

Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 1. General Provisions

§111. Definitions

A. When used in these rules and regulations, the following words and phrases shall have the meanings ascribed to them below.

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Ozone Exceedance—a daily maximum 8-hour ~~hourly~~ average ozone measurement that is greater than the value of the standard.

* * *

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 15:1061 (December 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:777 (August 1991), LR 21:1081 (October 1995), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2444 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:808 (May 2006), LR 32:**.

Chapter 5. Permit Procedures

§504. Nonattainment New Source Review Procedures

A. ...

1. For an area that is designated ~~incomplete data, transitional nonattainment, marginal, moderate, serious, or severe~~ nonattainment for the ozone national ambient air quality standard (NAAQS), VOC and NO_x are the regulated pollutants under this Section. VOC and NO_x emissions shall not be aggregated for purposes of determining major stationary source status and significant net emissions increases.

2. Except as specified in Subsection M of this Section, ~~The~~ potential to emit of a stationary source shall be compared to the major stationary source threshold values listed in Subsection L, Table 1 of this Section to determine whether the source is major.

3. Except as specified in ~~Paragraph A.5~~ Subsection M of this Section, the emissions increase that would result from a proposed modification, without regard to project decreases, shall be compared to the trigger values listed in Subsection L, Table 1 of this Section to determine whether a calculation of the net emissions increase over the contemporaneous period must be performed.

a. - d. ...

4. ~~Except as specified in Subsection M of this Section, the~~ net emissions increase shall be compared to the significant net emissions increase values listed in Subsection L, Table 1 of this Section to determine whether a nonattainment new source review must be performed.

5. - 7. ...

8. For applications deemed administratively complete in accordance with LAC 33:III.519.A on or after December 20, 2001 and prior to June 23, 2003, and for which the nonattainment new source review (NNSR) permit was issued in accordance with Subsection D of this Section on or before June 14, 2005, the provisions of this Section governing serious ozone nonattainment areas ~~shall apply~~ applied to VOC and NO_x increases. For applications deemed administratively complete in accordance with LAC 33:III.519.A on or after June 23, 2003, and for which the NNSR permit was issued in accordance with Subsection D of this Section on or before June 14, 2005, the provisions of this Section governing severe ozone nonattainment areas ~~shall apply~~ applied to VOC and NO_x increases.

B. - D.4. ...

5. ~~Except as specified in Subsection M of this Section, Emission~~ offsets shall provide net air quality benefit, in accordance with offset ratios listed in Subsection L, Table 1 of this Section, in the area where the NAAQS national ambient air quality standard for that pollutant is violated.

D.6. - F. ...

1. All emission reductions claimed as offset credit shall be from decreases of the same pollutant or pollutant class (e.g., VOC) for which the offset is required. Interpollutant trading, for example using a NO_x credit to offset a VOC emission increase, is not allowed. Except as specified in Subsection M of this Section, ~~Offsets~~ shall be required at the ratio specified in Subsection L, Table 1 of this Section.

2. - 7.c. ...

8. Emissions reductions achieved by shutting down an existing ~~source~~ emissions unit or curtailing production or operating hours below baseline levels may be generally credited if such reductions are surplus, permanent, quantifiable, and federally enforceable, and in accordance with the State Implementation Plan (SIP); and if:

a. the shutdown or curtailment occurred after the last day of the base year for the SIP planning process. For purposes of this Subparagraph, the administrative authority may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emissions unit (However, in no event may credit be given for shutdowns that occurred before August 7, 1977.);

b. the shutdown or curtailment occurred on or after the date the permit application or application for emission reduction credits (ERCs) was filed; or

c. the applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit.

F.9. - K. Visibility Impairment. ...

L. Table 1—Major Stationary Source/Major Modification Emission Thresholds

<p>Table 1 Major Stationary Source/Major Modification Emission Thresholds</p>

Pollutant	Major Stationary Source Threshold Values (tons/year)	Major Modification Significant Net Increase (tons/year)	Offset Ratio Minimum
Ozone		Trigger Values	
VOC/NO _x ⁺			
Marginal [†]	100	40(40) ²	1.10 to 1
Moderate	100	40(40) ²	1.15 to 1
Serious	50	25 ³ (5) ⁴	1.20 to 1 w/LAER or 1.40 to 1 internal w/o LAER
Severe	25	25 ³ (5) ⁴	1.30 to 1 w/LAER or 1.50 to 1 internal w/o LAER
<u>Extreme</u>	<u>10</u>	<u>Any increase</u>	<u>1.50 to 1</u>
CO			
Moderate	100	100	>1.00 to 1
Serious	50	50	>1.00 to 1
SO ₂	100	40	>1.00 to 1
PM ₁₀ ¹			
Moderate	100	15	>1.00 to 1
Serious	70	15	>1.00 to 1
Lead	100	0.6	>1.00 to 1

¹For those parishes that are designated incomplete data or transitional nonattainment for ozone, the new source review rules for a marginal classification apply. The requirements of LAC 33:III.504 applicable to major stationary sources and major modifications of PM₁₀ shall also apply to major stationary sources and major modifications of PM₁₀ precursors, except where the administrator determines that such sources do not contribute significantly to PM₁₀ levels that exceed the PM₁₀ NAAQS in the area.

²Consideration of the net emissions increase will be triggered for any project that would increase emissions by 40 tons or more per year, without regard to any project decreases.

³For serious and severe ozone nonattainment areas, the increase in emissions of VOC or NO_x resulting from any physical change or change in the method of operation of a stationary source shall be considered significant for purposes of determining the applicability of permit requirements, if the net emissions increase from the source equals or exceeds 25 tons per year of VOC or NO_x.

⁴Consideration of the net emissions increase will be triggered for any project that would increase VOC or NO_x emissions by five tons or more per year, without regard to any project decreases, or for any project that would result in a 25 ton or more per year cumulative increase in emissions of VOC within the contemporaneous period or of NO_x for a period of five years after the effective date of the rescission of the NO_x waiver, and within the contemporaneous period thereafter.

- VOC = volatile organic compounds
- NO_x = oxides of nitrogen
- CO = carbon monoxide
- SO₂ = sulfur dioxide
- PM₁₀ = particulate matter of less than 10 microns in diameter

M. Notwithstanding the parish's nonattainment status with respect to the 8-hour national ambient air quality standard (NAAQS) for ozone, the provisions of this Subsection shall apply to sources located in the following parishes: Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, major stationary source and major modification significant net increase threshold values and minimum offset ratios established by Subsection L, Table 1 of this Section, the provisions of this Subsection shall apply to sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge as long as each parish's nonattainment designation with respect to the 8-hour national ambient air quality standard (NAAQS) for ozone is "marginal" or "moderate."

1. For an existing stationary source with a potential to emit of 50 tons per year or more of VOC or NO_x, consideration of the net emissions increase will be triggered for any project that would:

a. increase emissions of VOC or NO_x by 25 tons per year or more, without regard to any project decreases;

b. increase emissions of the highly reactive VOC (HRVOC) listed below by 10 tons per year or more, without regard to any project decreases:

i. 1,3-butadiene;

ii. butenes (all isomers);

iii. ethylene;

iv. propylene.

2. The following sources shall provide offsets for any net emissions increase:

a. a new stationary source with a potential to emit of 50 tons per year or more of VOC or NO_x;

b. an existing stationary source with a potential to emit of 50 tons per year or more of VOC or NO_x with a significant net emissions increase of VOC, including HRVOC, or NO_x of 25 tons per year or more.

3. The minimum offset ratio for an offset required by Paragraph M.2 of this Section shall be 1.2 to 1.

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

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§509. Prevention of Significant Deterioration

A. – A.5. ...

B. **Definitions.** For the purpose of this Section, the terms below shall have the meaning specified herein as follows.

Major Modification—

- a. ...
- b. Any significant emissions increase from any emissions unit or net emissions increase at a major stationary source that is significant for volatile organic compounds (VOCs) or nitrogen oxides (NO_x) shall be considered significant for ozone.

c. - d. ...

Major Stationary Source—

- a. - c. ...
- d. a major source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone;
- e. - Table A. ...

Regulated NSR Pollutant—

- a. any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the administrative authority (e.g., volatile organic compounds and nitrogen oxides are precursors for ozone);
- b. - d. ...

Significant—

- a. in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant	Emission Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy of particulate emissions
	15 tpy of PM ₁₀ emissions
Ozone	40 tpy of volatile organic compounds <u>or nitrogen oxides</u>
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy

Pollutant	Emission Rate
Reduced sulfur compounds (including H ₂ S)	10 tpy
Municipal waste combustor organics ¹	0.0000035 tpy
Municipal waste combustor metals ²	15 tpy
Municipal waste combustor acid gases ³	40 tpy
Municipal solid waste landfills emissions ⁴	50 tpy

¹Measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

²Measured as particulate matter.

³Measured as sulfur dioxide and hydrogen chloride.

⁴Measured as nonmethane organic compounds.

b. - c. ...

C. – I.5. ...

a. the emissions increase of the pollutant from a new stationary source or the net emissions increase of the pollutant from a modification would cause, in any area, air quality impacts less than the following amounts:

Carbon monoxide	575 µg/m ³	8-hour average
Nitrogen dioxide	14 µg/m ³	annual average
Particulate matter	10 µg/m ³ of PM ₁₀	24-hour average
Sulfur dioxide	13 µg/m ³	24-hour average
Ozone	No <i>de minimis</i> air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would <u>require the performance of</u> be required to perform an ambient impact analysis including the gathering of ambient air quality data.	
Lead	0.1 µg/m ³	3-month average
Fluorides	0.25 µg/m ³	24-hour average
Total reduced sulfur	10 µg/m ³	1-hour average
Hydrogen sulfide	0.2 µg/m ³	1-hour average
Reduced sulfur compounds	10 µg/m ³	1-hour average

I.5.b. – AA.15.b. ...

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 16:613 (July 1990), amended by the Office of Air Quality

and Radiation Protection, Air Quality Division, LR 17:478 (May 1991), LR 21:170 (February 1995), LR 22:339 (May 1996), LR 23:1677 (December 1997), LR 24:654 (April 1998), LR 24:1284 (July 1998), repromulgated LR 25:259 (February 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2447 (November 2000), LR 27:2234 (December 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2437 (October 2005), LR 31:3135, 3156 (December 2005), LR 32:**.

Chapter 6. Regulations on Control of Emissions through the Use of Emission Reduction Credits Banking

§607. Determination of Creditable Emission Reductions

A. - C. ...

1. If the design value for the nonattainment area is above the ~~1-hour~~ national ambient air quality standard (NAAQS) for ozone, the department shall compare the current total point-source emissions inventory for the modeled parishes to the base case inventory, except that, beginning with the 2005 emissions inventory, this comparison shall be made to the base line inventory.

2. - 4.a. ...

i. if the design value for the nonattainment area is above the ~~1-hour~~ NAAQS for ozone and the current total point-source inventory for the modeled parishes exceeds the base case inventory or base line inventory, as appropriate per Paragraph C.1 of this Section, baseline emissions shall be the lower of actual emissions, adjusted allowable emissions determined in accordance with Paragraph C.3 of this Section, or emissions attributed to the stationary point source(s) in question in the base case or base line inventory, as appropriate; or

ii. if the design value for the nonattainment area is not above the ~~1-hour~~ NAAQS for ozone or the current total point-source inventory for the modeled parishes does not exceed the base case inventory or base line inventory, as appropriate per Paragraph C.1 of this Section, baseline emissions shall be the lower of actual emissions or adjusted allowable emissions determined in accordance with Paragraph C.3 of this Section; and

C.4.b. - D. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:877 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1622 (September 1999), LR 28:302 (February 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

Chapter 7. Ambient Air Quality

§709. Measurement of Concentrations—PM₁₀, PM_{2.5}, Sulfur Dioxide, Carbon Monoxide, Atmospheric Oxidants, Nitrogen Oxides, and Lead

A. PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, atmospheric oxidants, nitrogen oxides, and lead shall be measured by the methods listed in LAC 33:III.711.C, Table 2 or by such other equivalent methods approved by the department. The publications or their replacements listed in LAC 33:III.711.C, Table 2 are incorporated as part of these regulations by reference.

B. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§711. Tables 1, 1a, 2—Air Quality

A. Table 1. Primary Ambient Air Quality Standards

Table 1. Primary Ambient Air Quality Standards		
Air Contaminant	Maximum Permissible Concentration	
PM ₁₀	50 µg/m ³	(Annual geometric arithmetic mean)
	150 µg/m ³	(Maximum 24-hour concentration not to be exceeded more than once per year)
PM _{2.5}	15.0 µg/m ³	(Annual arithmetic mean)
	65 µg/m ³	24-hour
Sulfur Dioxide (SO ₂)	80 µg/m ³	or 0.03 ppm (Annual arithmetic mean)
	365 µg/m ³	or 0.14 ppm (Maximum 24-hour concentration not to be exceeded more than once per year)
Carbon Monoxide (CO)	10,000 µg/m ³	or 9 ppm (Maximum 8-hour concentration not to be exceeded more than once per year)
	40,000 µg/m ³	or 35 ppm (Maximum 1-hour concentration not to be exceeded more than once per year)

Table 1. Primary Ambient Air Quality Standards		
Air Contaminant	Maximum Permissible Concentration	
Ozone	0.08 ppm daily maximum 8-hour average 235 µg/m ³	The standard is met at an ambient air monitoring site when the 3-year average of the annual fourth highest daily maximum 8-hour average ozone concentrations is less than or equal to 0.08 ppm, as determined in accordance with 40 CFR 50, Appendix I. (0.12 ppm) The standard is attained when the expected number of days per calendar year with maximum hourly average concentration above 0.12 ppm [235 micrograms per cubic meter (µg/m ³)] is equal to or less than one as determined by 40 CFR 50 Appendix H.
Nitrogen Dioxide (NO ₂)	100 µg/m ³	(0.05 ppm) (Annual arithmetic mean)
Lead	1.5 µg/m ³	(Maximum arithmetic mean averaged over a calendar quarter)

1. - 2. ...

B. Table 1a. Secondary Ambient Air Quality Standards

Table 1a. Secondary Ambient Air Quality Standards		
Air Contaminant	Maximum Permissible Concentration	
PM ₁₀	50 µg/m ³	(Annual arithmetic mean)
	150 µg/m ³	(Maximum 24-hour concentration not to be exceeded more than once per year)
PM _{2.5}	15.0 µg/m ³	(Annual arithmetic mean)
	65 µg/m ³	24-hour
Sulfur Dioxide (SO ₂)	1,300 µg/m ³	(Maximum 3-hour concentration not to be exceeded more than once per year)
Carbon Monoxide (CO)	10,000 µg/m ³	or 9 ppm (Maximum 8-hour concentration not to be exceeded more than once per year)
	40,000 µg/m ³	or 35 ppm (Maximum 1-hour concentration not to be exceeded more than once per year)

Table 1a. Secondary Ambient Air Quality Standards		
Air Contaminant	Maximum Permissible Concentration	
Ozone	0.08 ppm daily maximum 8-hour average 235 µg/m ³	The standard is met at an ambient air monitoring site when the 3-year average of the annual fourth highest daily maximum 8-hour average ozone concentrations is less than or equal to 0.08 ppm, as determined in accordance with 40 CFR 50, Appendix I. (0.12 ppm) The standard is attained when the expected number of days per calendar year with maximum hourly average concentration above 0.12 ppm [235 micrograms per cubic meter (µg/m³)] is equal to or less than one as determined by 40 CFR 50 Appendix H.
Nitrogen Dioxide (NO ₂)	100 µg/m ³	(0.05 ppm) (Annual arithmetic mean)
Lead	1.5 µg/m ³	(Maximum arithmetic mean averaged over a calendar quarter)

1. - 2. ...

C. Table 2. Ambient Air—Methods of Contaminant Measurement

Table 2. Ambient Air—Methods of Contaminant Measurement		
Air Contaminant	Sampling Interval	Analytical Method
PM ₁₀	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix J.
PM _{2.5}	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix L.
Sulfur Dioxide	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix A.
	Continuous	Any method complying with reference or equivalent methods in Title 40, Code of Federal Regulations, Part 53, Subpart B.
Total Oxidants	Continuous	Any method complying with reference or equivalent methods in Title 40, Code of Federal Regulations, Part 50, Appendix D, and Part 53, Subpart B.

Table 2. Ambient Air—Methods of Contaminant Measurement		
Air Contaminant	Sampling Interval	Analytical Method
Carbon Monoxide	Continuous	Any method complying with reference or equivalent methods in Title 40, Code of Federal Regulations, Part 50, Appendix C, and Part 53, Subpart B.
Nitrogen Dioxide	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix F.
Lead	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix G.
<u>Total Suspended</u>	<u>24 hours</u>	<u>Any method complying with Particulate (TSP) reference method in Title 40, Code of Federal Regulations, Part 50, Appendix B.</u>

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.