

SECTION 3

REASONABLE FURTHER PROGRESS

2002 TO 2008 RFP DEMONSTRATION

A. INTRODUCTION

On June 15, 2004, the Environmental Protection Agency (EPA) classified the Baton Rouge Nonattainment Area (BRNA) as *marginal* for the 1997 8-hour ozone standard with an attainment date of June 15, 2007. Because the area did not meet the attainment date, the BRNA was re-classified to *moderate* with a new attainment date of June 15, 2010. (72 FR 61315-61320, 10/30/2007)

Phase II of the 1997 8-hour ozone implementation rule states that *moderate* areas must meet the Reasonable Further Progress (RFP) requirements under sections 172(c)(2) and 182 of the 1990 Clean Air Act Amendments (CAAA). In a memorandum from William T. Harnett of EPA, which the State received on August 15, 2006, guidance was provided for calculating RFP for *moderate* areas that have an approved 15% Rate of Progress (ROP) plan under the 1-hour standard and that have an attainment date after 2009. The guidance states: “These areas are treated like subpart I areas, which must obtain a 15% reduction (can be for NO_x or VOC or a combination of either) for the first 6 years after the baseline year. OTAQ [EPA Office of Transportation and Air Quality] is developing guidance for this situation. In the meantime, the State should use Appendix A/Method 2 (which applies to serious and higher classified areas) except that instead of demonstrating RFP for a total of 18% emission reductions for the first 6 years, the total would be 15% due to the moderate classification. See 40 CFR 51.910(a)(1)(ii)(A), which refers to section 51.910(b)(2).”

This document details the process and results to show that the state meets the 15% RFP emission reduction requirements for the period between the 2002 base year through the 2008 RFP milestone year. Compliance with the 2008 milestone emission reduction requirements are demonstrated by using EPA guidance, first to calculate the elements of the RFP demonstration and then to use these elements in conjunction with EPA RFP methodology to demonstrate compliance with RFP reduction requirements. The required RFP elements are:

- 2002 base year emissions
- 2002 to 2008 non-creditable reductions
- 2002 to 2008 required RFP reductions
- 2008 target level of emissions
- 2002 to 2008 projected emissions growth
- 2008 RFP milestone year projected emissions with growth and controls
- Demonstration of compliance with RFP requirements
- Contingency plan

This document describes how the elements of the BRNA 2008 RFP demonstration are calculated and used to demonstrate compliance with 2008 RFP requirements. It also provides a summary of the 2008 BRNA RFP demonstration. First, the target level of emissions for 2008 is calculated. Second, the 2008 RFP milestone year emissions with 2002 to 2008 emissions growth and controls are projected. Third, the 2008 target level of emissions is compared to the projected 2008 RFP milestone year emissions in order

to demonstrate compliance with the RFP requirements. Finally, in case of a milestone year failure, the required 3% contingency plan is provided.

B. 2008 TARGET LEVEL CALCULATION

EPA guidance specifies the method states are to use to calculate the maximum amount of emissions a nonattainment area can emit for an RFP milestone year. The RFP target level of emissions is calculated with a six-step process.

- Develop the 2002 base year inventory
- Develop the 2002 RFP base year inventory
- Calculate the non-creditable fleet turnover correction
- Develop the adjusted RFP base year inventory for 2002 relative to 2008
- Calculate the 2008 required 15% emissions reduction
- Calculate the 2008 target level of emissions

1. Develop the 2002 Base Year Inventory

EPA guidance specifies the method states must use to develop the base year inventory. Details of the development of the BRNA 2002 inventory are described in the document “2002 Base Year Emissions Inventory for the Baton Rouge Nonattainment Area” by LDEQ in June 2007 and submitted to EPA on July 20, 2007. A summary of the 2002 base year emissions inventory is shown in Table B-1.

Table B-1: BRNA 2002 Base Year Ozone Season Weekday Emissions Inventory

Source Category	NOx (Tons/Day)	VOC (Tons/Day)
Stationary Point	116.2	40.2
Area /with Nonroad	38.8	44.7
Mobile	44.7	23.0
Biogenic	0.0	99.6
Total	199.7	207.5

2. Develop the 2002 RFP Base Year Inventory

EPA guidance specifies that the RFP reductions must be based on anthropogenic emissions only. For NOx, with no biogenic emissions in the 2002 Base Year Inventory, the 2002 RFP Base Year Inventory is the same as the 2002 Base Year Inventory. For VOC, the 2002 RFP Base Year Inventory is equal to 207.5 minus 99.6 or 107.9 tons/day (TPD).

3. Calculate the Non-Creditable Fleet Turnover Correction

EPA guidance states that emission reductions due to vehicle fleet turnover (higher polluting older vehicles being replaced by lower polluting newer vehicles) are not creditable towards RFP. The emission inventories are a representation of the effects of pre-1990 CAA controls projected to the RFP base and milestone years. As such, these inventories can be used to estimate the effects of the pre-1990 CAA controls between milestone years.

The emission rates are developed using the latest version of EPA’s emission factor model, MOBILE6.2.03. The model input file is set up to disable all 1990 CAA effects, set the model evaluation

year to the RFP base or milestone year, and then the model is run to determine emission factors for the base or milestone year with only pre-1990 CAA controls. The emission factors for all years are then multiplied by the 2002 base year vehicle miles travelled (VMT). The non-creditable fleet turnover correction is calculated by subtracting the 2008 projected emissions from the 2002 projected emissions. The results are summarized in Table B-2. (See Appendix – Calculation of FMVCP/RVP Reductions)

Table B-2: FMVCP/RVP Emissions Corrections

	NOx Mobile Emissions, TPD		VOC Mobile Emissions, TPD	
	2002 Actual	Target Year w/2002 VMT (1)	2002 Actual	Target Year w/2002 VMT (1)
2002	45.3	51.0	26.5	29.0
2008	45.3	44.6	26.5	24.6
Correction		6.4		4.4

(1) Post 1990 Clean Air Act controls off

4. Develop the Adjusted RFP Base Year Inventory for 2002 Relative to 2008

The Adjusted RFP Base Year Inventory for 2002 Relative to 2008 is equal to the 2002 RFP Base Year Inventory, as calculated in Step 2, minus the non-creditable fleet turnover correction, as calculated in Step 3. For NOx, the calculation is 199.7 less 6.4 or 193.3 TPD. For VOC, the calculation is 107.9 less 4.4 or 103.5 TPD.

5. Calculate the 2008 Required 15% Emissions Reduction

The EPA 1997 Phase II 8-hour ozone implementation rule requires all ozone nonattainment areas classified as *moderate* and above to reduce NOx and/or VOC emissions by 15% for the period 2002 through 2008. The required 2008 reductions are calculated by multiplying the Adjusted RFP Base Year Inventory for 2002 Relative to 2008, as calculated in Step 4, by the percent reduction needed to meet RFP requirements. LDEQ has decided to rely on NOx reductions to meet the RFP requirements. As such, the required NOx reductions are equal to 193.3 times 15% or 29.0 tons/day.

6. Calculate the 2008 Target Level of Emissions

The 2008 Target Level of Emissions is calculated by subtracting the required emission reductions, as calculated in Step 5, and the non-creditable fleet turnover correction, as calculated in Step 3, from the 2002 Base Year Inventory. For NOx, the calculation is 199.7 minus 29.0 and minus 6.4 or 164.3 tons/day. The RFP plan must demonstrate that the projected emissions for 2008, reflecting growth and the RFP control strategy, will be less than or equal to the 2008 Target Level of Emissions. Table B-3 summarizes the calculation of the Target Level. Note: The VOC calculation is shown for information only.

Table B-3: Summary of Calculation of Target Level for BRNA

Description	NOx, TPD	VOC, TPD
Step 1: 2002 Base Year Inventory	199.7	207.5
Step 2: Emissions from Biogenic Sources	0.0	99.6
Step 2a: Calculate the 2002 RFP Base Year Inventory (Step 1 minus Step 2)	199.7	107.9
Step 3: 2002 to 2008 Non-creditable Fleet Turnover Correction	6.4	4.4
Step 4: Calculate the Adjusted RFP Base Year Inventory (Step 2a minus Step 3)	193.3	103.5

Step 5: Percent of NOx and VOC to meet 15% Reduction Requirement	15.0	0.0
Step 5a: Calculate the 2008 15% Reduction Requirement (Step 4 times Step 5)	29.0	0.0
Step 6: Calculate the 2008 Target Levels (Step 4 minus Step 5a)	164.3	103.5

C. 2008 RFP MILESTONE YEAR EMISSIONS PROJECTION

EPA guidance specifies the method states must use to project the 2008 milestone year emissions. The projection is used to demonstrate compliance with RFP reduction requirements. The RFP milestone year emissions are projected with a three-step process.

- Determine the growth from 2002 to 2008 for the various source categories
- Determine the emission reductions from controls applied between 2002 and 2008
- Project the 2008 RFP milestone year emissions

1. Determine the Growth from 2002 to 2008 for the Various Source Categories

EPA guidance requires that the growth of each source category be determined and included in the 2008 milestone year emissions projection.

Point Sources – The BRNA is classified as *moderate* nonattainment for the 1997 8-hour ozone standard. The CAA Section 182(b)(5) requires *moderate* areas to off-set growth by a minimum of 1.15 to 1.0. For this RFP demonstration, it is assumed that the off-set requirement will result in no NOx point source growth within the BRNA. The correctness of this assumption can be confirmed by comparing the point source inventory from the 2002 base year with the LDEQ Emission Inventory (EI) for 2007 (2008 is not yet available) as follows:

Table C-1: Comparison of NOx Inventory for 2002 to 2007

Description	NOx, TPD
2002 Base Year NOx Point Source Inventory	116.2
NOx Control Rule Reductions	40.0 (1)
NOx Inventory After Controls	76.2
2007 EI NOx	71.2

(1) The NOx control rule (LAC 33:III.2201) was designed to achieve approximately 40 TPD reductions in the BRNA.

The required off-set, plus other factors, has resulted in an estimated excess over controls decrease in point source emissions of approximately 5 TPD. (See **2002 and 2007 Point Source Inventories in Appendix – Point Sources by Facility**)

Area and Nonroad Sources – EPA guidance requires that states project growth of these emission categories with the Economic Growth Analysis System (EGAS) model. The EGAS growth factors for the emission categories in the BRNA were determined and then multiplied times the 2002 emissions to get the projected 2008 emissions. The growth was calculated by subtracting the 2002 emission from the 2008 estimated emission for each category. (See **Appendix – Calculation of Area Source Growth, Calculation of Nonroad Source Growth**)

Mobile Sources – EPA guidance requires that states project mobile source growth with the MOBILE6.2.03 model. Using the model and the projected 2008 VMT, the 2008 estimated emissions were

determined. The growth was calculated by subtracting the 2002 emissions from the 2008 estimated emissions. (See **Appendix – Calculation of Mobile Source Growth**)

The following table summarizes the projected growth from 2002 to 2008 for all source types.

Table C-2: Projected Growth by Source Type

Source Type	NO _x , TPD	VOC, TPD
Point	0.0	0.0
Area	0.26	3.29
Nonroad	3.90	0.36
Mobile	-15.7	-7.8
Total Growth	-11.54	-4.15

2. Determine the Emission Reductions from Controls Applied Between 2002 and 2008

a. In early 2002 LDEQ promulgated a NO_x control rule (LAC 33:III, Chapter 22) that established requirements for reducing NO_x emissions during the ozone season in the Baton Rouge nonattainment area as well as four parishes to the north of Baton Rouge. Affected facilities included those with one or more sources that collectively emitted or had the potential to emit fifty tons per year or more of NO_x.

The rule established emission factors for boilers, heaters, furnaces, turbines and internal combustion engines. Further, the rule established requirements for permits, compliance demonstration, recordkeeping and reporting. Facilities were required to have controls fully operational by May 1, 2005. The rule established the following emission limits:

- Electric Power Generating System Boilers
 - Coal-fired 0.21 lb/MMBtu
 - Number 6 Fuel Oil-fired 0.18 lb/MMBtu
 - All Others (gaseous or liquid)..... 0.10 lb/MMBtu
- Industrial Boilers 0.10 lb/MMBtu
- Process Heaters/Furnaces
 - Ammonia Reformers 0.23 lb/MMBtu
 - All Others 0.08 lb/MMBtu
- Stationary Gas Turbines
 - Peaking Service, Fuel Oil-fired..... 0.30 lb/MMBtu
 - Peaking Service, Gas-fired 0.20 lb/MMBtu
 - All Others 0.16 lb/MMBtu
- Stationary Internal Combustion Engines
 - Lean-burn..... 4 g/Hp-hour
 - Rich-burn 2 g/Hp-hour

Additionally, after the BRNA was reclassified to *severe*, LDEQ promulgated a revision to Chapter 22 (29LR1674) that established requirements for smaller NO_x sources - equal to or greater than twenty-five tons per year and less than fifty tons per year. All other provisions of Chapter 22 remained the same. The rule proposed the following emission limits for these smaller sources:

- Electric Power Generating System Boilers
 - Coal-fired 0.50 lb/MMBtu
 - Number 6 Fuel Oil-fired 0.30 lb/MMBtu
 - All Others (gaseous or liquid)..... 0.20 lb/MMBtu
- Industrial Boilers..... 0.20 lb/MMBtu
- Process Heaters/Furnaces
 - Ammonia Reformers..... 0.30 lb/MMBtu
 - All Others..... 0.18 lb/MMBtu
- Stationary Gas Turbines
 - Peaking Service, Fuel Oil-fired..... 0.37 lb/MMBtu
 - Peaking Service, Gas-fired..... 0.27 lb/MMBtu
 - All Others..... 0.24 lb/MMBtu
- Stationary Internal Combustion Engines
 - Lean-burn..... 10 g/Hp-hour
 - Rich-burn 2 g/Hp-hour

The Chapter 22 NO_x rule was designed to achieve approximately 40 TPD of reductions in BRNA only.

b. Other regulations and programs that reduced NO_x (and VOC) emissions after 2002 include:

(1) **Mobile Source Controls** - Mobile source controls that reduced NO_x and VOC emissions included a vehicle inspection and maintenance (I/M) program and federal motor vehicle control programs (FMVCP). All mobile source control programs were modeled with EPA's current version of the onroad emissions model, MOBILE6. Below is a brief summary of these mobile source control programs.

(a) **Vehicle I/M Program** – LDEQ promulgated a revision to the low enhanced vehicle I/M program for the BRNA. LDEQ received full approval from EPA for its low enhanced I/M program (Final Rule, 67 FR 60594). The program included gas cap testing and visual anti-tampering checks on 1980 and newer gasoline-fueled cars and trucks weighing less than 10,000 lbs (gross vehicle weight rating). On-board diagnostic (OBD) testing is conducted on 1996 and newer vehicles. Annual emission testing is conducted using a decentralized network of certified motor vehicle inspection stations.

(b) **Tier 2/Low Sulfur Gasoline Program Credits** – The final rule on Tier 2 motor vehicle emissions standards and sulfur control requirements for passenger cars, light trucks, and medium-duty cars including SUVs and minivans rated between 8,500 and 10,000 pounds, was published on February 10, 2000 (65 FR 6698). As with the NLEV program, MOBILE6 is configured for estimation of credits derived from the Tier 2 program beginning with calendar year 2004 and later.

(2) **Nonroad Source Controls** - Nonroad source controls that reduced NO_x and VOC emissions in the BRNA included four federal off-road measures. These measures regulated diesel engines, recreational and commercial marine vessels, and locomotives. Following is a summary of these federal measures:

(a) **Nonroad Diesel Engines** - The final rule on control of emissions from nonroad diesel engines was published on October 23, 1998 (63 FR 205). The rule was established to reduce emissions from nonroad diesel engines and equipment by establishing stringent new emissions standards and requirements to ensure that engines maintain their level of emission performance as they age, to provide compliance flexibility to engine and equipment manufacturers, and to establish a voluntary program to encourage the introduction of low-emitting engines.

(b) **Marine Spark-Ignition Engines** – The final rule for control of emissions from new, gasoline, spark-ignition marine engines was published on October 4, 1996 (61 FR 194). The rule established, beginning in 1998, more stringent standards for manufacture of engines used in outboards, personal watercraft, and jet boats.

(c) **Marine Compression-Ignition Engines** - The final rule for control of emissions from new, compression-ignition, marine diesel engines, equal to or greater than 37 kilowatts, was published on December 29, 1999 (64 FR 249). The rule sets emission standards for engines and takes effect between 2004 and 2007, depending on engine size.

(d) **Locomotives and Locomotive Engines** - The final rule for control of emissions from locomotives and locomotive engines was published on April 16, 1998 (63 FR 73). The rule sets emission standards for engines and includes a variety of compliance and enforcement provisions and regulations concerning the preemption of certain state and local controls for locomotives.

3. Project the 2008 RFP Milestone Year Emissions

The 2008 milestone year for BRNA projections are summarized in Table C-3. Each category includes both growth from 2002 to 2008 and controls.

Table C-3: 2008 RFP Milestone Year Emissions

Source Category	NOx, TPD	VOC, TPD
Point Source (1)	71.2	34.2
Area/w Nonroad Source (Tables B-1 plus C-2)	43.0	48.4
Mobile Source (Tables B-1 plus C-2)	29.0	15.2
Total Projected Emissions	143.2	97.8

(1) From 2007 EI, no growth to 2008

D. Demonstration of Compliance with RFP Requirements

The EPA Phase II 1997 Eight-Hour Ozone Implementation Rule requires all ozone nonattainment areas classified as *moderate* to reduce NOx and/or VOC emissions by 15% for the period 2002 through 2008. In addition to the 15%, the required reductions must also offset growth and vehicle fleet turnover. To demonstrate compliance with these requirements, the states are to compare the calculated 2008 Target Level of Emissions to the 2008 Projected Milestone Year Emissions after controls are applied. If the Projected Milestone Year Emissions are less than the Target Level of Emissions, the requirements are satisfied.

BRNA chose to demonstrate compliance with RFP requirements with NOx reductions. Table D-1 shows that the requirements are met.

Table D-1: RFP Demonstration for 2008

Description	NOx, TPD	VOC TPD
Target Level of Emissions for 2008 (Table B-3)	164.3	103.5

Projected 2008 RFP Milestone Year Emissions (Table C-3)	143.2	97.8
Are Milestone Year Emissions less than Target Level of Emissions?	Yes	Yes
Excess	21.1	5.7

E. Contingency Plan

In case of a milestone year attainment failure, the states are required to have a contingency plan that reduces emissions by an additional 3% between the 2008 RFP milestone year and the next calendar year. EPA guidance allows that controlled emission reductions not previously used in the 2008 RFP milestone demonstration may be used to satisfy contingency requirements. Because the excess emission reductions from the 2008 RFP demonstration are greater than the reductions required for 2009 contingency, the 2009 contingency plan for BRNA does not require any additional controls. A summary of the estimated control reductions and the required contingency level of reductions is presented in Table E-1.

Table E-1: RFP Contingency Demonstration

Description	NO_x, TPD	VOC, TPD
Adjusted 2008 Base Year (Section B.4)	193.3	103.5
Required % Contingency	3%	NA
Required Contingency Reductions in 2009	5.8	NA
Excess from 2008 RFP Demonstration (Table D-1)	21.1	5.7
Is excess greater than required contingency reductions?	Yes	Yes
Contingency Excess	15.3	5.7

Appendix - Calculation of FMVCP/RVP Reductions

Ozone Season Weekday Emissions, 2002 - 2008									
Parish	NOx Mobile Emissions, TPD					VOC Mobile Emissions, TPD			
	2002 Actual (1)	2002 Adjusted (2)	2008 w/2002 VMT (3)	FMVCP Reduction (4)		2002 Actual (1)	2002 Adjusted (2)	2008 w/2002 VMT (3)	FMVCP Reduction (4)
Ascension	7.5	8.4	7.3	1.1		3.8	4.2	3.6	0.6
E Baton Rouge	18.9	21.5	19.1	2.4		13.9	15.2	12.9	2.3
Iberville	4.5	5.1	4.3	0.8		2.0	2.2	1.8	0.4
Livingston	8.9	9.9	8.6	1.3		4.4	4.8	4.1	0.7
W Baton Rouge	5.5	6.1	5.3	0.8		2.4	2.6	2.2	0.4
Totals	45.3	51.0	44.6	6.4		26.5	29.0	24.6	4.4
Notes:									
(1) Peak Ozone Season, RVP 7.8, 2002 VMT, 2002 Emission Factors									
(2) Peak Ozone Season, RVP 7.8, 2002 VMT, 2002 Emission Factors, CAA Disabled									
(3) Peak Ozone Season, RVP 7.8, 2002 VMT, 2008 Emission Factors, CAA Disabled									
(4) = (2) - (3)									
Factors projected from MOBILE6.2.03.									
The adjustments are due to FMVCP only since the RVP is constant from 2002 to 2008.									

Appendix - Point Sources by Facility

Parish	AI #	Facility	2002 (TPY)		2007 (TPY)	
			VOC	NOx	VOC	NOx
0180	529	UNIVAR USA, INC/GEISMAR	2.0	0.0	3.0	0.9
0180	1093	CROMPTON INC/MONOCHEM	10.0	392.0	5.6	158.7
0180	1136	SHELL CHEMICAL LP/GEISMAR PLNT	510.0	739.0	537.8	684.8
0180	1138	GEISMAR VINYL CO, LP	115.0	130.0	110.2	42.8
0180	1433	CROMPTON MFG CO INC/GEISMAR PLANT	801.0	100.0	626.2	13.0
0180	1468	RUBICON, INC.	236.0	590.0	178.9	422.5
0180	2049	BASF CORPORATION/GEISMAR SITE	268.0	671.0	255.3	822.9
0180	2082	HONEYWELL INTL INC/GEISMAR WRKS	24.0	49.0	56.0	79.5
0180	2218	PRAXAIR INC/GEISMAR	19.0	199.0	33.5	216.3
0180	2245	TRIAD NITROGEN LLC	66.0	2368.0	0.6	6.2
0180	2398	TRIAD NITROGEN, LLC/MELAMINE CHEMICALS	6.0	2.0	0.0	0.0
0180	2416	CF INDUSTRIES, INC./DONALDSONVILLE NITROGEN	228.0	3429.0	199.4	2894.5
0180	2679	AIR PRODUCTS & CHEMICALS,INC/GEISMAR SYNGAS	3.0	56.0	4.2	62.2
0180	3302	EL PASO FLD SRVCS CO/RIVERSIDE	94.0	288.0	91.8	171.3
0180	3400	VULCAN CHEMICALS	262.0	1286.0	41.7	212.6
0180	3420	ORMET CORP/ALUMINA PLANT	0.0	6.0	0.0	0.0
0180	3732	PCS NITROGEN FERTILIZER,L.P./GEISMAR	50.0	1329.0	19.2	430.5
0180	3990	WAGNER OIL CO CO/DARROW COMM LEASE	36.0	0.0	0.0	0.0
0180	4762	ENTERPRISE GAS PROC LLC/TEBONE FRAC PLNT	107.0	49.0	174.5	39.2
0180	4803	BFI WASTE SYSTEMS OF N.A.,INC/COLONIAL LANDFILL	12.0	11.0	8.5	9.9
0180	5565	WILLIAMS OLEFINS LLC/GEISMAR ETHYLENE	278.0	703.0	246.3	640.4
0180	8142	WAGNER OIL CO/DARROW GRC BATTERY	70.0	41.0	11.4	5.0
0180	11416	BRIDGELINE HOLDINGS LP/SORRENTO UNDERGROUND GAS SF	11.0	44.0	17.1	30.2
0180	17771	T T BARGE CLEANING INC/MILE 183	7.1	1.8	11.8	1.0
0180	20506	ENTERPRISE PRODUCTS CO/SORRENTO PHT	29.0	3.0	27.7	2.8
0180	26272	DSI TRANSPORTS, INC	13.0	1.0	29.8	0.9
0180	27834	EXXONMOBIL PIPELINE CO/SORRENTO STORAGE	37.0	2.0	37.3	1.2
0180	30073	AIR PRODUCTS & CHEMICALS,INC/DINITROTOLUENE	5.0	25.0	5.1	29.2
0180	31513	AIR LIQUIDE AMERICA CORP/GEISMAR	3.0	269.0	20.2	106.2
0180	31514	GABRIEL CHEMICALS LLC/CHLOROSULFONIC ACID PLANT	0.0	0.0	0.0	0.0
0180	33564	Cooper T Smith Stevedoring Co - America Weigh Rig Loading & Transfer Facility	na	na	0.8	29.2
0180	33579	Cooper T Smith Stevedoring Co - Floating Grain Elevator Rig #1	na	na	0.0	0.0
0180	39945	ORMET CORP/BURNSIDE BULK MARINE TERMINAL	7.0	89.0	0.8	9.0
0180	41417	SHELL PIPELINE CO LP/SORRENTO DOME STORAGE	6.0	2.0	188.0	1.6
0180	46968	Mid-America Resources Corp - Sorrento Field Production Facility	na	na	2.4	0.2
0180	67572	DUPONT CHEMICALS/BURNSIDE PLANT	2.0	55.0	2.0	55.1
0180	83718	GULF LIQUIDS NEW RIVER PROJECT LLC/GEISMAR GAS PLNT	24.8	44.0	31.7	54.5
0180	86181	TEXACO PIPELINES LLC/SORRENTO TENDS PUMP STN	15.0	0.0	12.8	0.0
0180	88164	ENTERPRISE PROD OPER LP/SORRENTO RAIL RACK	1.0	0.0	5.9	0.2
0180	90203	EOTT ENERGY OPER LP/DARROW CRUDE OIL TERM	0.0	0.0	0.0	0.0
0180	92534	BORDEN CHEM INC/FORMALDEHYDE TRAINS & METHANOL TANK FARM	41.0	3.0	56.1	0.8
0180	97675	CHEMTECH CHEMICALS/CHEMICAL BLENDING	0.0	0.0	0.5	0.0
0180	99129	BURLINGTON RESOURCES O&G/UNITED LANDS #1	4.0	1.0	3.8	0.5
0180	100581	WILLIAMS OLEFINS LLC/HC BARGE LOAD	13.0	0.0	0.0	0.0
0180	100651	GULF LIQUIDS NEW RIVER PROJECT/SORRENTO GAS PLANT	5.5	0.2	12.1	1.7
0180	122402	IMTT - Geismar	na	na	0.0	0.0
0180	143528	State Lease 17446 Tank Battery - Darrow Field	na	na	7.9	0.0
0180	143529	SL 17446 Well - Darrow Field	na	na	2.4	0.3
0180	145270	Sorrento Production Facility	na	na	3.5	0.1
0840	248	DELTECH CORPORATION	28.0	256.0	38.5	90.8
0840	285	EXXONMOBIL CHEM/BR PLASTICS PLNT	532.0	108.0	199.2	117.2
0840	286	EXXONMOBIL CHEM CO/BR CHEM PLT	1708.0	2486.0	1510.2	2166.6
0840	288	FORMOSA PLASTICS CORPORATION, LA	44.0	570.0	80.7	253.0
0840	289	HONEYWELL/BATON ROUGE PLNT	242.0	21.0	269.1	16.4
0840	332	EXXONMOBIL/B R MARKETING TERM	36.0	0.0	32.4	0.0
0840	582	PLANTATION PIPELINE CO/BR TANK FARM	1787.0	0.0	634.5	0.0
0840	669	ALBEMARLE CORP.	31.0	11.0	27.0	9.6
0840	1000	ASHLAND CHEM CO/B.R. DISTRIBUTION	6.9	0.0	5.8	0.0
0840	1157	STUPP CORP/BAKER	5.0	0.0	8.0	0.0
0840	1186	ENTERGY GSI/LA STN 2	0.0	0.0	0.0	0.0
0840	1186	ENTERGY/LA STATION 1	51.0	1833.0	52.0	1676.0
0840	1314	RHODIA INC/BR FAC	66.0	74.0	30.5	69.9
0840	1395	DSM COPOLYMER/BR PLANT	78.0	127.0	76.9	197.2
0840	1396	EXIDE TECHNOLOGIES/B R SMELTER	0.0	9.0	1.1	15.7
0840	1413	UOP LLC/BR PLNT	2.0	46.0	2.8	35.0
0840	1516	CLEAN HARBORS BATON ROUGE, LLC	7.0	0.0	0.5	0.0
0840	2617	GEORGIA PACIFIC/PT HUDSON OPERATNS	334.0	1916.0	629.1	1681.6

Appendix - Point Sources by Facility

Parish	AI #	Facility	2002 (TPY)		2007 (TPY)	
			VOC	NOx	VOC	NOx
0180	529	UNIVAR USA, INC/GEISMAR	2.0	0.0	3.0	0.9
0840	2638	EXXONMOBIL REF & SUPPLY CO/B R REFINERY	1659.0	3583.0	1545.0	2018.5
0840	3085	ETHYL CORPORATION	1.2	0.0	4.9	0.0
0840	3230	EXXONMOBIL CHEM CO/RESIN FINSHNG PLT	14.0	16.0	22.1	14.8
0840	3387	FERRO CORPORATION/BATON ROUGE SITE	18.0	8.0	13.4	8.5
0840	3519	EXXONMOBIL CHEM CO/B.R. POLYOLEFINS	101.0	105.0	82.5	111.3
0840	3587	PPG IND INC/GROW AUTOMOTIVE	3.0	0.0	1.7	0.0
0840	4407	EBR Parish Renewable Energy Center	na	na	1.7	0.0
0840	4993	BP AMERICA PROD/PT HUDSON GAS PLNT	52.0	20.0	3.5	0.7
0840	5190	ALLWASTE CONTAINER SVCS/BATON ROUGE PLANT	0.0	2.0	1.0	2.0
0840	5540	LOUISIANA STATE UNIVERSITY	6.4	133.4	6.4	124.5
0840	8007	FLORIDA GAS TRANSMISSION CO/ZACHARY COMP STN	73.0	940.0	71.7	363.9
0840	11595	FLOWERS BAKING CO OF BATON ROUGE LLC	41.4	1.5	51.2	1.8
0840	17129	HILCORP ENERGY CO/COMITE FIELD FACILITY	9.0	9.0	25.0	7.0
0840	22750	EDO SPECIALTY PLASTICS	13.0	0.0	16.8	0.0
0840	25383	LAMAR CORP/ LAMAR GRAPHICS	20.0	0.0	38.4	0.0
0840	27559	BAYOU COATING LLC	2.0	2.0	27.2	6.2
0840	29884	GREAT LAKES CARBON CORP/B R CALCINED COKE PLT	8.5	380.0	5.5	361.9
0840	31128	East Baton Rouge Parish Landfill (BFI North)	na	na	4.2	5.5
0840	32045	VINTAGE PETROLEUM INC/MANCHAC POINT	85.0	19.0	16.0	22.0
0840	32050	SCHERING-PLOUGH ANIMAL HEALTH CORP/VET OPERATIONS	2.1	0.7	0.0	0.0
0840	32056	EXXON MOBIL CORP/EMPR	7.0	4.0	5.0	1.3
0840	88139	BP AMERICA PROD/PT HUDSON CTB	30.0	14.0	21.4	12.2
0840	90176	B P PIPELINES NORTH AMERICA/PT HUDSON TERMINAL	40.7	0.0	0.0	0.0
0840	95859	University Field Production Facility	na	na	28.2	9.6
0840	96336	US Composite Pipe South LLC - Baton Rouge Plant	na	na	5.5	4.6
0840	98136	HILCORP ENERGY CO/COBB #1 COMITE FIELD	1.0	35.0	0.0	0.0
0840	114658	Siegen Production Facility - Siegen Field	na	na	32.0	9.5
0840	114659	Port Hudson Field Production Facility	na	na	34.2	0.2
0840	119007	Duplantier Tank Battery - University Field	na	na	10.0	24.0
0840	119008	Nelson Tank Battery - University Field	na	na	24.0	18.0
0840	138716	North Burtville Field Facility - North Burtville Field	na	na	16.9	8.4
0840	144826	Crown Paper #1 Production Facility - Profit Island Field	na	na	14.8	7.5
0840	146877	Crown Paper #1 Treating Facility - Profit Island Field	na	na	5.2	13.5
1280	1306	CORA TEXAS MFG INC/SUGAR MILL	14.0	215.0	14.0	221.0
1280	1409	DOW CHEMICAL CO/LA OPERATIONS	1270.0	8611.0	1404.4	4582.7
1280	1607	ATOFINA PETROCHEMICALS INC/COSMAR STYRENE PLNT	98.0	682.0	121.7	373.7
1280	2043	WILLIAMS FIELD SERVICES/CHOCTAW TERMINAL	18.0	12.0	18.2	10.6
1280	2367	SYNGENTA CROP PROTECTION INC/ST. GABRIEL PLANT	257.0	215.0	215.1	231.9
1280	2455	GEORGIA GULF CHEM & VINYLs LLC/PLAQUEMINE	139.0	1265.0	170.4	1181.4
1280	2625	ENTERGY GSI/WILLOW GLEN	103.0	2437.0	10.0	208.0
1280	2644	PIONEER AMERICAS INC	0.3	16.7	1.6	26.0
1280	3129	ASHLAND CHEMICAL CO/PLAQUEMINE METHANOL PLNT	0.0	0.3	0.0	0.0
1280	3263	AIR PRODUCTS & CHEMICALS,INC/ST. GABRIEL	12.0	64.0	37.6	73.6
1280	3492	LBC BATON ROUGE LLC/SUNSHINE TERM	58.0	1.0	104.1	3.3
1280	4197	SOUTHERN NATURAL GAS/WHITE CASTLE CS	20.0	404.0	65.5	174.8
1280	5176	ATOFINA PETROCHEM INC/CARVILLE POLYSTYRENE	4.0	33.0	17.6	22.1
1280	7359	TEXAS EASTERN TRANSMISSION, LP/WHITE CASTLE CS	3.0	180.0	1.7	0.0
1280	8055	State of Louisiana Military - Gillis W Long Center	na	na	0.9	14.1
1280	8056	Plaquemine Point Shipyard	na	na	16.2	6.0
1280	8072	GRUY PETROLEUM MGMT CO/BAYOU BOUILLON PF	15.0	60.0	0.0	0.0
1280	14139	PLAINS MARKETING LP/ST GABRIEL TERMINAL	12.0	0.0	12.1	0.0
1280	14535	INEOS FLUOR AMERICAS LLC/KLEA-134A PLANT	1.9	15.6	2.5	14.9
1280	17383	LA INTRASTATE GAS CO./MYRTLE GROVE C.S.	10.0	19.0	24.8	11.6
1280	19184	LIG LIQUIDS CO LLC/PLAQUEMINE GAS	5.0	151.0	46.6	117.3
1280	20411	TEXAS PETRO INVESTMENT CO/BAYOU BLEU FLD PROD	69.0	113.0	19.9	60.4
1280	24479	SCS Iberville Coatings Inc	na	na	2.3	1.5
1280	26034	LA ENERGY & POWER AUTHORITY/PLAQUEMINE STEAM & DIESEL PWR PLT	0.0	1.1	0.0	0.3
1280	26984	CIBA SPECIALTY/ST. GABRIEL PLANT	5.0	4.0	3.0	1.5
1280	27495	BIOPRODUCTS OF LA LLC/GULF COAST	15.4	1.7	0.1	0.1
1280	32133	G & A INTERNATIONAL/BAYOU SORREL	23.0	43.0	22.8	19.5
1280	32135	JP OIL CO/WHITE CASTLE FLD	37.0	37.0	39.1	23.3
1280	32141	BRIDGELINE HOLDINGS LP/TALLY HO CS	1.0	1.0	0.2	0.2
1280	32145	HILCORP ENERGY CO/NW BAYOU CHOCTAW	47.0	16.0	3.6	2.9
1280	32146	BLIGH PETROLEUM INC/BAYOU CHOCTAW FLD PROD FAC	8.4	32.8	0.0	0.0
1280	32154	JP OIL CO/GRAND RIVER	0.0	0.0	0.0	0.0
1280	32160	Bayou Bleu Field Production Facility	na	na	9.8	25.7
1280	32161	OLEUM OPERATING CO, LC/BYU HENRY FLD PF	8.3	14.6	8.2	14.5
1280	33667	Basic Industries Inc - Sandblast & Spray Paint Yard	na	na	9.9	7.0
1280	39633	Command Services Inc	na	na	38.6	23.4

Appendix - Point Sources by Facility

Parish	AI #	Facility	2002 (TPY)		2007 (TPY)	
			VOC	NOx	VOC	NOx
0180	529	UNIVAR USA, INC/GEISMAR	2.0	0.0	3.0	0.9
1280	39978	KINDER MORGAN LIQUIDS TERMINAL LLC/ST GABRIEL TERMINAL	18.3	0.0	12.7	0.5
1280	40037	NOBLE ENERGY INC/STATE LEASE 14371	3.0	0.0	3.0	0.5
1280	51854	CARVILLE ENERGY LLC/CARVILLE ENERGY CENTER	2.0	18.0	1.2	347.2
1280	84377	OLEUM OPERATING CO, LC/BAYOU DES GLAISES-WILBERT MINERAL B LEASE	7.4	30.0	0.0	0.0
1280	84483	HILCORP ENERGY CO/FROG LAKE	14.0	29.0	0.0	0.0
1280	85393	PETRO HUNT LLC/BYU HENRY CTL FAC	36.0	48.0	14.0	0.0
1280	85652	AEP CORP/VENTURES LEASE CO/PLAQUEMINE COGEN	0.0	0.0	0.0	0.0
1280	86585	SHELL PIPELINE CO LP/GRAND RIVER BARGE LOADING	2.0	0.0	0.0	0.0
1280	89237	INEOS LLC/INEOS OXIDE	12.0	0.0	0.0	0.0
1280	89512	E&E PRODUCTION CO/DUGAS & LEBLANC LTD ET AL #1	3.0	0.0	20.6	5.0
1280	90197	EOTT ENERGY PIPELINE LP/BAYOU BLUE CRUDE OIL TERM	0.0	0.0	0.0	0.0
1280	101588	PETROQUEST ENERGY LLC/EEX CORP PF #1	20.0	11.0	30.2	10.9
1280	113166	Bayou Bouillion Production Facility	na	na	11.7	11.9
1280	118389	Bayou Bleu - Central Facility #1	na	na	10.1	7.3
1280	119219	White Castle Deep Production Facility	na	na	32.1	3.7
1280	128487	Dent et al #1 Production Facility - Musson Field	na	na	16.3	0.8
1280	126578	Shintech Louisiana LLC - Plaquemine PVC Plant	na	na	0.0	0.0
1280	126748	Schwing 10 Production Facility - Frog Lake Field	na	na	14.2	2.7
1280	126750	Dow Chemical Co Production Facility - Frog Lake Field	na	na	8.3	7.8
1280	128638	Forest Home Partnership Facility	na	na	15.5	22.8
1280	134264	Gueymard Production Facility - St Gabriel Field	na	na	16.3	17.4
1280	138856	St Gabriel Dehy & NGL Production Facility	na	na	15.9	0.2
1280	139760	Bayou Bouillion etal #1 Production Facility	na	na	0.0	0.0
1740	1467	EAST JORDAN IRON WORKS	3.0	14.0	2.1	4.9
1740	4990	BP AMERICA PROD/LOCKHART CROSSING CF # 1	12.0	38.0	10.6	12.9
1740	6858	GRIFFIN INDUSTRIES, INC	0.0	1.0	0.0	0.6
1740	9154	THE SHAW GROUP/SUNLAND FABRICATORS	14.0	0.0	67.7	15.5
1740	11767	WASTE MANAGEMENT OF LA, LLC/WOODSIDE LANDFILL	37.0	12.0	4.0	8.9
1740	17042	DENBURY RESOURCES INC/LOCKHART CROSS WILCOX CF3	121.0	125.0	24.9	10.2
1740	19875	WEYERHAEUSER CO/HOLDEN SAWMILL & LOG PROCESS	219.0	22.0	223.9	19.4
1740	26884	PLAINS MARKETING LP/LOCKHART CROSSING	5.0	0.0	0.0	0.0
1740	32465	TMR EXPLORATION INC/ LVG WXI RA SU LB	19.6	0.2	25.0	1.1
1740	32466	Erva S Mayers # 1	na	na	0.0	0.0
1740	80537	DELTA ENVIRONMENTAL PRODUCTS,INC	20.8	0.0	19.8	1.5
1740	99952	O M Barnett #2 Facility - Lockhart Crossing Field	na	na	0.8	0.0
1740	120886	SL 7729 #2 Wellsite - Lockhart Crossing Field	na	na	1.9	0.0
1740	130526	Blind River Facility (SL 18562 #1 Well) - Blind River Field Block 16	na	na	0.0	0.0
1740	146741	Lockhart Crossing Central Processing Facility	na	na	0.0	0.0
3120	302	T.T. BARGE SERVICE MILE 237, LLC/BR SHIPYARD	34.8	7.8	12.6	3.3
3120	858	EXXONMOBIL REF & SUPPLY CO/ANCHORAGE TNK FRM	32.0	0.0	25.2	2.5
3120	1648	CASTROL CONSUMER N AMER AUTO INC /PT ALLEN	16.5	3.3	17.4	7.6
3120	2366	PLACID REFINING CO LLC/PT ALLEN	204.0	967.0	240.7	743.9
3120	2519	DSM COPOLYMER/ADDIS PLANT	493.0	163.0	0.0	0.0
3120	2937	Shaw SS&S Fabricators Inc - Addis Facility	na	na	5.3	9.5
3120	3473	SHINTECH LOUISIANA LLC/ADDIS PLANT B	1.0	5.0	0.0	0.0
3120	4056	HARRY L. LAWS & CO,INC/CINCLARE CENTRAL FACTORY	10.0	121.0	0.0	0.0
3120	4174	SID RICHARDSON CARBON CO/ADDIS PLT	307.0	220.0	99.0	326.9
3120	9495	DISCOVERY ALUMINAS,INC/ALCOA PORT ALLEN WORKS	35.0	30.0	52.5	30.6
3120	11059	Specialty Application Services Inc - Port Allen Facility	na	na	7.6	4.8
3120	12096	Westway Terminal Co Inc	na	na	0.1	0.3
3120	17161	EXXONMOBIL PROD CO/BR GAS PLANT	26.0	114.0	17.9	63.8
3120	19338	PETROLEUM FUEL & TERM/PORT ALLEN	0.0	2.0	0.0	0.0
3120	19556	INTERCONTINENTAL TERMINALS CO/ANCHORAGE CHEM TERM	1.8	0.3	0.0	0.0
3120	25344	Criterion Catalysts & Technologies LP - HPA Port Allen Plant	na	na	8.1	7.7
3120	26217	INTL PAINTING CORP	35.0	0.0	29.8	0.0
3120	40198	B R FRACTIONATORS/PLT 1	21.0	42.0	18.8	60.7
3120	43634	TRINITY MARINE PRODUCTS INC/PLANT 48	14.0	4.0	9.5	0.2
3120	83425	SHINTECH LOUISIANA, LLC/ADDIS PLANT A	31.0	34.0	42.5	32.2
3120	98796	EXXONMOBIL PIPELINE CO/ANCHORAGE TERMINAL	8.0	0.0	11.2	0.1
3120	126510	Bueche Heirs Well #1 Facility SN 228905 - Profit Island Oil Field	na	na	10.8	8.1
3120	139063	Oliver #1 Tank Battery - Profit Island Field	na	na	21.5	7.9
Column Total			14660.0	42415.0	12492.8	26000.4

1. 2002 emissions from "2002 Base Year Emissions Inventory for the Baton Rouge Nonattainment Area" dated June 2007
2. 2007 emissions from LDEQ ERIC database.

Appendix - Calculation of Area Source Growth

AREA SOURCE - OZONE SEASON WEEKDAY EMISSIONS

SCC	Description	2002		Growth Factor	08 Estimated Emissions		Growth	
		NOx (TPD)	VOC (TPD)	02 - 08	NOx (TPD)	VOC (TPD)	NOx (TPD)	VOC (TPD)
2103006000	Commercial/Institution - Natural Gas	0.21	0.01	1.0971	0.23	0.01	0.02	0.00
2104006000	Residential - Natural Gas	0.79	0.05	1.0507	0.83	0.05	0.04	0.00
2104007000	Residential - LPG	0.06	0.00	1.0260	0.06	0.00	0.00	0.00
2104008000	Residential-Wood Fireplaces	0.04	1.24	1.0012	0.04	1.24	0.00	0.00
2104008010	Residential-Woodstoves - General	0.03	0.56	1.0012	0.03	0.56	0.00	0.00
2104008050	Residential-Woodstoves - Non-Catalytic		0.01	1.0012		0.01		0.00
2302002100	Commercial Cooking - ConveyORIZED Charbroiling		0.01	1.1251		0.01		0.00
2302002200	Commercial Cooking - Underfired Charbroiling		0.04	1.1251		0.05		0.01
2302003000	Commercial Cooking - Deep Fat Frying		0.01	1.1251		0.01		0.00
2302003100	Commercial Cooking - Flat Griddle Frying		0.01	1.1251		0.01		0.00
2401001000	Surface Coatings - Architectural Coatings		2.77	1.0880		3.01		0.24
2401005000	Surface Coatings - Auto Refinishing: SIC 7532		0.83	1.1390		0.95		0.12
2401008000	Surface Coatings - Traffic Markers		0.15	1.0448		0.16		0.01
2401015000	Surface Coatings - Factory Finished Wood		0.02	1.2328		0.02		0.00
2401025000	Surface Coatings - Metal Furniture: SIC 25		0.02	1.4386		0.03		0.01
2401040000	Surface Coatings - Metal Cans: SIC 341		0.03	1.2763		0.04		0.01
2401050000	Surface Coatings - Miscellaneous Finished Metals		4.50	1.2763		5.74		1.24
2401055000	Surface Coatings - Machinery and Equipment		0.06	1.4077		0.08		0.02
2401065000	Surface Coatings - Electronic and Other: SIC 36-363		0.04	1.3941		0.06		0.02
2401070000	Surface Coatings - Motor Vehicles: SIC 371		0.04	1.3117		0.05		0.01
2401080000	Surface Coatings - Marine: SIC 373		1.30	1.2909		1.68		0.38
2401090000	Surface Coatings - Miscellaneous Manufacturing		0.18	1.2407		0.22		0.04
2401100000	Surface Coatings - Industrial Maintenance Coatings		0.24	1.2328		0.30		0.06
2401200000	Surface Coatings - Other Special Purpose Coatings		0.23	1.0285		0.24		0.01
2415000000	Degreasing - All Processes, All Industries		1.14	1.2764		1.46		0.32
2420000000	Dry Cleaning - All Processes		0.88	1.1177		0.98		0.10
2425000000	Graphic Arts - All Processes		0.42	1.0754		0.45		0.03
2460100000	Consumer and Commercial Products - Personal Care		1.81	1.0094		1.83		0.02
2426020000	Consumer and Commercial Products - Household		0.62	1.0094		0.63		0.01
2460400000	Consumer and Commercial Products - Automotive		1.10	1.0094		1.11		0.01
2460500000	Consumer and Commercial Products - All Coatings		0.84	1.0094		0.85		0.01
2460600000	Consumer and Commercial Products - All Adhesives		0.46	1.0094		0.46		0.00
2460800000	Consumer and Commercial Products - FIFRA Related		1.50	1.0094		1.51		0.01
2460900000	Consumer and Commercial Products - Miscellaneous		0.06	1.0094		0.06		0.00
2461021000	Commercial - Cutback Asphalt		0.43	1.2986		0.56		0.13
2461850000	Commercial - Pesticide Application		0.01	1.0494		0.01		0.00

Appendix - Calculation of Area Source Growth

AREA SOURCE - OZONE SEASON WEEKDAY EMISSIONS

SCC	Description	2002		Growth Factor	08 Estimated Emissions		Growth	
		NOx (TPD)	VOC (TPD)	02 - 08	NOx (TPD)	VOC (TPD)	NOx (TPD)	VOC (TPD)
2501060050	Gas Service Stations - Stage 1:Total		0.19	1.0448		0.20		0.01
2501060052	Gas Service Stations - Stage 1: Splash Filling		0.45	1.0448		0.47		0.02
2501060053	Gas Service Stations - Stage 1: Submerged Filling		0.02	1.0448		0.02		0.00
2501060201	Gas Service Stations - UST: Breathing and Emptying		0.96	1.0448		1.00		0.04
2501080050	Airports Aviation Fuel - Stage 1: Total		0.19	1.3117		0.25		0.06
2501080100	Airports Aviation Fuel - Stage 2: Total		0.01	1.3117		0.01		0.00
2505000120	Petroleum Transport - All Transport Types		0.03	1.0448		0.03		0.00
2505030120	Petroleum Transport - Trucks		0.13	1.0448		0.14		0.01
2601000000	Onsite Incineration - All Categories	0.24	0.24	1.0094	0.24	0.24	0.00	0.00
2601020000	Onsite Incineration - Commercial/Institutional	0.42	0.42	1.2986	0.55	0.55	0.13	0.13
2610000100	Open Burning - Yard Waste: Leaves		0.03	1.0094		0.03		0.00
2610000400	Open Burning - Yard Waste: Brush		0.02	1.0094		0.02		0.00
2610000500	Open Burning - Land Clearing: Debris	0.51	1.17	1.0094	0.51	1.18	0.00	0.01
2610030000	Open Burning - Residential	0.14	0.70	1.0094	0.14	0.71	0.00	0.01
2620030000	Landfill - Municipal	0.01	0.06	1.2796	0.01	0.08	0.00	0.02
2630020000	Wastewater Treatment - Publicly Owned	-	0.40	1.0717		0.43		0.03
2801500170	Agricultural Burning - Whole Field on Fire: Grass	0.00	0.01	1.0494	0.00	0.01	0.00	0.00
2801500250	Agricultural Burning - Whole Field on Fire: Sugarcane	1.23	2.45	1.0494	1.29	2.57	0.06	0.12
2801500261	Agricultural Burning-Whole Field on Fire: Wheat Headfire	0.03	0.05	1.0494	0.03	0.05	0.00	0.00
2801500262	Agricultural Burning-Whole Field on Fire: Wheat Backfire	0.01	0.02	1.0494	0.01	0.02	0.00	0.00
2810001000	Other Combustion - Forest Wildfires	0.17	0.38	1.0094	0.17	0.38	0.00	0.00
2810015000	Other Combustion-Prescribed Burning: Forest Management	0.03	0.37	1.0094	0.03	0.37	0.00	0.00
2810030000	Other Combustion - Structure Fires	0.00	0.02	1.1809	0.00	0.02	0.00	0.00
Column Total		3.92	29.94		4.18	33.23	0.26	3.29

1. 2002 Emissions from "2002 Base Year Emissions Inventory for the Baton Rouge Nonattainment Area" dated June 2007
2. Growth factors from EGAS 5.0
3. SCC Classifications with no estimated emissions are blank.

Appendix - Calculation of Nonroad Source Growth

NONROAD SOURCE - OZONE SEASON WEEKDAY EMISSIONS

SCC	Description	2002		Growth Factor 02 - 08	08 Estimated Emissions		Growth	
		NOx (TPD)	VOC (TPD)		NOx (TPD)	VOC (TPD)	NOx (TPD)	VOC (TPD)
2260000000	Gasoline except Rail and Marine - 2 Stroke							
2260001010	Recreational Equipment - Motorcycles:Offroad	0.00	0.72	1.0143	0.00	0.73	0.00	0.01
2260001030	Recreational Equipment - All Terrain Vehicles	0.00	0.71	1.0143	0.00	0.72	0.00	0.01
2260002000	Construction & Mining, Total	0.00	0.30	1.0143	0.00	0.30	0.00	0.00
2260004000	Lawn & Garden, All	0.00	1.49	1.0143	0.00	1.51	0.00	0.02
2260006000	Commercial Equipment	0.00	0.13	1.0143	0.00	0.13	0.00	0.00
2260007005	Logging Equipment - Chain Saws, ≥6HP	0.00	0.06	1.0143	0.00	0.06	0.00	0.00
2265000000	Gasoline except Rail and Marine - 4 Stroke							
2265001010	Recreational Equipment - Motorcycles:Off-Road	0.00	0.02	1.0143	0.00	0.02	0.00	0.00
2265001030	Recreational Equipment - All Terrain Vehicles	0.02	0.18	1.0143	0.02	0.18	0.00	0.00
2265001050	Recreational Equipment - Golf Carts	0.00	0.01	1.0143	0.00	0.01	0.00	0.00
2265002000	Construction & Mining, Total	0.02	0.16	1.0143	0.02	0.16	0.00	0.00
2265003000	Industrial Equipment, All	0.08	0.06	1.0143	0.08	0.06	0.00	0.00
2265004000	Lawn & Garden, All	0.24	1.29	1.0143	0.24	1.31	0.00	0.02
2265006000	Commercial Equipment	0.17	0.71	1.0143	0.17	0.72	0.00	0.01
2265007010	Logging Equipment - Shredders ≥6Hp	0.00	0.02	1.0143	0.00	0.02	0.00	0.00
2265010010	Industrial Equipment - Oil Field Equipment	0.01	0.03	1.0143	0.01	0.03	0.00	0.00
2267000000	LPG Equipment except Rail and Marine							
2267002000	Construction & Mining, All	0.01	0.00	1.0490	0.01	0.00	0.00	0.00
2267003000	Industrial Equipment, All	0.92	0.23	1.0490	0.97	0.24	0.05	0.01
2267004066	Lawn & Garden Equipment - Chippers/Stump Grinders (Com)	0.01	0.00	1.0490	0.01	0.00	0.00	0.00
2267006000	Commercial Equipment	0.07	0.01	1.0490	0.07	0.01	0.00	0.00
2268000000	CNG Equipment except Rail and Marine							
2268003020	Industrial Equipment - Forklifts	0.06	0.00	1.0490	0.06	0.00	0.00	0.00
2268006000	Commercial Equipment	0.07	0.00	1.0490	0.07	0.00	0.00	0.00
2268010010	Industrial Equipment - Oil Field Equipment	0.03	0.16	1.0490	0.03	0.17	0.00	0.01
2270000000	CI Equipment except Rail and Marine - Diesel							
2270002000	Construction & Mining, Total	7.66	0.79	1.0143	7.77	0.80	0.11	0.01
2270003000	Industrial Equipment, All	0.53	0.07	1.0143	0.54	0.07	0.01	0.00
2270004000	Lawn & Garden, All	0.10	0.02	1.0143	0.10	0.02	0.00	0.00
2270005000	Agricultural Equipment, All	0.39	0.05	1.0143	0.40	0.05	0.01	0.00
2270006000	Commercial Equipment	0.41	0.07	1.0143	0.42	0.07	0.01	0.00
2270007015	Logging Equipment - Forest Equipment:Feller?Bunch/Skidder	0.13	0.01	1.0143	0.13	0.01	0.00	0.00
2270008005	Airport Ground Support Equipment	0.02	0.00	1.0143	0.02	0.00	0.00	0.00
2270010010	Industrial Equipment - Oil Field Equipment	0.10	0.01	1.0143	0.10	0.01	0.00	0.00
2275020000	Commercial Aircraft	0.13	0.02	1.3117	0.17	0.03	0.04	0.01

Appendix - Calculation of Nonroad Source Growth

NONROAD SOURCE - OZONE SEASON WEEKDAY EMISSIONS

SCC	Description	2002		Growth Factor 02 - 08	08 Estimated Emissions		Growth	
		NOx (TPD)	VOC (TPD)		NOx (TPD)	VOC (TPD)	NOx (TPD)	VOC (TPD)
2275050000	General Aviation	0.00	0.01	1.3117	0.00	0.01	0.00	0.00
2275060000	Air Taxi	0.00	0.01	1.3117	0.00	0.01	0.00	0.00
2280002100	Commercial Marine Vessels - Diesel:Port Emissions	5.72	0.14	1.0747	6.15	0.15	0.43	0.01
2280002200	Commercial Marine Vessels - Diesel:Underway Emissions	4.10	0.09	1.0747	4.41	0.10	0.31	0.01
2280003100	Commercial Marine Vessels - Residual:Port Emissions	8.95	0.32	1.2214	10.93	0.39	1.98	0.07
2280003200	Commercial Marine Vessels - Residual:Underway Emissions	1.62	0.05	1.2214	1.98	0.06	0.36	0.01
2282000000	Recreational Marine/Pleasure Craft - All Fuels							
2282005010	Pleasure Craft - Gasoline, 2-Stroke, Outboard	0.18	5.64	1.0143	0.18	5.72	0.00	0.08
2282005015	Pleasure Craft - Gasoline, 2-Stroke, Personal Water Craft	0.02	0.89	1.0143	0.02	0.90	0.00	0.01
2282010005	Pleasure Craft - Gasoline, 4-Stroke, Inboard/Sterndrive	0.16	0.29	1.0143	0.16	0.29	0.00	0.00
2282020005	Pleasure Craft - Diesel, Inboard/Sterndrive	0.11	0.00	1.0143	0.11	0.00	0.00	0.00
2285002006	Railroad Equipment - Diesel, Line Haul Locomotives	2.42	0.13	1.2017	2.91	0.16	0.49	0.03
2285002010	Railroad Equipment - Diesel, Yard Locomotives	0.44	0.03	1.2017	0.53	0.04	0.09	0.01
2285002015	Railroad Equipment - Diesel, Railway Maintenance	0.02	0.00	1.2017	0.02	0.00	0.00	0.00
Column Total		34.92	14.93		38.82	15.29	3.90	0.36

1. 2002 Emissions from "2002 Base Year Emissions Inventory for the Baton Rouge Nonattainment Area" dated June 2007
2. EGAS 5.0 growth factors for Aircraft, Commercial Marine, and Railroad classifications.
3. Growth for all other categories was projected from EGAS 4.0 factors.

Appendix - Calculation of Mobile Source Growth

MOBILE SOURCE - OZONE SEASON WEEKDAY EMISSIONS						
Mobile NOx Emissions			Mobile VOC Emissions			
Parish	2002 (1)	2008 (2)	Growth 2002-08	2002 (1)	2008 (2)	Growth 2002-08
Ascension	7.5	5.1	-2.4	3.8	3.3	-0.5
E. Baton Rouge	18.9	12.4	-6.5	13.9	9.0	-4.9
Iberville	4.5	3.1	-1.4	2.0	1.5	-0.5
Livingston	8.9	6.1	-2.8	4.4	3.4	-1.0
W. Baton Rouge	5.5	2.9	-2.6	2.4	1.5	-0.9
Total, tpd	45.3	29.6	-15.7	26.5	18.7	-7.8
(1) Peak Ozone Season, RVP 7.8, 2002 VMT and Emission Factors						
(2) Peak Ozone Season, RVP 7.8, 2008 VMT and Emission Factors						
Growth factors projected from MOBILE6.2.03.						