1996–1999.

b. Point Sources. Growth factors from the EPA's Economic Growth Analysis System (EGAS) were used to estimate 1990–1999 growth for point sources. The EGAS is a computer software package that provides growth factors by Source Category Codes for each specific emissions point at a facility. The 1999 point source inventory was calculated by projecting the 1990 base year emissions inventory by the EGAS growth factors. The 1990–1999 point source growth is a negative 1.6 tons per day (TPD).

The growth estimate for 1990–1996 calculated in the 15% ROP Plan was a negative 1.8 tons/day. As stated earlier, the State is required to offset the emissions growth expected in 1996–1999. Therefore, the growth projection for 1996–1999 is a positive .2 tons/day (from negative 1.8 to negative 1.6 tons/day).

The State noted in its Post-1996 ROP plan that the point source emissions reductions reflected in the 15% ROP Plan, 34.0 tons/day, had been adjusted for projected growth through 1996. Growing the point source reductions out to 1999 increases the point source reductions to 34.2 tons/day. The .2 tons/day difference in projected reductions is shown in the plan as a reduction in the total amount of growth that must be offset. The EPA is proposing to find the State's point source growth projections for 1996–1999 acceptable.

c. Area Sources. The EGAS growth factors were used for area sources, other than gasoline distribution and leaking underground storage tanks (USTs). (Gasoline distribution growth was based on 1996 and 1999 fleet gasoline fuel efficiencies (miles/gallon) determined from the MOBILE5a model and used with 1996 and 1999 VMT to estimate gas consumption. Leaking USTs were based on an actual count.) The area source growth for 1996–1999 is .2 tons/day. The EPA is proposing to find the State's area source growth projections for 1996–1999 acceptable.

d. On-road Mobile Sources. Highway mobile source growth was determined through projections using the MOBILE5a computer model and projected growth in VMT. The VMT growth projections were developed by the Louisiana Department of Transportation, in cooperation with the Metropolitan Planning Organization, Capitol Regional Planning Commission, and Louisiana Department of Environmental Quality. The projected on-road mobile source emissions growth for the Baton Rouge area (1996–1999) is 2.4 tons/day. The EPA is proposing to

find acceptable the State's on-road mobile source growth projections for 1996–1999.

e. Non-road Mobile Sources. The EGAS growth factors were used for projecting growth in non-road mobile sources. The non-road mobile growth (1996–1999) is .2 TPD. The EPA is proposing to find acceptable the State's non-road mobile growth projections for 1996–1999 acceptable.

The following Table summarizes the emissions growth by source category from the nonattainment area:

BATON ROUGE GROWTH, 1996–1999

Source category	Tons/day
Point	0.2
Area	0.2
On-road Mobile	2.4
Non-road Mobile	0.2
Subtotal	3.0
Offset from Growth of 15% Plan Point Source Reductions	(0.2)
Total Growth in 9% Plan	2.8

In summary, the EPA proposes that the State's methodology for selecting growth factors and applying them to the 1990 base year emissions inventory to estimate growth in emissions from 1996–1999 is acceptable.

8. Total Required Reductions

The total required reductions in the plan include the 9% ROP reductions, reductions to offset projected growth (1996–1999), and the FMVCP/RVP turnover correction reductions (1996–1999). The total required reductions are 23.0 tons/day. The State's ''share'' of these reductions consists of the 9 percent reductions (17.2 tons/day) plus the growth offset (2.8 tons/day), or 20.0 tons/day. The FMVCP/RVP turnover correction reductions (3.0 tons/day) are the Federal reductions that are not creditable towards meeting the ROP/growth offset requirements.

9. Measures to Achieve the Required Reductions

a. Surplus Reductions in the 15 Percent ROP Plan. As stated previously, the surplus reductions in the 15% ROP Plan total 3.2 tons/day. The State has carried these reductions over to the Post-1996 ROP Plan, which the EPA is proposing to find acceptable. A detailed description of the control measures are included in the TSD to this proposed rulemaking, as well as in the 15% ROP Plan rulemaking and its associated TSD.

b. Tier I FMVCP. Section 202 of the Act sets new Tier 1 emission standards for motor vehicles. The EPA promulgated Tier 1 standards for 1994 and later model year light-duty vehicles and light-duty trucks on June 5, 1991 (56 FR 25724). The Tier 1 standards are approximately twice as stringent as prior (pre-1990 CAAA) motor vehicle emissions standards. The State employed the MOBILE5a emission factor model to estimate the amount of VOC emissions reductions from this control measure. The State has calculated that the Tier I FMVCP reductions will achieve a total of 1.0 tons/day in emissions reductions in 1996–1999. The EPA is proposing that the State's emission reduction estimates are adequately documented and acceptable for credit towards the Post-1996 ROP Plan.

c. Federal Non-road Small Engine Standards. The Federal standards for non-road engines (25 horsepower and below) were promulgated on July 3, 1995 (60 FR 34582). The standards primarily affect two stroke and four stroke lawn and garden equipment and light commercial, construction, and logging equipment. States are allowed to take credit for this measure in their ROP Plans pursuant to EPA's policy memoranda, ''Guidance on Projection of Nonroad Inventories to Future Years,'' dated February 4, 1994, and ''Future Nonroad Emission Reduction Credits for Court-Ordered Nonroad Standards,'' dated November 28, 1994. Based on this policy, Louisiana took credit in its Post-1996 ROP Plan for the reductions expected to result by 1999 from the Federal non-road small engine standards (22.9 percent from 1990 levels). The EPA is proposing that the 22.9 percent emissions reduction figure is adequately documented, follows EPA guidance, and is therefore, acceptable. Thus, the reductions claimed, 1.1 tons/day (5.0 tons/day projected 1999 uncontrolled emissions × 22.9 percent) are proposed by the EPA to be creditable towards the Post-1996 ROP Plan.

d. Architectural and Industrial Maintenance (AIM) Coatings. The State has chosen to rely on the Federal AIM rule for emission reductions in the Post-1996 ROP Plan. The EPA proposed this national rule on June 25, 1996 (61 FR 32729). The rule is expected to be finalized in the August 1998 time frame. The State has followed the EPA's policy memoranda entitled, ''Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance Coating Rule,'' dated March 22, 1995, and ''Update on the Credit for the 15% Rate-of-Progress Plans for Reductions from Architectural and Industrial Maintenance Coatings Rule,'' dated March 7, 1996, in estimating the amount of creditable emission reductions that will result from the final rule when promulgated. The guidance allow States to assume a 20 percent emission reduction from this source category. The State's projected uncontrolled AIM emissions in 1999 are 5.4 tons/day. Applying the 20 percent reduction credit results in a reduction of 1.1 tons/day. The EPA is proposing that the State has properly estimated the emissions reductions that will result from the Federal AIM rule, and the reductions, therefore, are creditable towards the Post-1996 ROP Plan. It should be noted, however, that if the final rule does not provide the amount of credit indicated in the memorandum that States can claim in their ROP plans, Louisiana is responsible for developing measures to make up the shortfall.

e. Autobody Refinishing National Rule. Autobody shop emissions come from the painting of damaged vehicles or the reconditioning of old vehicles typically done in an industrial or small business shop. The coatings used emit VOCs in significant amounts and the EPA is in the process of developing a national rule to address the VOC content in those coatings. The EPA intends to finalize the rule in the August 1998 time frame. In a November 29, 1994, memorandum, ''Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance Coatings Rule and Autobody Refinishing Rule,'' the EPA set forth policy on the creditable reductions from the final autobody refinishing rule. That memorandum allowed for a 37 percent reduction from

1990 base year emissions. Louisiana is claiming a 37 percent emissions reduction from projected 1999 uncontrolled emissions. Louisiana's January 2, 1997, submittal, states the inventory is 1.5 tons/day; however, based on the supporting documentation submitted, the EPA has recalculated the projected emissions to actually be 1.68 tons/day (based on a 1990 uncontrolled inventory of 1.4 multiplied by a 1999 EGAS growth factor of 1.2013). The submittal takes credit for a reduction of only .5 tons/day (1.5 × 37%). However, the EPA has found this figure to be incorrectly computed. The reductions should actually be .62 tons/day (1.68 × 37%). The EPA is proposing that .62 tons/day of reductions be creditable towards the Post-1996 ROP reduction requirement. It should be noted, however, that if the final rule does not provide the amount of credit indicated in the memorandum that States can claim in their ROP plans, Louisiana is responsible for developing measures to make up the shortfall.

f. Consumer Products National Rule. Section 183(e) of the Act required the EPA to conduct a study of VOC emissions from consumer and commercial products. The EPA was then required to list (and eventually) to regulate those product categories that account for 80 percent of the consumer products emissions in the ozone nonattainment area. Group I of the EPA's regulatory schedule lists 24 categories of consumer products to be regulated by national rule—including personal, household, and automotive products. The EPA intends to issue a final rule covering these products in the August 1998 time frame.

In a June 22, 1995, memorandum entitled, ''Regulatory Schedule for Consumer and Commercial Products under Section 183(e) of the Clean Air Act,'' the EPA set forth policy regarding the amount of emissions reductions credit States could take from the Federal consumer products rule. The policy allows areas to take a 20 percent reduction from 1990 baseline levels.

The consumer products portion of the State's 1999 uncontrolled inventory is 4.71 tons/day. However, the January 2, 1997, submittal inaccurately states that the inventory is 5.1 tons/day. This figure is actually the uncontrolled 1990 base year inventory figure. When a 1999 EGAS growth factor of .9227 is applied to the 1990 uncontrolled inventory, 5.1 tons/day, the projected 1999 inventory is 4.71 tons/day. Applying a 20 percent reduction from 4.71 tons/day (per the EPA's guidance) results in reductions of .94 tons/day that are creditable toward the Post-1996 ROP Plan requirement. The .06 tons/day difference between the amount of reductions creditable (.94 tons/day) and those claimed in the plan (5.1 tons/day × 20% = 1.0 tons/day) are more than offset by the additional .12 tons/day reductions creditable to the Post-1996 ROP Plan from the autobody refinishing regulation (above). The EPA is proposing that .94 tons/day, versus 1.0 tons/day, be creditable towards the Post-1996 ROP reduction requirement. It should be noted, however, that if the final rule does not provide the amount of credit that the memorandum indicates States can claim in their ROP plans, Louisiana is responsible for developing measures to make up the shortfall.

g. Glycol Dehydrator Controls. Controls have been installed on glycol dehydrators in Louisiana to comply with the State's waste gas regulations (LAC 33:III.2115). Section 2115 was SIP-approved as part of the EPA's Louisiana RACT ''Catch-up'' rulemaking (59 FR 17078, dated April 11, 1994). The natural gas industry had been unaware of the amount of VOC emissions from this source until several years ago. As a result, the glycol dehydrator VOC emissions from several facilities were not included in the original base year inventory. The emissions were subsequently reported by the facilities for the 1993 Periodic Emissions Inventory. The State has added these glycol dehydrator emissions (totalling 9.31 tons/day) back to the 1990 base year inventory. (As noted previously in the base year emissions inventory section, the EPA is proposing to approve these revisions to the 1990 base year inventory.) The vent streams have been controlled by routing them to control devices (incinerators). The EPA is proposing that the control efficiency and rule effectiveness rates are acceptable. The State has taken 8.4 tons/day of emissions reduction credit in the Post-1996 ROP Plan for six facilities that have installed controls on glycol dehydrators to comply with the State's waste gas regulations. The EPA is, therefore, proposing the emissions reductions from the glycol dehydrator controls have been properly quantified and are creditable towards the Post-1996 ROP Plan requirements.

h. Vents to Flare. A flare system was installed at a carbon black plant, Sid Richardson, to control vent streams containing VOCs. The controls were installed to comply with the State's waste gas regulation (LAC 33:III.2115). As stated above, section 2115 has been Federally approved into the Louisiana SIP. The 1999 projected emissions (uncontrolled) were 412 tons/year. Installation of the control device has resulted in emissions reductions of 400 tons/year or 1.1 tons per day. The EPA is proposing that the control efficiency and rule effectiveness rates are acceptable, and the emissions reductions claimed, 1.1 tons/day, are creditable towards the Post-1996 ROP reductions requirements.

i. Barge Cleaner (Permit Modification). Trinity, Inc., is a barge cleaning facility in East Baton Rouge Parish whose uncontrolled VOC emissions were determined to be .9 tons/day. The State issued a permit modification (#0840–00065–04) limiting emissions from the facility to no more than .1 tons/day of VOCs. The State submitted the permit modification as part of the January 2, 1997, Post-1996 ROP Plan submittal. The permit modification was issued under a SIP-approved nonattainment new source review permitting program and is, therefore, Federally enforceable. The modification has been reviewed to verify that the emissions limits in the permit are enforceable, the emissions reductions are properly quantified, and the permit contains acceptable recordkeeping, reporting, and monitoring requirements. The EPA is proposing that the amount of emissions reductions claimed, .8 tons/day, is creditable towards the Post-1996 ROP reductions requirement.

j. Acetylene Plant (Agreed To Order). Borden Chemicals and Plastics, located in Ascension Parish, discovered that emissions from two sources in the acetylene plant, the quench water system and a barometric leg vent, were understated. The State issued a Reasonable Further Progress Agreed To Order to control these two sources by November 1, 1999. The order was included in the January 2, 1997, Post-1996 ROP Plan submittal. Reducing emissions from the barometric condenser system will involve modification of the barometric condenser system and the addition of a non-contact cooling tower and heat exchanger system. The emissions reduction project from the quench water system involves handling quench water from the soot decanters. Water exiting the soot decanters is presently cooled via a contact cooling tower. A closed loop design is planned whereby water returning to the quench will be cooled by heat exchanger. The exchanger cooling water will be recycled through a non-contact cooling tower similar to that described for the barometric condenser system.

As stated previously (in the discussion of the 1990 base year inventory), the understated emissions

have been added back to the 1990 base year point source inventory.

The emissions reductions anticipated from controlling the quench water system and the barometric leg vent are 1.8 and 1.4 tons/day, respectively. The EPA has reviewed the Agreed To Order to verify that the emissions limits in the order are enforceable, and that the reductions have been properly quantified. In addition, the EPA verified that the order contains acceptable recordkeeping, reporting, and monitoring requirements. The EPA is proposing to approve the Agreed To Order as part of the Post-1996 ROP plan and the associated emissions reductions, 3.2 tons/day, as creditable towards the 9% ROP Plan.

k. Summary of Reductions in the Plan. The following is a summary of the emissions reductions claimed in the 9% ROP Plan:

Louisiana 9 percent plan required reductions (excluding RVP/FMVCP):	(Tons/day)
9% ROP Reduction	17.2
Growth	2.8
Total	20.0
Reductions in Plan:	
Federal Measures:	
FMVCP Tier 1 Standards	1.0
Small Engines Rule	1.1
AIM Rule	1.1
Autobody Refinishing Rule	0.6
Consumer Products Rule	0.9
Other Sources:	
Surplus Reductions in 15% Plan	3.2
Barge Cleaner (Permit Modification)	0.8
Acetylene Plant (Agreed Order)	3.2
Glycol Dehydrator Controls	8.4
Vents to Flares	1.1
Total Reductions	21.4
SURPLUS REDUCTIONS	1.4

l. EPA Action. The EPA is proposing that the control measures' associated emissions reductions claimed in the January 2, 1997, Post-1996 ROP Plan are creditable towards the 9% ROP requirements of section 182(C)(2)(B) of the Act. The EPA is also proposing to approve the Borden Chemical and Plastics Reasonable Further Progress Agreed To Order as part of the Baton Rouge Post-1996 ROP Plan.

B. Motor Vehicle Emissions Budgets

1. Introduction

As stated previously, section 176(c) of the Act, and the Federal Transportation Conformity Rule require States to establish motor vehicle emissions budgets in any control strategy SIP that is submitted for attainment and maintenance of the NAAQS. Louisiana submitted, in the January 2, 1997, Post-1996 ROP Plan, 1999 projected motor vehicle emissions budgets for VOC and NO_X for the 5-parish Baton Rouge ozone nonattainment area.

In developing the projections, the State followed the requirements of section 51.452(b)(1) of the then-effective Federal Transportation Conformity Rule, which stipulate refined modeling requirements to be used for the areas classified as serious and above for ozone nonattainment for conformity determinations made after January 1, 1995. These enhanced transportation modeling requirements are aimed at improving the accuracy with which mobile source emissions are estimated. The modeling requirements are discussed in detail in the document, ''1999 Mobile Source Emissions Budget for East Baton Rouge Parish Utilizing Post-Processor for Air Quality,'' prepared by the Capital Region Planning Commission, dated October 1996. (The document is available from the EPA Region 6 Office listed above.)

2. EPA Action

For the 5-parish serious ozone nonattainment area, the State established VOC/NO_X mobile vehicle emissions budgets as follows:

BATON ROUGE, LA 1999 MOTOR VEHICLE EMISSIONS BUDGETS

Pollutant	Budget (tons/day)
VOC	33.93
NO_X	58.03

These totals are the official mobile emissions budgets to be used for transportation conformity determinations. The EPA is proposing to approve the MVEBs in the table above.

C. Contingency Measures

1. Introduction

Under section 172(c)(9) of the Act, ozone nonattainment areas classified as moderate or above must submit contingency measures to be implemented if reasonable further progress (RFP) is not achieved or if the standard is not attained by the applicable attainment date. The ''General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990'' (57 FR 13498, April 16, 1992) states that the contingency measures should, at a minimum, ensure that an appropriate level of emissions reduction progress continues to be made if attainment or RFP is not achieved in a timely manner and additional planning by the State is needed.

In the General Preamble, the EPA interpreted the Act to require States with moderate and above ozone nonattainment areas to include sufficient contingency measures in their November 1993 submittals so that, upon implementation of such measures, additional emissions reductions of up to 3 percent of the emissions in the adjusted base year inventory (or a lesser percentage that will cure the identified failure) would be achieved in the year following the year in which the failure has been identified. States must show that their contingency measures can be

implemented with minimal further action on their part and with no additional rulemaking actions such as public hearings or legislative review.

Additional contingency provisions are included in section 182(c)(9) for serious ozone nonattainment areas. These latter provisions are similar to the section 172(c)(9) requirements except that the focus in section 182 (''Ozone Areas'') is on meeting emissions reductions milestones (section 182(g)).

a. Point Source Emissions Banking. Louisiana identified, in both its 15% and Post-1996 ROP Plans submittals, the State's point source banking regulations (LAC 33:III sections 601, 613, 617, 619, and 621) as the 3 percent contingency measure. The banking regulations are intended to meet the contingency measure requirements of both section 172(c)(9) and section 182(c)(9) of the Act. The adopted point source banking regulations were initially submitted to the EPA for approval in the December 15, 1995, 15% ROP Plan submittal. The EPA deferred taking action on the regulations in the context of the 15% ROP Plan approval until its rulemaking action on the Post-1996 ROP Plan/Attainment Demonstration SIP. (The rationale for ''carving out'' the contingency measures is explained in more detail in the the TSD to this proposed rulemaking as well as the TSD to the 15% ROP Plan rulemaking.)

These banking regulations enable point sources of VOC and NO_X emissions in Federally designated ozone nonattainment areas to identify and preserve emissions reductions for offsetting or netting purposes. Emission reduction credits which are established in the bank are also available to the State for confiscation if needed to meet a reasonable further progress milestone. The banking regulations prohibit sources from withdrawing reduction credits below the minimum balance needed to meet the 3 percent contingency requirement. Sources were allowed six months from the date the regulation was promulgated to apply for banking their surplus emissions reduction credits which had occurred prior to enactment of the regulations. If an application for the credits was not received within the six-month period, the credits were subject to confiscation by the State. The banking regulations require that all emission reductions must be surplus and Federally enforceable for approval by the State as emission reduction credits in the bank.[2]

In the December 22, 1995, Post-1996 ROP Plan submittal, the State provided a table of the emissions reductions that had been banked by industry to date pursuant to the regulations. The State's contingency measure requirement is 5.7 tons/day (3 percent times the adjusted base year inventory of 191.2 tons/day). The VOC reductions ''on deposit,'' 13.0 tons/day, are well in excess of the 3 percent requirement. The table also identified the amount of NO_X credits ''on deposit'' in the bank (5.65 tons/day) as of the date of the submittal.

Sections 172(c)(9) and 182(c)(9) specify that the contingency measures shall ''take effect without further action by the State or the Administrator.'' In the ''General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,'' the EPA interpreted this requirement to be that no further rulemaking activities by the State or the EPA would be needed to implement the contingency measures. The EPA recognized that certain actions, such as notification of sources, modification of permits, etc., would probably be needed before a measure could be implemented effectively. States would need to show that their contingency measures could be implemented with minimal further action on their part and with no additional rulemaking actions such as public hearings or legislative review. In general, the EPA expected all actions needed to effect full implementation of the measures to occur within 60 days after the EPA notified the State of its failure.

The EPA is proposing that the State has met these contingency measures requirements by having adopted and submitted the point source banking regulations and demonstrating the bank has sufficient VOC credits ''on deposit'' and available for confiscation in the event of a missed milestone/failure to attain. To ensure that sufficient credits remain in the bank to cover the contingency requirement, the regulations stipulate that emission reduction credits may not be drawn down below the amount claimed by the State in its three percent contingency measure. The State has discretion in determining which credits should actually be confiscated (i.e., pro-rata, last-in/first-out, etc.).

As a result of the confiscation, the credits would no longer be available to facilities for either offsetting new source growth or netting out of nonattainment new source review. As such, the banking regulations stipulate that the State shall provide written notice to the affected facility(ies) of its intention to confiscate credits to meet the contingency measures. A 30-day comment period is then allowed for the affected facility(ies) to respond to the confiscation or submit an alternative emissions reduction proposal. The EPA is proposing to find that the banking rules provide for expeditious implementation of the contingency measures consistent with the time frames identified in the General Preamble.

Louisiana also submitted to the EPA, in the January 2, 1997, Post-1996 ROP Plan submittal, a correction to a typographical error in section 615, ''Schedule for Submitting Applications.'' The EPA is, therefore, proposing to act upon both the correction and the base rule in this rulemaking.

b. EPA Action. The EPA is proposing to approve only the already-banked point source VOC emissions reductions credits of 5.7 tons/day towards meeting the 3 percent contingency measure requirement. Although, the EPA's ''NO_X Substitution Guidance'' permits serious and above ozone nonattainment areas to use both NO_X and VOC reductions, rather than VOC reductions alone, to meet RFP requirements after 1996, the policy requires that the cumulative VOC/NO_X RFP reductions be consistent with the emissions reductions in the modeled attainment demonstration or comparable modeling analysis. Consistent with the NO_X substitution policy, the EPA issued guidance allowing States to substitute up to 2.7 percent NO_X reductions for the 3 percent contingency measure (which would be implemented after 1996) in their 15% ROP Plans.

On January 16, 1996, however, the EPA approved a section 182(f) NO_X exemption for the Baton Rouge ozone nonattainment area (see 61 FR 2438, dated January 26, 1996). The exemption was based on an urban airshed modeling analysis that showed additional NO_X reductions would not contribute toward attainment. Like the section 182(f) modeling analysis, the Attainment Demonstration submittal of December 22, 1995, also did not model any additional NO_X reductions beyond

[2] Although the regulations are clear that, at the time of deposit, emission reductions credits must be surplus, the rules do not expressly state that they must be surplus at the time they are used. However, the rules do state that sources must comply with new source review requirements and preconstruction permit regulations in accordance with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27, and 52.28. (Please see the EPA's restructuring of 40 CFR part 51 at 51 FR 40660 to 40661 (November 7, 1986).)

40 CFR 51.165(a)(3)(i) (formerly 40 CFR 51.18(j)), in particular, specifically requires that the baseline be tied to allowable (or actual in some cases) emissions at the time a permit application is filed. Hence, the EPA believes the requirement that the emission reductions be surplus when actually used is adequately addressed by the regulations.

some early (1990–1994) voluntary NO_X reductions. Therefore, the EPA believes that allowing banked NO_X reductions to be used toward the 3 percent contingency measure would be inconsistent with the NO_X waiver already approved for the area, as well as the Attainment Demonstration SIP.

The EPA has determined that the point source banking regulations, which generated the 5.7 tons/day of banked VOC reductions, are generally consistent with the Act, EPA policy/guidance and Federal regulations. The EPA bases its decision on the following: (1) The rules mandate that major sources bank their surplus emission reductions credits (2) the State is vested with the authority to confiscate the necessary reductions to cover the 3 percent contingency measure (if triggered following a failure to meet an RFP milestone and/or attain the NAAQS); (3) the regulations prohibit drawing down credits below the 3 percent requirement; and (4) the State has demonstrated that it has sufficient credits currently ''on account'' to cover the contingency measure requirement of 5.7 tons/day of VOCs. Thus, EPA is proposing to approve 5.7 tons/day of the banked point source VOC reductions (which total 13.0 tons/day), towards meeting the 3 percent contingency measure requirement required pursuant to sections 172(c)(9) and 182(c)(9) of the Act.

In addition, the EPA is proposing to approve the point source VOC/NO_X emissions reductions banking regulations as meeting the requirements for SIP approval under part D and section 110 of the Act.

A detailed analysis of the banking regulation is provided in the TSD to this proposed rulemaking.

It should be noted that the scope of this proposed rulemaking is to approve the banked VOC emissions reductions as creditable towards the contingency measures pursuant to sections 172(c)(9) and 182(c)(9) of the Act, and to approve all of the point source banking regulations as an acceptable SIP revision pursuant to part D and section 110 of the Act. The EPA is not approving the banking regulations as an economic incentive program (EIP) pursuant to the EPA's Economic Incentives Program Rules (59 FR 16690) and section 182(g) of the Act.

Under section 182(g)(3), if a State fails to submit a milestone compliance demonstration for any serious or severe area as required by section 182(g)(2), the State must choose from three options: to bump-up to the next higher classification, to implement additional measures (beyond those in the contingency plan which will already be triggered and implemented) to achieve the next milestone, or to adopt an economic incentive program (as described in section 182(g)(4)). Under section 182(g)(5), if a State fails to submit a compliance demonstration for any extreme area as required by section 182(g)(2), or if the area has not met an applicable milestone as required by section 182(g)(1), the State must submit a plan revision to implement an economic incentive program (as described in section 182(g)(4)) within 9 months of such failure.

An EIP is not required for the Baton Rouge serious ozone nonattainment area. The EPA encourages the adoption of ''discretionary'' EIPs by States, as allowed for in the Act (section 110(a)(2)(A)), as a means of stimulating the adoption of incentive-based, innovative programs, where appropriate, that will assist States in meeting air quality management goals. However, since the State has not expressly submitted the point source banking regulations as a section 182(g) SIP revision, the EPA believes it beyond the scope of this rulemaking to act upon the banking regulations as an EIP.

D. Additional Rule Submitted

The State elected to include regulation LAC 33:III.611, ''Mobile Sources Emissions Reductions,'' in the January 2, 1997, submittal for the EPA's approval as part of the overall emissions banking program. However, the State is not taking any reduction credit in the contingency plan from this voluntary mobile source emissions reduction program. In fact, no vehicles have actually been scrapped to date under the program and, hence, no mobile emission reduction credits have been banked statewide as part of the vehicle scrappage program.

Since the State's submission of section 611, certain national policy issues have arisen surrounding the use of mobile source-generated emissions reductions credits for use by point sources. Pending resolution of these issues, the EPA is deferring action on the regulation at this time. Deferring action on this rule will have no effect on either the Post-1996 ROP Plan or the Attainment Demonstration since the State is not relying on reductions from the vehicle scrappage program to meet the reductions target or demonstrate attainment. A more in-depth discussion of the EPA's rationale for deferring action on the rule is provided in the TSD to this proposed rulemaking.

E. Attainment Demonstration

1. Introduction

According to section 182(c)(2)(A) of the Act, serious and above ozone nonattainment areas must submit a revision to the SIP that includes a demonstration that the plan, as revised, will provide for attainment of the NAAQS for ozone by November 15, 1999. In addition to the 15% and 9% (net of growth) ROP reductions requirements, if the mandatory emission reductions are not sufficient to demonstrate attainment of the ozone NAAQS by November 15, 1999, emissions (VOCs and/or NO_X) must be further reduced until attainment is demonstrated through photochemical grid modeling.

For ozone nonattainment areas classified as serious or above, section 182(c)(2)(A) of the Act requires an attainment demonstration based on photochemical grid modeling, for which the Urban Airshed Model (UAM) is the EPA-approved model. *See* appendix W of 40 CFR part 51.

The modeling portion of the SIP submittal was reviewed in terms of technical accuracy and for consistency with EPA modeling guidelines. The following guidance documents establish the acceptable techniques for application of UAM demonstrating attainment of the ozone NAAQS:

EPA's *Guideline on Air Quality Models (Revised)* (July 1986);

EPA's *Guideline for Regulatory Application of the UAM* (July 1991); and

EPA's final *Guidance on use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS* (June 1996).

Thus, the review covered the appropriateness of data sources, appropriateness of technical judgements and procedures followed in input preparation, performance of quality assurance and diagnostic procedures, adequacy of model base case performance, consistency of control measure simulation inputs with the submitted control measures, adequacy of the demonstration of attainment of the NAAQS, and consistency and completeness of documentation.

The UAM model uses an inventory of pollutant emissions, together with air quality and meteorological data, as input to a system of algorithms incorporating chemistry and dispersion, in order to simulate an observed pollution episode. Once a ''base case'' is developed that meets the minimum performance criteria, projected future emissions are used as input to simulate air quality in the attainment deadline year. Various combinations of

geographically uniform emission reductions are simulated to determine approximate attainment reduction targets. Planners design a control strategy to meet these targets, and then simulate it with UAM, including the spatially and temporally varying effects of the selected controls. Attainment is demonstrated when the modeled air quality with emission controls in effect is below the NAAQS throughout the geographical modeling domain.

2. Uncertainty and Model Performance

A modeling attainment demonstration is subject to several uncertainties. The meteorological and air quality inputs have their own associated uncertainties, both in measurement and in representativeness. In addition, not all variables can be measured for all hours, so default and interpolated values must be used. Processes such as chemical reaction and advection necessarily appear in the model in simplified form. The selected episodes may not represent all conditions conducive to high pollutant levels. Finally, base case and projected emissions are uncertain. Biogenic emission methodologies are also in a state of flux. In spite of these sources of uncertainty, photochemical grid modeling is the best tool that is available for determining the emission reductions that are needed for NAAQS attainment. The Guideline procedures are meant to ensure that inputs are set in a scientifically sound manner, and to uncover compensating errors that can be present even when the model predicts ozone well.

In recognition of these uncertainties, the EPA's *Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS* was developed to better reflect experience gained in model applications since 1991. The guidance was intended to assist States' efforts to develop their ''Phase II'' SIP revisions demonstrating attainment of the ozone NAAQS pursuant to the March 2, 1995, EPA memorandum from Assistant Administrator Mary Nichols entitled, ''Ozone Attainment Demonstrations.'' The guidance allows States to use a ''weight-of-evidence'' determination if the modeled attainment test is not fully passed, showing that attainment of the NAAQS is still likely. (An explanation of the attainment tests is provided below.)

As explained in the Guideline, episodes are chosen for modeling based on their high ozone levels, data availability, and other criteria. Generally, episodes should be chosen that are approximately as severe as the area's design value, which is based on the historical ozone highs. During a particular episode, the observed ozone peak may be higher or lower than the design value; but as long as it is relatively close, that episode can be accepted for use in an attainment demonstration. (See also the discussion of the attainment test below.)

Once an episode is chosen, modelers attempt to simulate it with UAM. Various performance statistics and diagnostic tests are available to gauge their success. (A discussion of the statistical and diagnostic tests employed in the evaluation of the Baton Rouge modeling demonstration is provided below.) The most commonly stated one is the peak accuracy, since it is the ozone peak that is ultimately to be reduced to the NAAQS level. However, it uses only one place and time out of all those simulated. In judging model performance to be acceptable, predictions at many places and times are examined. Also the overall pattern of ozone and other chemical species are evaluated, in light of the changing emissions and meteorology occuring during the episode. Sometimes a lengthy process of diagnostic testing and refinement of inputs is required. Thus, the finally accepted base case may show some bias (e.g., simulated ozone peak not matching the observed), and yet be fully adequate as a simulation of the episode, and for use in an attainment demonstration. The EPA is proposing to find that the Baton Rouge episodes had acceptable performance and met EPA's Guideline criteria.

3. Episodes Modeled

The Guideline calls for a minimum of 3 primary episode days to be modeled. The EPA may allow areas to use just two if they are based on a field study, since this provides substantially more complete data, and, hence, more confidence in model development procedures and results. The tradeoff of higher quality modeling for fewer episodes is deemed by EPA to be a reasonable one. In the case of the Baton Rouge demonstration, however, the State modeled all three primary episode days.

The following three episodes were selected for use in the December 22, 1995, Baton Rouge Attainment Demonstration SIP submittal: August 15–16, 1989; May 24–25, 1990; and August 18–19, 1993.

4. Attainment Tests

The *Guidance on use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS* (June 1996) identifies two approaches that the State can use for demonstrating attainment of the ozone NAAQS. One of the acceptable approaches is called the ''Deterministic Approach,'' which consists of a deterministic test and an optional weight-of-evidence determination. The deterministic test is passed if predicted maximum ozone concentrations are less than or equal to 124 parts per billion (ppb) in all surface grid cells on all modeled primary episode days. If the test is not passed, a weight-of-evidence determination may be used to show that attainment of the NAAQS is still likely.

Meanwhile, the second acceptable approach is called the ''Statistical Approach.'' This approach consists of two parts: a ''Statistical Test,'' and a weight-of-evidence determination. The ''Statistical Test'' includes three benchmarks. The first of these limits the number of allowed exceedances. The second restricts the magnitude of an allowed exceedance. The third benchmark requires a minimum level of improvement in air quality to be exceeded. If one or more of the benchmarks is failed, a weight-of-evidence determination may also be performed using corroborative information. If the corroborative information is consistent with the likelihood that a proposed strategy will lead to attainment of the ozone NAAQS by statutory dates, attainment has been demonstrated.

As discussed below, the State has met these requirements by demonstrating attainment of the ozone NAAQS through UAM modeling consistent with the EPA's guidance using the ''Statistical Approach.''

5. Photochemical Grid Model Used

The State used UAM version IV, an EPA-approved photochemical grid model, to develop the attainment demonstration for the Baton Rouge area. The State's modeling activities were performed as outlined in the UAM modeling protocols and according to the EPA's ''Guideline for Regulatory Application of the Urban Airshed Model.'' (A specific modeling protocol was developed by the State for its modeling activities. The State's modeling protocol was reviewed and approved by the EPA.)

The Baton Rouge modeling domain covers all or part of 20 parishes in Louisiana, including the Baton Rouge serious ozone nonattainment area consisting of East Baton Rouge, West Baton Rouge, Livingston, Iberville, and Ascension Parishes.

a. Modeling Inputs. i. Meteorological and Air Quality Inputs. In performing the base case analyses, meteorological models were employed to simulate the weather patterns characteristic of each

episode. Concurrently, models of emissions of NO_X, VOCs, and carbon monoxide (CO) were developed to characterize the spatial and temporal distributions of these ozone precursors.

The meteorological data and air quality data used in this modeling study were obtained from a variety of sources including the Aerometric Information Retrieval System, the National Climatic Data Center, and the Louisiana Department of Environmental Quality. Land-use data were obtained from the U.S. Geological Survey (USGS). The meteorological data were collected from various surface meteorological monitoring sites. These were supplemented with aircraft data. The State followed the EPA's UAM guidance to develop domain-wide hourly wind field data, mixing heights, temperature, and meteorological scalars for Baton Rouge.

The State used the air quality data (i.e., ambient ozone, nitric oxide, nitrogen dioxide and CO concentrations) measured at monitoring stations throughout the domains to construct initial conditions. In addition, EPA-recommended background concentration values were used where measurements were unavailable.

ii. Base Case Emissions Inventories. The State followed the EPA's procedures for developing episode-specific base case emissions inventories. The Baton Rouge modeling exercises were conducted using emissions inventories compiled by survey and direct measurement by the State. The modeling emissions inventories are composed of point source, area, on-road mobile, non-road mobile, and biogenic emissions. Where applicable, emissions were adjusted for pertinent conditions related to the episode day to be modeled, thus producing day-specific emissions. Adjustments were related to meteorology, operating conditions at major point sources, and upset conditions or other unusual events that may have affected the emissions.

In the Baton Rouge modeling exercises, the State developed separate modeling inventories for all the episodes primarily based on the 1990 and 1993 base year emissions inventories. The State employed the EPA's UAM Emissions Preprocessor System (EPS), Version 2.0, to facilitate developing detailed emission inventories.

For the point source modeling inventory, the State compiled and used the 1990 base year and 1993 periodic point source inventories for the entire modeling domain. These annual emissions were adjusted to reflect seasonal and day-of-week variations in activity levels. The episode-specific hourly NO_X emissions rates of several major electric utilities in the area (i.e., Big Cajun #1, Big Cajun #2) were also taken into account in the modeling. This information was then processed through EPS 2.0.

For area sources, the State developed the episodic inventory for the Baton Rouge ozone nonattainment area based on the ''top-down'' approach, wherein parish emissions are spatially allocated using surrogate parameters. The area source emissions estimates were developed for all parishes in the modeling domain except Avoyelles Parish. Area source emissions for Avoyelles Parish were extracted from the EPA's 1990 Interim Inventory. In addition, emissions from autobody refinishing were only provided for the then-six nonattainment parishes, so the emissions for this source category from the 1990 Interim Inventory were extracted and added to the area source inventory for the remaining parishes in the modeling domain. The State used EPS 2.0 to process these area source emissions.

On-road mobile source episode-specific emissions were developed based on the top-down approach, also. This top-down approach employed the output of the EPA's mobile emissions factor model, MOBILE5a, coupled with the LADOTd vehicle miles traveled (VMT) estimates. The VMT was estimated for each parish in the domain. A seasonal adjustment was applied to the VMT estimates by LADOTd to reflect peak ozone seasonal levels before calculating the parish-level onroad motor vehicle emissions. The final inventories produced by EPS 2.0 for each episode day accurately reflect episodic daily diurnal temperature variations.

For the non-road mobile source emissions estimates (for the then-six nonattainment parishes), the State used 1990 county level estimates of emissions assembled by Energy and Environmental Analysis, Inc., for the EPA's Office of Mobile Sources (1992). For the remaining parishes in the modeling domain, the State used emissions data from the EPA's 1990 Interim Inventory to develop the non-road mobile modeling inventory.

The State developed biogenic emissions estimates for the Baton Rouge modeling domain based on information provided by the Georgia Institute of Technology (GIT). The biogenic emissions data provided by GIT represented biogenic emission rates for one hour, calculated at 30 degrees Celsius and full solar intensity, for each grid cell. In addition, biogenic emission estimates provided by GIT were adjusted for specific episodes based on hourly variations in temperature and solar intensity.

iii. Projection Inventories. The State used the EPS 2.0 utility program (i.e., Bureau of Economic Analysis Factors (BEAFAC)) to generate state-level projection factors from to 1999 for area, non-road mobile, and point sources. The factors produced by BEAFAC are based on the Bureau of Economic Analysis' ''Regional Projections to 2040,'' which contains the state data related to population, personal income, employment and earnings for 57 industrial groupings. For this application, the BEAFAC cross-reference glossary was modified to use the employment projections rather than earnings, since the State considered the employment factors as more representative of anticipated growth in the Baton Rouge area. Meanwhile, the 1999 mobile source emission inventories for the Baton Rouge modeling domain were based on MOBILE5a emission factors and LADOTd's VMT projections. (LADOTd's VMT projection was the 1999 VMT estimates by parish and functional classification for only the Baton Rouge then-six parish ozone nonattainment area.) Future year VMT estimates for other parishes were not available and, therefore, were kept at the 1990 level. (The EPA believes this is acceptable because the parishes, which are outside of the Baton Rouge nonattainment area, are, for the most part, rural in nature and have not experienced significant population growth since 1990.)

The future year (1999) baseline emissions inventories are summarized in Appendix E to the ''Final Technical Support Document: Application of the Urban Airshed Model to the Baton Rouge, Louisiana Ozone Nonattainment Area (December 1995),'' which was included in the December 22, 1995, attainment demonstration submittal. The 1999 baseline emission estimates account for the effects of growth and mobile-source emission reductions due to fleet turnover. The federally mandated 15 percent reduction in VOC emissions between 1990 and 1996, and additional 9 percent (1996–1999) reduction required for serious ozone nonattainment areas are accounted for in the 1999 baseline modeling inventories as well. The controls affect point, area, onroad and nonroad mobile sources. The industrial-source NO_X reductions between 1990 and 1994 resulting from several facilities' participation in a voluntary early NO_X reduction program were also incorporated into the modeling

inventory. Other control programs in effect, such as the existing vehicle anti-tampering inspections required for attainment areas as well as for nonattainment parishes were taken into account in the projected modeling inventory.

iv. Future Boundary Conditions. Improvements in air quality in the Baton Rouge area are anticipated by 1999, and these are reflected in the boundary condition estimates. For determining future-year boundary conditions for the three episodes, the State took into account the emission reductions that would take place between the base and future years.

b. Base Case Model Performance. In the Baton Rouge model performance evaluation, both graphical and statistical performance measures were implemented for all meteorological episodes and monitoring networks. The graphical measures include time series plots of the observed and simulated pollutant concentrations, and contour plots showing isopleths of simulated pollutant concentrations, and, where available, observed surface-layer concentrations. The statistical performance measures consisted of the mathematical calculation of a number of statistical measures of bias including the unpaired highest-prediction accuracy, the normalized bias test, and the gross error of all pairs greater than 60 ppb. A sensitivity analysis was also conducted to assess the stability of the models across a range of possible input parameters. In the Baton Rouge base case simulations, the model performance for the August 15–16, 1989, and August 18–19, 1993, episodes was good. The model performance for the May 24–25, 1990, episode was very good. The TSD to this proposed rulemaking provides a detailed analysis of the base case model performance.

6. Attainment Demonstration

The EPA's *Guideline for the Regulatory Application of the Urban Airshed Model* stipulates that, for the primary episode days modeled, there should be no predicted daily maximum ozone concentrations greater than 0.124 ppm anywhere in the modeling domain for each primary episode day modeled. However, as stated previously, The EPA has revised the model test for demonstrating attainment of ozone NAAQS. The revisions purposely make the modeled attainment test more closely reflect the form of the NAAQS. The revised tests are laid out in the EPA's guidance document entitled, *Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS* (June 1996). In the guidance, the EPA recommends either a Statistical Approach or Deterministic Approach should be used for the attainment demonstration of the ozone NAAQS.

Briefly, the Statistical Approach consists of a test and an optional weight-of-evidence determination. The statistical test includes the application of three benchmark tests which examine: (1) the number of simulated exceedances within defined subregions of the modeling domain, (2) the magnitude of the simulated exceedances compared to calculated limits, and (3) the simulated reduction in areal ozone coverage relative to the base case simulation. A weight-of-evidence determination entails use of supplementary analyses to determine whether attainment is likely, despite the model results which do not pass the statistical test.

Meanwhile, the Deterministic Approach consists of a deterministic test plus an optional weight-of-evidence determination. The deterministic test is passed if daily maximum concentrations predicted in every surface grid cell are less than or equal to 124 ppb for all primary episode days. Again, a weight-of-evidence determination may be undertaken to demonstrate attainment despite results which do not pass the deterministic test.

To be consistent with the EPA guidance, the State used the three episodes, all having good to very good model performance, for demonstrating attainment of the ozone NAAQS. These episodes were modeled using the projected 1999 emission inventory, which includes the emission controls to be implemented through 1999. As a result, for the August 15–16, 1989 episode, the maximum simulated (peak) concentration is reduced from 15.9 to 12.2 parts per hundred million (pphm) on the first day of the episode and from 16.0 to 12.7 pphm on the second day. For the May 24–25, 1990, episode, the maximum simulated ozone concentration is reduced from 13.8 to 12.6 pphm on the first day of the episode and from 16.4 to 13.8 pphm on the second day. For the August 18–19, 1993 episode, the maximum predicted concentration is reduced from 15.9 to 15.0 pphm on the first day of the episode and from 14.8 to 14.2 pphm on the second day. (These results are provided in the TSD to this rulemaking at Figures 7.1a, 7.1b, 7.3a, 7.3b, 7.5a, 7.5b, and Tables 7–4 through 7–6).

These future year simulation results were then reviewed in accordance with the updated EPA guidance on the use of modeled results to demonstrate attainment of the ozone standard. The State elected to use the Statistical Approach along with weight-of-evidence determination to demonstrate attainment of the ozone NAAQS.

As stated previously, Benchmark Test #1 examines the number of simulated exceedances within defined subregions of the modeling domain. For the test, the State used the Classification and Regression Tree analysis software to classify the three episodes based on the meteorological and air quality conditions. For Baton Rouge, the test limits the number of projected exceedance days per subregion in the modeling domain to 2. The maximum number of days for which an exceedence occurs within any subregion is 2. Hence, Benchmark Test #1 is passed. (A more detailed explanation of this statistical test is provided in the TSD to this proposed rulemaking.)

Benchmark Test #2 requires that the predicted daily maxima corresponding with each allowed modeled exceedance may not be greater than concentration derived from a distribution of observed daily maxima at sites currently just attaining the ozone NAAQS. This was defined as the site having 1 to 3 exceedances within this time frame, and the fourth highest maximum ozone concentration was less than 12.4 pphm but greater than or equal to 11.5 pphm. The State used the data collected at Louisiana monitoring sites for the period 1984–1994 to determine a distribution of maximum ozone concentrations for monitoring sites just satisfying the ozone NAAQS. Thus, the State calculated the resultant maximum allowed concentration for each meteorological episode by determining the concentration obtained from the distribution which would correspond to a day with the same likelihood of being exceeded as the day in question. As a result, the exceedance limits for the August 16, 1989, May 25, 1990, and August 19, 1993, primary episode days are 12.4 pphm, 13.7 pphm and 12.4 pphm, respectively. Meanwhile, the simulated maximum ozone concentrations for the August 16, 1989, May 25, 1990, and August 19, 1993, primary episode days are 12.7 pphm, 13.8 pphm, and 14.2 pphm, respectively. Thus, the August 16, 1989, and May 25, 1990, primary episode days came very close to meeting the benchmark, while the August 19, 1993, episode did not.

Benchmark Test #3 requires that, for a composite of all primary episode days, areal ozone coverage for a cutoff concentration of 12.4 pphm is reduced by at least 80 percent compared to that for the base case simulation. This test is only required if ozone concentrations are underestimated in the base case

simulation. In the base case simulations for Baton Rouge, the fractional bias, a measure of over/underestimation, for the simulation of the August 16, 1989, and August 19, 1993, episodes are within plus or minus 5 percent, and the May 25, 1990, episode value is 7.3 percent (the positive value indicates overestimation). Therefore, Benchmark Test #3 did not apply because the model over predicted for the composite of the three episodes.

7. Modeling Evaluation Summary

The EPA believes that the State's attainment demonstration for the Baton Rouge ozone nonattainment area fulfills the requirements of section 182(c)(2)(A) of the Act. The State has adequately followed the EPA's guidance on the application of the UAM for demonstrating attainment of the ozone NAAQS. Following the Statistical Approach, it was demonstrated that two of the three episodes met or nearly met all the specified benchmark criteria. However, supplementary information (i.e., mid-course review, severity of selected episodes, uncertainty in the boundary condition estimates, etc.) provided by the State for consideration in the weight-of-evidence has supported the State's attainment demonstration.

In addition, the ''Guidance on the Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS,'' allows the use of normalized trend data, results from observational models and or other models and consideration of incremental cost/benefit estimates, etc., in a weight-of-evidence determination. In determining whether the State's statistical approach and weight-of-evidence determination was adequate, EPA considered trend data, in particular, which reflect significant reductions in monitored ozone values, precurser emissions, etc. since 1990.

For example, air quality in the Baton Rouge ozone nonattainment area has shown a steady improvement toward attaining the ozone NAAQS. The ozone design value has dropped significantly from the 1990 design level of 168 ppb. The current design value (based on 1995–1997 air quality data) is 139 ppb. (A historical account of the design values since 1990 is provided in the TSD to this proposed rulemaking.)

This position is further strengthened by the results of a recent analysis of precursor emissions in the area conducted by EPA Region 6.[3] A review of the total non-methane organic compound trend data (1985–1996) in Baton Rouge shows a 61 percent decrease at the Capitol Site of the summer mean concentrations—from 795 parts per billion carbon (ppbC) in 1985 to 307 ppbC in 1996.

Furthermore, the number of exceedence days has also been on a generally downward trend. A historical account of the exceedences days is provided in the TSD to this proposed rulemaking.

In summary, based on the results of the Statistical Approach, along with the weight-of-evidence determination, EPA is proposing that the modeled control strategy will provide for attainment of the ozone NAAQS by the statutory attainment date.

8. Control Strategy Evaluation

Tables 7–1 through 7–3 of the December 22, 1995, submittal compare the 1999 projected VOC and NO_X inventories with the base case inventories for the modeling domain. For the August 16, 1989, primary episode day, the total anthropogenic VOC emissions for 1999 are 29.7 percent lower than the 1989 emissions estimates and the total 1999 anthropogenic NO_X emissions are 9.0 percent lower than the 1989 emissions. For the May 25, 1990 primary episode day, the total anthropogenic VOC emissions for 1999 are 28.2 percent lower than the 1990 emissions estimates and the total 1999 anthropogenic NO_X emissions are 8.3 percent lower than the 1990 emissions. For the August 1993 primary episode day, these percentages are 14.9 percent (lower) for VOC and 2.7 percent (higher) for NO_X. (The smaller reductions for the 1993 episode reflect the following: (1) the projection period (1993–1999) is shorter, and (2) the actual baseline inventories include the VOC reductions and the voluntary early NO_X reductions that occurred between 1990 and 1993.)

Although the EPA believes that reducing NO_X emissions can have positive effects on ozone levels, particularly in terms of lowering the background concentrations in downwind areas, the modeling demonstrations submitted by the State to EPA to date have not demonstrated conclusively that the voluntary early NO_X emissions reductions are essential for attaining the ozone standard throughout the modeling domain. As such, at this time, the EPA is not requiring the State to establish permanent and enforceable limits for those sources at the levels resulting from voluntary early NO_X reductions. The EPA bases its decision on the following:

First, additional UAM modeling results submitted to EPA have been inconclusive with regards to the benefits of the early NO_X reductions on projected ozone levels. In its November 17, 1994, section 182(f) NO_X waiver, the State included a three-episode UAM demonstration showing that additional NO_X reductions (beyond the ''early'' NO_X reductions achieved to date) would not contribute to attainment in the area. For the demonstration, the State modeled three emission reduction scenarios (i.e., substantial VOC reductions, substantial NO_X reductions; and VOC and NO_X reductions) for all three episodes using a 1999 projected emissions inventory that included the early point source NO_X reductions and the 15% ROP reductions. The State modeled the scenarios using across-the-board reductions in the projected VOC[4] and NO_X point source emission inventories. For all three episodes, the controlling day showed that the domain-wide predicted maximum ozone concentrations were lowest when only VOC reductions were modeled. In contrast, further NO_X reductions increased the domain-wide maximum ozone concentrations. The modeling results are explained in detail in the EPA's TSD to the section 182(f) rulemaking. The EPA's approval of the State's section 182(f) petition was published on January 26, 1996 (61 FR 2438).

In the section 182(f) modeling demonstration, the State plotted the effect of the 15% ROP, early NO_X, and across-the-board VOC/NO_X reductions on predicted maximum ozone values. These plots were also included in the TSD to the proposed rulemaking on the section 182(f) petition in Figures 7, 9, and 11. Most noteworthy was the inconclusiveness of the effect of the early NO_X reductions on predicted peak ozone concentrations. In the case of the July 28, 1989, episode, the early NO_X reductions resulted in a slight increase in peak concentrations (from 138 ppb to 139). In the August 16, 1989, episode, peak concentrations remained unchanged (138 ppb). Lastly, in the May 25, 1990, episode, peak concentrations were decreased slightly from the early NO_X reductions (145 to 144).

In addition, in the case of the August 19, 1993, episode, the early NO_X

[3] U.S. Environmental Protection Agency Region 6, *Initial Analysis of 1996 Photochemical Assessment Monitoring Stations (PAMS) Data from Baton Rouge, El Paso, Dallas, and Houston*, December 3, 1997.

[4] It should be noted that, for the purposes of the section 182(f) demonstration, the State did not model the post-1996 ROP (9%) emission reduction strategy since a specific control strategy had not been developed at the time of submitting the section 182(f) demonstration. However, the point source reductions scenarios that were modeled represent equal or greater VOC reductions than those required to meet the Post-1996 ROP emissions reduction target.

reductions are included in the actual emissions (the majority of the reductions having occurred by 1993). From that baseline level, areawide point source NO_X emissions are projected to 1999. In 1999, the projected point source NO_X emissions are 2.7 percent greater in 1999 than in the base case (i.e., 1993). In spite of the growth in point source NO_X emissions from 1993–1999, however, the peak modeled ozone concentration was reduced from 148 ppm in the base case to 142 ppm. (See Table 7–6 in the TSD to this proposed rulemaking).

In summary, the EPA proposes that the modeling results for Baton Rouge adequately demonstrate that the area could attain the ozone standard by 1999 through the implementation of a VOC-only control strategy consisting of the Federally enforceable 15 percent and Post-1996 ROP reductions (net of growth) from the 1990 base year levels, and without the voluntary early NO_X reductions.

9. Modeling Attainment Without I/M

As mentioned previously, the UAM analyses in the December 22, 1995, submittal modeled on-road mobile emissions reductions that were expected to result, by November 15, 1999, from a decentralized, low enhanced vehicle I/M program. The I/M program, which was scheduled to begin January 1, 1999, consisted of a biennial two-speed idle test in East Baton Rouge Parish, with remote sensing in all of the (then six) ozone nonattainment parishes. The program's authorizing legislation included a sunset clause requiring reauthorization of the program by the Legislature every two years. Ultimately, the Louisiana Legislature did not approve the reauthorization of the program, and the EPA was required to disapprove the Baton Rouge low enhanced I/M SIP.

In light of this, the State opted to remove the I/M reductions from the Post-1996 ROP Plan and replace them with additional point source emissions reductions in the January 2, 1997, Post-1996 ROP Plan revision. However, in order for the State to replace the I/M reductions in the plan submittal with point source reductions, the EPA required the State, in the January 2, 1997, submittal, to provide an analysis of the impact that removing the reductions from I/M would have on the modeling results. (In the December 22, 1995, submittal, the State claimed 2.1 tons/day of reduction credits from implementing the low enhanced I/M program in the nonattainment area.)

In the January 2, 1997, submittal, Louisiana described observed impacts on modeling results resulting from increases in the projected on-road mobile emissions inventory. First, the State noted that, in the case of the August 1989 and May 1990 episodes, the State initially modeled a domain-wide projected on-road mobile VOC emissions inventory of 39.5 tons/day. This represented the projected mobile inventory assuming a full enhanced (I/M 240) vehicle inspection/maintenance program that was initially proposed by the State. Subsequently, the EPA revised the Federal I/M regulations to allow for a low enhanced I/M program. Under the low enhanced I/M program, the domain-wide projected on-road mobile emissions were 42.2 tons/day (for the August 1989 episode) and 42.0 tons/day (for the May 90 episode). The projected increase in VOCs, 2.8 tons/day for the August 89 episode and 2.6 tons/day for the May 90 episode, had no discernable effect on the maximum simulated ozone or the areal ozone coverage above 124 ppb for the modeled attainment demonstration.

The lack of sensitivity to changes in the onroad mobile VOC emissions was also demonstrated with the August 1993 modeling episode. Due to a mobile inventory processing error, domain-wide on-road mobile VOC projected emissions of 56.5 tons/day were initially modeled, which corresponded to a maximum simulated ozone value of 145 ppb. Correcting the mobile processing error produced a projected on-road mobile VOC inventory of 45.3 tons/day (under the low enhanced I/M program). When the UAM modeling simulation was rerun using the corrected inventory, the maximum simulated ozone was 142 ppb. The 13.6 tons/day decrease in mobile VOCs accounted for only a 3 ppb reduction in the maximum simulated ozone. This further exemplified the lack of response in maximum simulated ozone levels to changes in projected mobile VOC emissions.

The EPA is proposing that the analysis has adequately demonstrated that this increase in projected (1999) mobile source VOC emissions (resulting from the removal of the low enhanced I/M program from the control strategy) would have no discernable effect on the maximum simulated ozone or the areal ozone coverage above 124 ppb for the modeled attainment demonstration.

It should be noted that the EPA did not request that the State provide a commensurate analysis of the effect that substituting additional point source VOC emissions reductions (2.1 tons/day) for the I/M reductions would have on the modeled results. The EPA considered this type of analysis unnecessary for the following reasons:

First, as a percentage of the domain-wide VOC point source emissions reductions modeled, the additional 2.1 tons/day of point source emissions reductions are not significant and, thus, are not expected to influence the modeling results. For instance, in the case of the August 16, 1989, episode, base case point source emissions were reduced by 48.3 percent in the projection (1999) year. Reducing the projected point source emissions by 2.1 tons/day constitutes an additional reduction of only 2.0 percent from the base case levels (from 48.3 to 50.3 percent). In the case of the May 25, 1990, episode, base case point source emissions were reduced by 48.7 percent in the projection year. Reducing the projected point source emissions by 2.1 tons/day also constitutes an additional reduction of only 2.0 percent from the base case levels (from 48.7 to 50.7 percent). Lastly, in the case of the August 19, 1993, episode, base case point source emissions were reduced by 22.4 percent in the projection year. Reducing the projected point source emissions by 2.1 tons/day constitutes an additional reduction of only 3.0 percent from the base case levels (from 22.4 to 25.4 percent).

Second, EPA expects that further reducing the point source VOC emissions would only contribute to attainment of the NAAQS. This is consistent with the control strategy being modeled for attainment (which relies on significant emissions reductions from point sources) and other directional modeling submitted by the State to date, namely, the modeling submitted in the section 182(f) NO_X waiver request. As stated previously, in the section 182(f) UAM demonstration, the State modeled across-the-board point source VOC reduction scenarios in addition to the 15% ROP reductions (namely 25, 50, 75, and 100 percent across-the-board reductions in point source VOC emissions). For all three episodes, the controlling day modeling results showed that domain-wide predicted maximum ozone concentrations were lowest when the across-the-board point source VOC reductions were modeled. A more detailed discussion of the across-the-board VOC reductions scenarios modeled is provided in the TSD to the EPA's rulemaking action approving the Baton Rouge section 182(f) NO_X exemption.

10. EPA Action

The EPA is proposing to approve Louisiana's Attainment Demonstration SIP submittals, dated December 22, 1995, and January 2, 1997, as meeting

the requirements of section 182(c)(2)(A) of the Act for demonstrating attainment of the NAAQS for ozone by November 1999. Through photochemical grid modeling, the State has demonstrated to the EPA's satisfaction that the VOC reductions in the 15% and Post-1996 ROP Plans (34.8 tons/day and 21.4[5] tons/day, respectfully) are sufficient to demonstrate attainment of the ozone NAAQS by the statutory deadline and that further reductions in VOC and/or nitrogen oxides (NO_X)) are not necessary to attain.

III. Proposed Rulemaking Action

The EPA has reviewed the SIP submittals for consistency with the Act, applicable EPA regulations and EPA policy, and is proposing to approve the following under sections 110(k)(3), 301(a), and Part D of the Act:

A. Post-1996 ROP Plan

The Baton Rouge, Louisiana, Post-1996 Rate-of-Progress Plan as originally submitted December 22, 1995, and revised January 2, 1997, as meeting the requirements of section 182(c)(2)(B) of the Act to achieve a reduction in VOC emissions (net of growth) of 9 percent between 1996 and 1999.

B. Contingency Plan

The Baton Rouge, Louisiana, contingency plan, initially submitted as part of the 15% ROP Plan on December 15, 1995, and, subsequently, as part of the Post-1996 Rate-of-Progress Plan submitted December 22, 1995, and revised January 2, 1997. The EPA is proposing approval of the contingency plan as meeting the requirements of sections 172(c)(9) and 182(c)(9) of the Act that moderate and above ozone nonattainment areas include contingency measures in their ROP Plan submittals. Specifically, the EPA is proposing to approve the contingency-reserved VOC banked emissions reductions of 5.7 tons/day (achieved through the State's banking regulations), identified in a table in Appendix T of the December 22, 1995, submittal, as creditable towards the 3 percent contingency requirements of sections 172(c)(9) and 182(c)(9) of the Act. In addition, the EPA is proposing to approve the point source VOC and NO_X emissions reductions banking regulations (LAC 33:III sections 601, 613, 617, 619, and 621), submitted December 15, 1995, and revised January 2, 1997, as meeting the requirements for SIP approval under part D and section 110 of the CAAA.

C. Motor Vehicle Emissions Budgets

The 1999 Motor Vehicle Emissions Budgets for on-road mobile VOC and NO_X emissions for the Baton Rouge 5-parish ozone nonattainment area submitted January 2, 1997, as meeting the requirements of section 176(c) of the Act and 40 CFR 51.452(b) of the Federal Transportation Conformity Rule.

D. Attainment Demonstration

The Baton Rouge, Louisiana Attainment Demonstration submitted December 22, 1995, and revised January 2, 1997, including the modeling analyses, as meeting the requirements of section 182(c)(2)(A) of the CAAA to provide for attainment of the ozone NAAQS by the applicable November 15, 1999, attainment date.

E. Emission Inventory Revisions

Revisions to the 1990 base year VOC emissions inventory submitted January 2, 1997 as meeting the requirements of section 182(a)(1) of the Act. In addition, the EPA is proposing to codify the revisions to the 1990 base year emissions inventory submitted as part of the 15% ROP Plan approved October 22, 1996 (61 FR 54737).

F. Revisions to 1996 Target Level of Emissions

The revision to the 1996 target level of VOC emissions submitted January 2, 1997, as meeting the requirements of part D and EPA guidance.

The EPA is deferring taking any action at this time on the State's accelerated vehicle retirement regulation (LAC 33:III.611) entitled, ''Mobile Sources Emission Reductions,'' which was submitted to the EPA on January 2, 1997. Deferred action on this regulation has no effect on either the Baton Rouge Post-1996 ROP Plan or on the Baton Rouge Attainment Demonstration since the State took no credit in these plans for reductions from vehicle scrappage.

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

IV. Administrative Requirements

A. Executive Orders (E.O.) 12866 and 13045

The Office of Management and Budget has exempted this regulatory action from E.O. 12866, entitled ''Regulatory Planning and Review,'' review.

The proposed rule is not subject to E.O. 13045, entitled ''Protection of Children from Environmental Health Risks and Safety Risks,'' because it is not an ''economically significant'' action under E.O. 12866.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), 5 U.S.C. 600 *et seq.*, generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This proposed rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the 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 Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Act forbids the 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).

C. Unfunded Mandates

Under section 202 of the Unfunded Mandates Reform Act of 1995, signed into law on March 22, 1995, the 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, the 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 the EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

The EPA has determined that the approval action proposed does not

[5] The 21.4 tons/day in emissions reductions includes the 3.2 tons/day surplus reductions from the 15% ROP Plan carried over to the Post-1996 ROP Plan.

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 approves preexisting 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, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

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

Dated: August 3, 1998

Gregg A. Cooke,

Regional Administrator, Region 6.

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[AK 15–1703; FRL–6146–4]

Approval and Promulgation of Implementation Plans; Alaska

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) invites public comment on its proposed approval of numerous revisions to the State of Alaska Implementation Plan submitted to EPA by the Director of the Alaska Department of Environmental Conservation (ADEC) on January 8, 1997, and March 17, 1998. The revisions were submitted in accordance with the requirements of section 110 and Part D of the Clean Air Act (hereinafter the Act). EPA is taking no action at this time on the provisions relating to the permitting of stationary sources, including the construction of new and modified stationary sources, Part D new source review, and prevention of significant deterioration permitting, but will propose action on those provisions in a separate notice. EPA is also taking no action on a number of provisions which are unrelated to the purposes of the implementation plan, including the Alaska provisions for implementing the Title V operating permit program.

DATES: Comments must be postmarked on or before September 17, 1998.

ADDRESSES: Written comments should be addressed to: Montel Livingston, SIP Manager, EPA, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, Washington 98101.

Copies of the State's request and other information supporting this proposed action are available for inspection during normal business hours at the following locations: EPA, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, Washington 98101, and Alaska Department of Environmental Conservation, 410 Willoughby Avenue, Juneau, Alaska 99801.

FOR FURTHER INFORMATION CONTACT: David C. Bray, Senior Air Pollution Scientist, Office of Air Quality (OAQ–107), EPA, Seattle, Washington, (206) 553–4253.

SUPPLEMENTARY INFORMATION:

I. Background

The Clean Air Act Amendments of 1990, Title V, requires States to develop operating permit programs for most stationary sources. While Title V operating permit programs are not approved as part of the State Implementation Plan (SIP) under section 110 of the Act, many provisions of the SIP will interact closely with the Title V operating permit program. As such, many States will be revising provisions of their SIPs to facilitate and improve the relationship between their SIP and their Title V operating permit program. The ADEC amended numerous provisions of its current rules for air pollution sources and submitted them to EPA on January 8, 1997, and March 17, 1998, as revisions to the Alaska SIP.

II. Description of Submittals

On January 8, 1997, the Director of ADEC submitted the Alaska air quality regulations, 18 Alaska Administrative Code (AAC) 50, effective January 18, 1997 (with the exception of 18 AAC 50.055(a)(9), 50.085, 50.090, 50.110, 50.300(g), and 50.310(I)), to EPA as a revision to the Alaska SIP. These regulations are intended to replace entirely the current version of the 18 AAC 50 in the EPA-approved SIP. (See 40 CFR 52.75 for identification of the regulations contained in the current EPA-approved SIP.) The January 8, 1997, submittal also includes the current Alaska Statutes for air pollution control, specifically the 1993 Alaska Act (Chapter 74 State Legislative Act 1993) relating to air quality control and the prevention, abatement, and control of air pollution as a revision to the statutes in the EPA-approved SIP. Finally, the submittal includes the ''In Situ Burning Guidelines for Alaska (revised 5/94),'' which implement certain provisions of the open burning regulations in 18 AAC 50.065. On March 17, 1998, the Director of ADEC resubmitted revisions to the opacity and particulate emission standards for urea prilling towers in operation before July 1, 1972 (18 AAC 50.055(a)(3) and (b)(6)), along with the ambient impact demonstrations required under 40 CFR part 51, appendix V to support the changes in emission standards.

III. Proposed Action

A. Changes to Emission Standards

The amended rules include two changes to the emission standards for urea prilling towers in operation prior to July 1, 1972. First, the opacity limit in 18 AAC 50.055(a)(3) is changed from 30 percent to 55 percent (not to be exceeded for more than three minutes in any one hour), and a 40 percent (24-hour average) standard is added. Second, the particulate emission limit in 18 AAC 50.055(b)(6) is changed from 0.1 grains per dry standard cubic foot to 0.04 grains per dry standard cubic foot. The SIP revision submittal includes an adequate demonstration, including dispersion modeling, that the revised emission standards ensure attainment and maintenance of the national ambient air quality standards (NAAQS) for PM–10 and prevent the significant deterioration of air quality in the area affected by urea prilling towers. EPA, therefore, proposes to approve the amended emission limitations as a revision to the Alaska SIP.

B. Revisions to Current Provisions

The amended rules include a number of changes to current provisions to strengthen and improve air quality protection in certain areas of Alaska. Special protection areas for sulfur dioxide are established in 18 AAC 50.025 in order to apply more stringent requirements in the Unalaska and substantially revised, primarily through the addition of provisions regulating firefighter training and the use of open burning as an oil spill response countermeasure. The opacity standards for marine vessels (18 AAC 50.070) are revised to address more and different modes of operation for vessels operating within three miles of the Alaska coastline. The regulations for wood-fired heating device visible emission standards (18 AAC 50.075) are revised to incorporate provisions of the Code of the city and Borough of Juneau, Alaska and an Ordinance of the City and Borough of Juneau, Alaska, both of