

## **SECTION 2: REDESIGNATION REQUIREMENTS**

Section 107(d)(3)(E) of the CAA states that an area can be redesignated to attainment if all the following conditions are met:

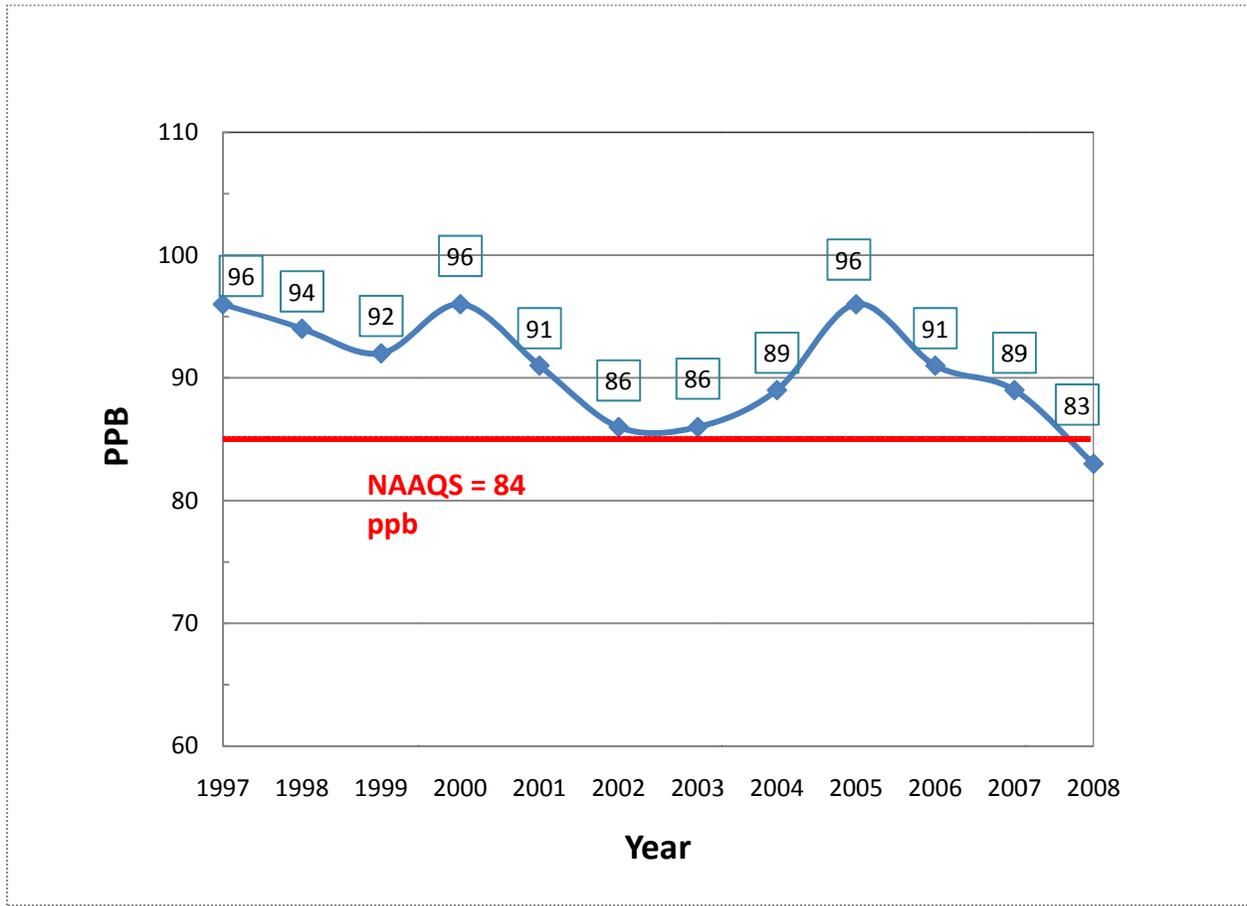
- The EPA has determined that the NAAQS have been attained;
- The applicable implementation plan has been fully approved by the EPA under Section 110(k);
- The EPA has determined that the improvement in air quality is due to permanent and enforceable reduction in emissions;
- The state has met all applicable requirements for the area under Section 110 and Part D; and
- The EPA has fully approved a maintenance plan, including a contingency plan, for the area under Section 175A.

### **2.1 Attainment of the 1997 8-hour Ozone NAAQS**

The BRNA ozone monitoring network consists of ten ambient air monitors. Data from these monitors is used to determine the Baton Rouge Area's compliance with the 1997 8-hour NAAQS. Compliance with the 1997 8-hour NAAQS is determined by the area's design value (DV) which is any consecutive three-year average of each annual fourth-highest daily maximum eight-hour ozone average. Data from this monitoring network for the years 2006 – 2008 indicate that the BRNA design value is 83 parts per billion (ppb), which is below the nonattainment threshold of 85 ppb. The BRNA demonstrated attainment of the 1997 8-hour ozone NAAQS on December 31, 2008 which was prior to the attainment date of June 15, 2010.

Since 2005, the area has demonstrated a downward trend in the monitored design values for the BRNA. (See Chart 1) The department has also compiled the design values for each monitor in the BRNA to determine attainment with the 1997 8-hour ozone standard. (See Table 1)

**Chart 1 - 1997-2008 Baton Rouge Area 8-Hour Ozone Design Values**



**Table 1: Baton Rouge Ozone Maintenance Area Monitors  
8-Hour Ozone Design Values 2006 – 2008**

Monitor	2006 Design Value	2007 Design Value	2008 Design Value
Baker	0.087	0.084	0.079
Bayou Plaquemine	0.08	0.081	0.079
Capital	0.08	0.08	0.075
Carville	0.084	0.085	0.081
Dutchtown	0.082	0.084	0.083
French Settlement	0.077	0.08	0.079
Grosse Tete	0.083	0.086	0.080
LSU	0.091	0.089	0.080
Port Allen	0.085	0.083	0.078
Pride	0.081	0.081	0.077

## **2.2 SIP Approvability Under Section 110(k) of the CAA**

The SIP for the BRNA must be fully approved under Section 110(k) of the CAA. On January 7, 2008, the LDEQ submitted a letter to EPA certifying that the state had satisfied for its SIP the infrastructure requirements which are contained in Section 110(a)(1) and (2) of the CAA. EPA submitted completeness findings for Section 110(a) State Implementation Plans for the 8-hour Ozone NAAQS in the Federal Register dated March 27, 2008 (FR 73 16205-16211). In Section II, Subsection C of this Federal Register notice, there is a list of states that submitted complete submissions to satisfy the Section 110(a)(2) requirements. The state of Louisiana is listed in this category. Based on this Federal Register notice published by EPA, the SIP for the BRNA has been fully approved under Section 110(k). The letter and the Federal Register notice are included in Appendix B.

All outstanding SIP revisions were submitted under a separate cover on August 31, 2010 as provided for in the proposed rule making of October 30, 2007 (72 FR 61315).

## **2.3 Permanent and Enforceable Emissions Reductions**

The BRNA has experienced improved air quality over the past several years as is evidenced by decreases in both 1-hour and 8-hour ozone emission inventories (EIs). These reduced EIs are due to permanent and enforceable reductions in VOC and NO<sub>x</sub> emissions through control strategies implemented in the area. Permanent and enforceable state and national control strategies implemented in the BRNA include the following:

- Point Source NO<sub>x</sub>
- National Volatile Organic Compound Emission Standards for Consumer Products
- National Organic Compound Emission Standards for Architectural Coatings
- National Low Emission Vehicle (NLEV) Program/Tier II Engine and Fuel Standards
- Stage I Vapor Recovery
- Stage II Vapor Recovery
- Locomotives and Marine Compression-Ignition Engines
- 2004 Clean Air Non-Road Diesel rule

The department has also submitted multiple SIP elements that show implementation of the rules promulgated by the state to allow for enforceable control strategies in the BRNA. These are SIP elements that have been approved by EPA and published in the Federal Register. The SIP elements along with the Federal Register notice information and approval dates are listed in Table 2 on page.

## 2.4 Requirements met for the area under Section 110 and Part D

### 2.4.1 Section 110 Requirements

The state has met the Section 110 requirement as was certified in the above mentioned letter and was approved by EPA in the Federal Register. A list of the Section 110 requirements and how the state has met these requirements is listed below.

- **Ambient Air quality monitoring/data system:** LDEQ meets the applicability requirements of Section 110(a)(2)B) though the operations of a statewide monitoring network, made up of stationary ambient air monitoring stations. The data collected from these monitors is reported to EPA on a regular basis.
- **Program for enforcement of control measures:** LDEQ has established rules governing emissions in the nonattainment area. These rules were submitted to EPA in various SIP revisions and have been approved in the Federal Register, thus satisfying the requirements of Section 110(a)(2)(C).
- **Interstate Transport:** LDEQ has submitted and EPA has approved the Clean Air Interstate Rule (CAIR) SIP for SO<sub>2</sub>. This SIP was approved on July 20, 2007 (72 FR 39741). EPA approved the first NO<sub>x</sub> CAIR SIP on September 28, 2007 (72 FR 55064). The department submitted a revision to the CAIR SIP on July 1, 2009 and it is under review by EPA. Both of these SIPs meet the requirements of Section 110(a)(2)(D).
- **Adequate Resources:** Subtitle II of Title 30 of the Louisiana Revised Statutes provides that the LDEQ secretary shall “receive and budget duly appropriated monies...to carry out the provisions and purposes of this Subtitle.” (LA. RS 30:2011.D.10)
- **Stationary source monitoring system:** The most current revision to the SIP concerning stationary source emissions monitoring was submitted to EPA on November 15, 1994 and was approved on February 6, 1995 (60 FR 02014). This SIP revision meets all requirements set forth in Section 110(a)(2)(F).
- **Emergency Power:** The “Prevention of Air Pollution Emergency Episodes” provision was promulgated by LDEQ on December 20, 1987. Revisions were made to the SIP in January 1988, and approved on March 8, 1989 (54 FR 09795).
- **Provisions for SIP revision due to NAAQS changes or findings of inadequacies:** Louisiana, through the LDEQ, has revised the SIP necessary to comply with changes to NAAQS or findings of inadequacies. See 54 FR 25449 for revisions concerning PM NAAQS.
- **Section 121 Consultants:** LDEQ, through established public hearing processes and laws governing public participation, meets the applicable requirements of Section 121 relating to consultation as required by Section 110(a)(2)(J).

- **PSD and Visibility protection:** Louisiana meets the applicability requirements of Section 110(a)(2)(J) through various SIP revisions.
  - The PSD SIP was first approved on October 28, 1990 (56 FR 20137) with subsequent revisions being approved October 15, 1996 (61 FR 53639)
  - Visibility Protection requirements were met through the submittal of the Visibility Analysis and Long Term Strategy, submitted on October 26, 1987 and approved on December 19, 1988 (53 FR 50958). Furthermore, the final Regional Haze SIP revisions were submitted to EPA on June 13, 2008.
- **Air Quality modeling/data:** Air quality modeling requirements are met through various SIP submittals through attainment demonstrations. The most recent submittal can be found in the Regional Haze submittal dated June 13, 2008.
- **Permitting Fees:** LDEQ's fee system was approved by EPA on July 7, 1982. See 47 FR 29535.
- **Consultation/participation by affected local entities:** LDEQ, through the established public hearing process and laws governing public participation, meets the applicable requirements of Section 110(a)(2)(M).

#### 2.4.2 Part D Requirements

All requirements are met in the Louisiana Regulations under LAC 33:III.504.L and M. AQ 234 and AQ 236 dealt with lowering the RACT threshold to 25 TPY for Chapters 21 and 22, which deal with VOC and NO<sub>x</sub>, respectively. These rules are still in full force and effect today. A more detailed RACT/RACM analysis is presented in Section 3 of this submittal.

#### 2.4.3 Section 185 Fees

Section 185 of the CAA requires each major stationary source in any severe or extreme ozone nonattainment area to pay a fee to the state as a penalty for failure to attain the ozone NAAQS. This provision is part of the original 1990 CAA Amendments (Part D, Subpart 2 - Additional Provisions for Ozone Nonattainment Areas) and can be seen as a final, harsh punishment for failure to attain. It is specifically directed towards major stationary sources and not nonpoint (area), mobile, or biogenic sources.

When the BRNA failed to reach the applicable attainment date and was bumped-up to the severe classification Section 185 penalty fee rule promulgation was required. The state sought legislative authority to collect these fees if the area did not attain the standard which would immediately require rule implementation. This authority was granted to the agency through Act No 441 of the 2003 Regular Session and Act No 588 of the 2008 Regular Session. Act No. 441

grants the LDEQ authorization with the applicable exceptions for Extension years and population densities of less than 250,000. Two separate rule makings have been proposed, but all rule making was stopped with the onset of the 8-hour Phase I Implementation Rule as this rule did away with the Section 185 requirements.

Lawsuits were filed arguing against many of the components of the Phase I Rule. As it applies to Section 185, EPA was of the opinion that Section 185 fees were not a control measure because realized emission reductions were not a direct result of its implementation. The courts in the South Coast case did not agree with EPA's assertion and the Section 185 fees were re-established as anti-backsliding criteria for those areas that fell under the requirement.

On January 5, 2010 EPA issued "Guidance on Developing Fee Programs Required by Clean Air Act Section 185 for the 1-hour Ozone NAAQS". In this document, EPA stated that :

"for an area that we [EPA] determine is attaining either the 1-hour or 1997 8-hour ozone NAAQS, based on permanent and enforceable emission reductions, the area would no longer be obligated to submit a fee program SIP revision to satisfy the anti-backsliding requirements associated with the transition from the 1-hour standard to the 1997 8-hour standard. In such cases an area's existing SIP should be considered an adequate alternative program. Our reasoning follows from the fact that an area's existing SIP measures, in conjunction with other enforceable federal measures, are adequate for the area to achieve attainment, which is the purpose of the section 185 program.

Following this guidance, Louisiana submitted on February 24, 2010, a Section 185 Determination of Termination for the Baton Rouge Ozone Nonattainment Area. This SIP revision was submitted based upon monitoring data for the years 2006, 2007, 2008 and 2009. The area reached attainment of the 1-hour and the 1997 8-hour ozone NAAQS on December 31, 2008. EPA issued a final rule on February 10, 2010 (75 FR 6570) which determined that the Baton Rouge 1-hour ozone nonattainment area had attained the 1-hour ozone NAAQS. A determination of attainment proposal for the 1997 8-hour ozone NAAQS was published on June 25, 2010 (75 FR 36316).

## **2.5 Section 175A Requirements for Maintenance Plans**

The remainder of this SIP revision is intended to fulfill the maintenance requirements in Section 175A of the CAA and contains the following elements:

- Attainment inventory;

- Maintenance Demonstration;
- Verification of continued attainment;
- Monitoring network; and
- Contingency Plan.

**Table 2: Baton Rouge Area SIP Elements**

SIP ELEMENT	PAGE NUMBER	APPROVAL DATE
RESCISSION OF SECTION 182(F) AND 182(B)(1) EXEMPTIONS TO THE NITROGEN OXIDES CONTROL REQUIREMENTS FOR THE BATON ROUGE OZONE NONATTAINMENT AREA	68FR 23597	6/4/2003
BATON ROUGE NONATTAINMENT AREA; OZONE, 1-HOUR OZONE ATTAINMENT DEMONSTRATION; ATTAINMENT DATE EXTENSION, AND WITHDRAWAL OF NONATTAINMENT DETERMINATION AND RECLASSIFICATION	67R 61786  (68 FR 20077 Notice of Withdrawal)	10/2/2002   4/24/2003
APPROVAL OF REVISIONS TO THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY TITLE 33 ENVIRONMENTAL QUALITY PART III. AIR CHAPTER 5, PERMIT PROCEDURES, 504. NONATTAINMENT NEW SOURCE REVIEW PROCEDURES	67FR61260  (Rule revision in process)	9/30/2002
BATON ROUGE ATTAINMENT DEADLINE EXTENSION; REVISED BASE-YEAR INVENTORY; REVISED 15% ROP PLAN; REVISED POST-1996 ROP PLAN; REVISED ATTAINMENT DEMONSTRATION	67FR61786	10/2/2002
CONTROL OF EMISSION OF NITROGEN OXIDES IN THE BATON ROUGE OZONE NONATTAINMENT AREA	67FR60877	9/27/2002
MOTOR VEHICLE INSPECTION AND MAINTENANCE PROGRAM	67FR60594	9/26/2002
EMISSION REDUCTION CREDITS BANKING IN NONATTAINMENT AREAS	67FR60871	9/27/2002
SUBSTITUTE CONTINGENCY MEASURES	67FR60590	9/26/2002
TRANSPORTATION CONFORMITY	64FR72934	2/28/2000
INSPECTION AND MAINTENANCE PROGRAM	64FR45454	8/20/1999
CLEAN FUEL FLEET SUBSTITUTE PROGRAM	64FR38577	7/19/1999
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, POINT BANKING REGULATION	64FR35930	8/2/1999

SIP ELEMENT	PAGE NUMBER	APPROVAL DATE
NONATTAINMENT MAJOR STATIONARY SOURCE REVISION	64FR00413	1/5/1999
VOC RACT FROM BATCH PROCESSES	63FR47429	11/8/1998
GENERAL CONFORMITY	63FR11372	5/8/1998
VOC RACT	62FR63658	2/2/1998
NONATTAINMENT NSR PROCEDURES	62FR52948	11/10/1997
POINTE COUPEE REDESIGNATION	62FR00648	12/20/1996
NEG DECLARATIONS FOR RACT	61FR55894	12/31/1996
15% RATE OF PROGRESS	61FR54737	12/23/1996
VOC RACT DEFINITION CORRECTION	61FR38590	8/26/1996
OZONE MONITORING (PAMS)	61FR31035	8/19/1996
SECTION 182(B)(1) TRANSPORTATION CONFORMITY NOX WAIVER	61FR07218	2/12/1996
SECTION 182(F) NOX CONTROL EXEMPTION	61FR02438	1/18/1996
CLEAN FUEL FLEET PROGRAM	60FR54305	12/22/1995
1990 BASE YEAR OZONE EMISSIONS INVENTORIES	60FR13908	5/15/1996
EMISSION STATEMENT PROGRAM	60FR02014	2/6/1995
SMALL BUSINESS ASSISTANCE PROGRAM	59FR32355	6/23/1994
VOC RACT CORRECTION	59FR23164	5/5/1994
STAGE II VAPOR RECOVERY	59FR14112	3/25/1994