

NOTICE OF INTENT

Department of Environmental Quality
Office of Environmental Assessment
Environmental Planning Division

Contingency Plan for NO_x Emissions
(LAC 33:III.2201 and 2202) (AQ239)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Air regulations, LAC 33:III.2201 and 2202 (Log #AQ239).

The proposed rule revises LAC 33:III.Chapter 22 emission factors for industrial boilers and stationary gas turbines in the five-parish Baton Rouge ozone nonattainment area. The revised emission factors will be triggered or implemented should the Baton Rouge ozone nonattainment area fail to achieve attainment with the one-hour ozone air quality standard by the Clean Air Act statutory attainment date of November 15, 2005. The rule, if implemented, will lower NO_x emissions by approximately 3,000 tons annually. On April 24, 2003, the Environmental Protection Agency reclassified or "bumped up," by operation of law, the Baton Rouge ozone nonattainment area from a classification of "serious" to "severe," effective June 23, 2003 (68 FR 20077). The five-parish Baton Rouge ozone nonattainment area includes the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge. Under Section 182(c)(9) of the 1990 Clean Air Act, area plans must include requirements for contingency provisions to take effect without further action by the state upon a failure by the state to meet the applicable milestone. This rule contains such contingency provisions, which will take effect in the event that the Baton Rouge ozone nonattainment area fails to come into compliance with the one-hour National Ambient Air Quality Standard for ozone by the attainment date. The rule will be included in a revision to the attainment State Implementation Plan (SIP) that must be submitted to the Environmental Protection Agency by June 23, 2004. Failure to promulgate the proposed rule to establish the contingency provisions would cause the SIP submittal to be deemed incomplete. The basis and rationale for this proposed rule are to comply with the provisions of the 1990 Clean Air Act Amendments.

This proposed rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required. This proposed rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

A public hearing will be held on March 26, 2004, at 1:30 p.m. in the Galvez Building, Oliver Pollock Conference Room C111, 602 N. Fifth Street, Baton Rouge, LA 70802. The hearing will also be for the revision to the SIP to incorporate this proposed rule. Interested persons are invited to attend and submit oral comments on the proposed amendments. Should individuals with a disability need an accommodation in order to participate, contact Judith Schuerman at the address given below or at (225) 219-3550. Free parking is available across the

street in the Galvez parking garage when the parking ticket is validated by department personnel at the hearing.

All interested persons are invited to submit written comments on the proposed regulation. Persons commenting should reference this proposed regulation by AQ239. Such comments must be received no later than April 2, 2004, at 4:30 p.m., and should be sent to Judith Schuerman, Office of Environmental Assessment, Environmental Planning Division, Regulation Development Section, Box 4314, Baton Rouge, LA 70821-4314 or to FAX (225) 219-3582 or by e-mail to judith.schuerman@la.gov. Copies of this proposed regulation can be purchased by contacting the DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of AQ239.

This proposed regulation is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 201 Evans Road, Building 4, Suite 420, New Orleans, LA 70123; 111 New Center Drive, Lafayette, LA 70508; 104 Lococo Drive, Raceland, LA 70394 or on the Internet at <http://www.deq.louisiana.gov/planning/regs/index.htm>.

James H. Brent, Ph.D.
Assistant Secretary

Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 22. Control of Emissions of Nitrogen Oxides (NO_x)

§2201. Affected Facilities in the Baton Rouge Nonattainment Area and the Region of Influence

A. – C.20. ...

D. Emission Factors

1. Except as provided in LAC 33:III.2202, The following table lists NO_x emission factors that shall apply to affected point sources located at affected facilities in the Baton Rouge Nonattainment Area or the Region of Influence.

<u>Table D-1A. Emission Factors for Sources in the Baton Rouge Nonattainment Area</u>		
<u>Category</u>	<u>Maximum Rated Capacity</u>	<u>NO_x Emission Factor^a</u>
<u>Electric Power Generating System</u>		
<u>Boilers:</u>		
<u>Coal-fired</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.50 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.21 pound/MMBtu</u>
<u>Number 6 Fuel Oil-fired</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.30 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.18 pound/MMBtu</u>
<u>All Others (gaseous or liquid)</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.20 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.10 pound/MMBtu</u>
<u>Industrial Boilers</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.20 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.10 pound/MMBtu</u>
<u>Process Heater/Furnaces:</u>		
<u>Ammonia Reformers</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.30 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.23 pound/MMBtu</u>
<u>All Others</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.18 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.08 pound/MMBtu</u>
<u>Stationary Gas Turbines:</u>		
<u>Peaking Service Fuel Oil-fired</u>	<u>>= 5 to <10 MW</u>	<u>0.37 pound/MMBtu</u>
	<u>>= 10 MW</u>	<u>0.30 pound/MMBtu</u>

Table D-1A. Emission Factors for Sources in the Baton Rouge Nonattainment Area		
Category	Maximum Rated Capacity	NO _x Emission Factor ^a
Peaking Service, Gas-fired	>= 5 to <10 MW	0.27 pound/MMBtu
	>= 10 MW	0.20 pound/MMBtu
All Others	>= 5 to <10 MW	0.24 pound/MMBtu ^b
	>= 10 MW	0.16 pound/MMBtu ^c
Stationary Internal Combustion Engines:		
Lean-burn	>= 150 to <320 Hp	10 g/Hp-hour
	>= 320 Hp	4 g/Hp-hour
Rich-burn	>= 150 to <300 Hp	2 g/Hp-hour
	>= 300 Hp	2 g/Hp-hour

^a based on the higher heating value of the fuel.

^b equivalent to 65 ppmv (15 percent O₂, dry basis) with an F factor of 8710 dscf/MMBtu.

^c equivalent to 43 ppmv (15 percent O₂, dry basis) with an F factor of 8710 dscf/MMBtu.

Table D-1B. Emission Factors for Sources in the Region of Influence		
Category	Maximum Rated Capacity	NO _x Emission Factor ^a
Electric Power Generating System Boilers:		
Coal-fired	>= 80 MMBtu/Hour	0.21 pound/MMBtu
Number 6 Fuel Oil-fired	>= 80 MMBtu/Hour	0.18 pound/MMBtu
All Others (gaseous or liquid)	>= 80 MMBtu/Hour	0.10 pound/MMBtu
Industrial Boilers	>= 80 MMBtu/Hour	0.10 pound/MMBtu
Process Heater/Furnaces:		
Ammonia Reformers	>= 80 MMBtu/Hour	0.23 pound/MMBtu
All Others	>= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines:		
Peaking Service, Fuel Oil-fired	>= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>= 10 MW	0.20 pound/MMBtu
All Others	>= 10 MW	0.16 pound/MMBtu ^b

Table D-1B. Emission Factors for Sources in the Region of Influence		
Category	Maximum Rated Capacity	NO _x Emission Factor ^a
Stationary Internal Combustion Engines:		
Lean-burn (Region of Influence)	>= 1500 Hp	4 g/Hp-hour
Lean-burn (Baton Rouge Nonattainment Area)	>= 320 Hp	4g/Hp-hour
Rich-burn	>= 300 Hp	2 g/Hp-hour

^a all factors are based on the higher heating value of the fuel.

^b equivalent to 423 ppmv (15 percent O₂, dry basis) with an F factor of 8710 dscf/MMBtu.

D.2 - I.5. ...

J. Effective Dates

1. Except as provided in LAC 33:III.2202, ~~the~~ owner or operator of an affected facility shall modify and/or install and bring into normal operation NO_x control equipment and/or NO_x monitoring systems in accordance with this Chapter as expeditiously as possible, but by no later than May 1, 2005.

2. Except as provided in LAC 33:III.2202, ~~the~~ owner or operator shall complete all initial compliance testing, specified by Subsection G of this Section, for equipment modified with NO_x reduction controls or a NO_x monitoring system to meet the provisions of this Chapter within 60 days of achieving normal production rate or after the end of the shake down period, but in no event later than 180 days after initial start-up. Required testing to demonstrate the performance of existing, unmodified equipment shall be completed in a timely manner, but by no later than November 1, 2005.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:290 (February 2002), repromulgated LR 28:451 (March 2002), amended LR 28:1578 (July 2002), LR 30:

§2202. Contingency Plan

A. This Section shall become effective only in the event that the United States Environmental Protection Agency (EPA) determines and notifies the department in accordance with Section 181(b)(2) of the Clean Air Act as amended [42 USC 7511(b)(2)] that the Baton Rouge Nonattainment Area has failed to attain the 1-hour ozone National Ambient Air Quality Standard (NAAQS) by its appropriate attainment deadline (November 15, 2005, for areas classified as "severe") or any extension of the deadline approved by the EPA in accordance with Section 181(a)(5) of the Clean Air Act as amended [42 USC 7511(a)(5)].

B. Emission Factors. The emission factors for the sources listed below in Table B-1 shall supersede the factors for the like sources in Table D-1A of LAC 33:III.2201.D.1. All

requirements of LAC 33:III.2201 shall remain applicable to such sources, except as superseded by this Section.

<u>Table B-1. Contingency Plan Emission Factors</u>		
<u>Category</u>	<u>Maximum Rated Capacity</u>	<u>NO_x Emission Factor^a</u>
<u>Industrial Boilers</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.08 pound/MMBtu</u>
<u>Stationary Gas Turbines (except peaking)</u>	<u>>= 10 MW</u>	<u>0.092 pound/MMBtu</u>

^a based on the higher heating value of the fuel.

C. Effective Dates

1. An owner or operator of a source subject to an emission factor provided in Table B-1 of Subsection B of this Section shall comply with such emission factor as expeditiously as possible, but not later than two years after determination and notification by the EPA in accordance with Subsection A of this Section.

2. Required testing to demonstrate the performance of existing, unmodified equipment shall be completed in a timely manner, but by no later than 30 months after determination and notification by the EPA in accordance with Subsection A of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 30:

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR ADMINISTRATIVE RULES**

Person

Preparing

Statement: Paul Heussner

Phone: (225) 219-3576

Dept.: Department of Environmental Quality

Office: Office of Environmental Assessment

Return

Address: P. O. Box 4314
Baton Rouge, LA 70821-4314

Rule

Title: Contingency Plan for NOx Emissions
(LAC 33:III.2201 and 2202)

Date Rule

Takes Effect: Upon Promulgation

SUMMARY

(Use complete sentences)

In accordance with Section 953 of Title 49 of the Louisiana Revised Statutes, there is hereby submitted a fiscal and economic impact statement on the rule proposed for adoption, repeal or amendment. THE FOLLOWING STATEMENTS SUMMARIZE ATTACHED WORKSHEETS, I THROUGH IV AND WILL BE PUBLISHED IN THE LOUISIANA REGISTER WITH THE PROPOSED AGENCY RULE.

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There are no known implementation costs or savings to state or local governmental units.

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

State government emissions fee collections are estimated to be reduced by approximately \$40,000 per year, due to the reductions of about 3,000 tons per year of NOx that will result from the proposed rule. This would not take effect until about 2008 depending on various circumstances. There is no effect on local government.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NON-GOVERNMENTAL GROUPS (Summary)

It is anticipated that this proposed rule will affect about 26 facilities that operate industrial boilers and stationary gas turbines in the Baton Rouge ozone nonattainment area. Estimated total costs for all 26 facilities are in the \$3 to \$20 million range. The final costs will depend on the type of technology that each facility will need to install in order to comply with the proposed rule. It is possible that some facilities may be able to use equipment already installed to meet the proposed requirements in which case their costs would be relatively minor. Other facilities may find it necessary to purchase additional equipment, which could entail substantial costs. For these reasons there is considerable variation in the cost estimate. This cost will only be incurred if the proposed rule is required to be implemented.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

Because of the potentially high implementation costs some facilities may shut down, thus affecting competition and employment.

Signature of Agency Head or Designee

LEGISLATIVE FISCAL OFFICER OR
DESIGNEE

James H. Brent, Ph.D, Assistant Secretary
Typed Name and Title of Agency Head or Designee

Date of Signature
LFO 7/1/94

Date of Signature

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR ADMINISTRATIVE RULES**

The following information is requested in order to assist the Legislative Fiscal Office in its review of the fiscal and economic impact statement and to assist the appropriate legislative oversight subcommittee in its deliberation on the proposed rule.

- A. Provide a brief summary of the content of the rule (if proposed for adoption or repeal) or a brief summary of the change in the rule (if proposed for amendment). Attach a copy of the notice of intent and a copy of the rule proposed for initial adoption or repeal (or, in the case of a rule change, copies of both the current and proposed rules with amended portions indicated).

The proposed rule revises LAC 33:III.Chapter 22 emission factors for industrial boilers and stationary gas turbines in the five-parish Baton Rouge ozone nonattainment area. The revised emission factors will be triggered or implemented should the Baton Rouge ozone nonattainment area fail to achieve attainment of the one-hour National Ambient Air Quality Standard for ozone by the Clean Air Act statutory attainment date of November 15, 2005. The proposed rule, if implemented, will lower NO_x emissions by approximately 3,000 tons annually.

- B. Summarize the circumstances which require this action. If the Action is required by federal regulation, attach a copy of the applicable regulation.

On April 24, 2003, the Environmental Protection Agency reclassified or “bumped up” by operation of law, the Baton Rouge ozone nonattainment area from a classification of “serious” to “severe”, effective June 23, 2003 (68 FR 20077). The five-parish Baton Rouge ozone nonattainment area includes the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge. Under section 182(c)(9) of the 1990 Clean Air Act, area plans must include requirements for contingency provisions to take effect without further action by the state upon a failure by the state to meet the applicable milestone. The proposed rule contains such contingency provisions which will take effect in the event that the Baton Rouge ozone nonattainment area fails to come into compliance with the one-hour National Ambient Air Quality Standard for ozone by the attainment date of November 15, 2005.

- C. Compliance with Act II of the 1986 First Extraordinary Session
 - (1) Will the proposed rule change result in any increase in the expenditure of funds? If so, specify amount and source of funding.

This proposed rule will not result in any increase in the expenditure of funds.

- 2) If the answer to (1) above is yes, has the Legislature specifically appropriated the funds necessary for the associated expenditure increase?

- (a) Yes. If yes, attach documentation.
- (b) No. If no, provide justification as to why this rule change should be published at this time.

This proposed rule will not result in any increase in the expenditure of funds.

FISCAL AND ECONOMIC IMPACT STATEMENT

WORKSHEET

I. A. COSTS OR SAVINGS TO STATE AGENCIES RESULTING FROM THE ACTION PROPOSED

1. What is the anticipated increase (decrease) in costs to implement the proposed action?

There will be no additional costs or savings to state governmental units as a result of this rule.

COSTS	FY 03-04	FY 04-05	FY 05-06
PERSONAL SERVICES			
OPERATING EXPENSES			
PROFESSIONAL SERVICES			
OTHER CHARGES			
EQUIPMENT			
TOTAL	0	0	0
MAJOR REPAIR & CONSTR.	0	0	0
POSITIONS (#)	0	0	0

2. Provide a narrative explanation of the costs or savings shown in "A.1.", including the increase or reduction in workload or additional paperwork (number of new forms, additional documentation, etc.) anticipated as a result of the implementation of the proposed action. Describe all data, assumptions, and methods used in calculating these costs.

There are no costs or savings associated with the proposed rule. Existing staff will absorb any workload adjustment.

3. Sources of funding for implementing the proposed rule or rule change.

SOURCE	FY 03-04	FY 04-05	FY 05-06
STATE GENERAL FUND			
AGENCY SELF-GENERATED			
DEDICATED			
FEDERAL FUNDS			
OTHER (Specify)			
TOTAL	0	0	0

4. Does your agency currently have sufficient funds to implement the proposed action? If not, how and when do you anticipate obtaining such funds?

No additional funds are required to implement the proposed action.

B. COST OR SAVINGS TO LOCAL GOVERNMENTAL UNITS RESULTING FROM THE ACTION PROPOSED.

1. Provide an estimate of the anticipated impact of the proposed action on local governmental units, including adjustments in workload and paperwork requirements. Describe all data, assumptions and methods used in calculating this impact.

No impact on local governmental units is anticipated.

2. Indicate the sources of funding of the local governmental unit which will be affected by these costs or savings.

No impact on local governmental units is anticipated.

FISCAL AND ECONOMIC IMPACT STATEMENT

WORKSHEET

II. EFFECT ON REVENUE COLLECTIONS OF STATE AND LOCAL GOVERNMENTAL UNITS

A. What increase (decrease) in revenues can be anticipated from the proposed action?

State government emissions fee collections are estimated to be reduced by approximately \$40,000, due to the reductions of about 3,000 tons per year of NOx that will result from the proposed rule. This would not take effect until about 2008 depending on various circumstances. There is no effect on local government.

REVENUE INCREASE/DECREASE	FY 03-04	FY 04-05	FY 05-06
STATE GENERAL FUND _____			
AGENCY SELF-GENERATED _____			
RESTRICTED FUNDS* _____			
FEDERAL FUNDS _____			
LOCAL FUNDS _____			
TOTAL	0	0	0

*Specify the particular fund being impacted.

B. Provide a narrative explanation of each increase or decrease in revenues shown in "A." Describe all data, assumptions, and methods used in calculating these increases or decreases.

State government emissions fees collections are estimated to be reduced by about \$40,000 per year due to emissions reductions that will result from the implementation of the proposed rule.

III. COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS

A. What persons or non-governmental groups would be directly affected by the proposed action? For each, provide an estimate and a narrative description of any effect on costs, including workload adjustments and additional paperwork (number of new forms, additional documentation, etc.), they may have to incur as a result of the proposed action.

It is anticipated that this proposed rule will affect about 26 facilities that operate industrial boilers and stationary gas turbines in the Baton Rouge ozone nonattainment area. Estimated total costs for all 26 facilities are in the \$3 to \$20 million range. The final costs will depend on the type of technology that each facility will need to install in order to comply with the proposed rule. It is possible that some facilities may be able to use equipment already installed to meet the proposed requirements in which case their costs would be relatively minor. Other facilities may find it necessary to purchase additional equipment, which could entail substantial costs. For these reasons there is considerable variation in the cost estimate. This cost will only be incurred if the proposed rule is required to be implemented.

B. Also provide an estimate and a narrative description of any impact on receipts and/or income resulting from this rule or rule change to these groups.

No estimates of the impact on receipts or income are available. If the proposed rule is implemented some facilities may shut down.

IV. EFFECTS ON COMPETITION AND EMPLOYMENT

Identify and provide estimates of the impact of the proposed action on competition and employment in the public and private sectors. Include a summary of any data, assumptions and methods used in making these estimates.

Implementation of the proposed rule may result in some facilities shutting down. This could have an effect on competition and employment.