APPENDIX A

GLOSSARY

Activity Number: This number identifies a specific permitting action for each Agency Interest Number (see definition below). It is largely used to refer to the permitting action within LDEQ during processing. However, this number can be useful to refer to permitting actions that are not assigned permit numbers, such as exemptions, variances, letters, etc. This number is shown on the first page of each permitting action issued by LDEQ. For permitting actions, it begins with the letters PER and is then followed by an eight (8) digit number.

Actual Emissions: The actual rate of emissions of a pollutant from an emissions unit as determined in accordance with the following:

a. In general, actual emissions as of a particular date equals the average rate, in tons per year, at which the unit actually emitted during a two-year period which precedes the particular date and which is representative of normal major stationary source operation. A different time period shall be allowed upon a determination by the DEQ that the time period is more representative of normal major stationary source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

b. For any emission unit which has not begun normal operations on the particular date, the actual emissions shall equal the allowable emissions of the unit. **(LAC 33:III.504.G and LAC 33:III.509.B)**

Administrative Amendment: A revision to a permit that would not violate any applicable requirements or standard and would meet the one of conditions identified in LAC 33:III.521.A.1 through A.6. In addition, an administrative amendment may be used to incorporate a new activity or technical correction under General Permit Condition XVII. **(LAC 33:III.521)**

Affected States: Any state contiguous to Louisiana whose air quality may be affected or any state which is within 50 miles of the source for which a Part 70 operating permit, permit revision, or permit renewal is being proposed. **(LAC 33:III.502)**

Agency Interest Number: Also known as the AI number, the Agency Interest Number is a unique identifier assigned to each facility. Existing facilities in the state have AI numbers assigned to them. When contacting LDEQ about a facility, it is extremely useful to mention this number, since all of the data LDEQ holds on a facility is organized by AI number. Having this number handy will ensure faster service.

Air Contaminants: Particulate matter, dust, fumes, gas, mist, smoke, or vapor or any combination thereof produced by process other than natural. **(LAC 33:III.111)**

Air Toxics Program: State air quality program contained in LAC 33:III.Chapter 51, by which emissions of toxic air pollutants are controlled through MACT standards and ambient air standards. **(LAC 33:III.Chapter 51)**

Allowable Emissions: The emission rate of a major stationary source calculated using the maximum rated capacity of the source, unless the source is subject to federally enforceable limits

which restrict the operating rate, or hours of operation, or both and the most stringent of the following:

a. any applicable standard set forth in 40 CFR Part 60, 61 or 63;
b. any applicable State Implementation Plant emissions limitation including those with a future compliance date; or
c. the emissions rate specified as a federally enforceable permit condition, including those with a future compliance date. **(LAC 33:III.504.G and LAC 33:III.509.B)**

Alternative Operating Scenarios: An element of operational flexibility which, if permitted, allows an owner/operator to operate in a different mode or configuration without prior notification to the LDEQ. Any alternative scenarios must be described in the permit application and the emissions impact quantified. **(LAC 33:III.507.G.5)**

Alternative Emissions Limits Under the State Implementation Plan (SIP): An element of operational flexibility that may be used to comply with the SIP. This option provides that the owner/operator may request that an alternative emission limit be specified in the permit if the SIP allows for the determination of an alternative emission limit equivalent. The owner/operator may also trade increases and decreases in emissions at the permitted facility where the permit does not already allow such trading if the SIP provides for emission trades without a permit revisions. Further requirements associated with requesting alternative emissions limits under the SIP are provided in **LAC 33:III.507.G.4**.

Ambient Air Standard: Standards which set a maximum concentration for a particular pollutant in ambient air concentrations.

Annual Compliance Certification: A positive statement by a responsible official stating that the facility is in compliance with all applicable requirements identified in the permit. Certification is required initially with Part 70 permit application and annually after permit approval.

APDU: An acronym standing for Air Permits Data Upload. This is a computer program that facilitates the submittal of the information found on an EIQ through an internet based interface. A more thorough discussion of APDU can be found in the *How To Apply For A Permit* chapter. APDU can only be accessed through the LDEQ web site.

Applicable Requirements: Includes all air quality regulations which impose control provisions or emission standards upon equipment, activities, or processes.

Application Shield: The Application Shield shields sources during the interim period between submittal of a complete application and permit issuance. Application Shields are provided for in LAC 33:III.507.E.3. In short, the application shield protects the source from enforcement action that would arise from not having a permit during the time the permit application is being processed. This situation would arise when an applicant's current permit expires during the time that the applicant's permit renewal application is being processed.

There are several important points to note about the application shield:

- To be eligible for the application shield, a source must make a timely submission of the application. See the guidance under the specific type of permit for which application is made to determine what constitutes a timely submittal.
- The application shield only applies if the application is timely *and* complete.
- The application shield applies to the initial Title V permit and to renewals.

Neither the completeness determination nor the application shield alleviates the permit applicant from the need to provide further information which the permitting authority determines necessary for processing the permit application. If a permit applicant does not submit required information on or before a written deadline, the application shield may be lost. The application shield starts at the earlier of the two following conditions:

1. The application is deemed administratively complete by LDEQ. See the *Administratively Complete* section of the *What Happens To My Permit After It Is Submitted?* section for more details.

2. Sixty days after the application is submitted if the completeness review has not been completed (default completeness).

The application shield is codified in Part 70 at 70.7(b), and is described in the preamble to the final rule on page 32275 of the July 21, 1992, Federal Register.

Area Sources: Sources which are not classified as major sources.

Authorized Company Agent: An individual who must sign and date the EIQ form attesting to the truth and accuracy of the report.

Baseline Concentration: That ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

a. the actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided below,
b. the allowable emissions of major stationary sources which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.

The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

a. actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
b. actual emissions increases and decreases at any stationary source occurring after the minor source baseline date. **(LAC 33:III.509)**

Best Available Control Technology: For PSD, the maximum degree of reduction for a pollutant that the Department of Environmental Quality determines, on a case-by-case basis, is achievable after taking into account energy, environmental and economic impact and other costs. **(LAC 33:III.509)**

Certification: A statement made by a responsible official that a document (i.e., permit application, report) is true, accurate and complete. The certification must state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the document are true, accurate, and complete.

Clarification of Non-Applicability: Regulations apply to this general type of emission source (i.e. vents, furnaces, towers, fugitives), but do not apply to this particular emission source.

Company Confidential: Proprietary information that the applicant does not wish to become part of the public record of its permit application is considered "Company Confidential". For example, an applicant may consider a given unit's production rate to be proprietary information that it does not want to become part of the public record. To ensure special handling, the applicant must follow specific procedures for confidential information. Note that any data used in emission calculations will not be deemed confidential. **(LAC 33:III.517.F, and 40 CFR Chapter 1, part 2, Subpart B.)**

Completeness Checklist: A form developed to assist the applicant and LDEQ in ensuring that all necessary information is included in the Part 70 operating permit application, so that the application may be deemed "complete" and allowed the protection of the application shield.

Compliance Certification Requirements: Those items that require positive affirmation by a responsible official of the site applying for the permit. The official must certify that the application is complete and that the site is in compliance with all applicable requirements. **(LAC 33:III.517)**

Construction: Construction is any physical change, or change in the method of operation, which results in a change in actual emissions. Construction includes the activities required to modify or build a new facility, including foundations and underground pipework. For Nonattainment New Source Review (NNSR) and Prevention of Significant Deterioration (PSD). **(LAC 33:III.504.G and LAC 33:III.509.B)**

Contemporaneous Period: For the Prevention of Significant Deterioration (PSD) program, the period from five years before construction commences on a particular change to the time normal operation commences for that change. For NNSR, the portion of the calendar year that the proposed increase will occur up to the start of operation of the project plus the prior four consecutive calendar years.

Control Technique Guidelines (CTGs): Guidelines issued by EPA to provide general definitions of RACT for specific industrial categories.

Continuous Record: Means documentation either in hard copy or computer readable form, of data values measured at least once every 15 minutes and recorded at a frequency specified by a regulation or emission standard.

Continuous Emissions Monitoring System (CEMS): Equipment used to sample and monitor emissions or process parameters on a ongoing basis.

Control Device(s)/Work Practices: Methods by which emissions are reduced or minimized. This includes equipment (such as a flare or closed vent system) or programs such as Leak Detection and Repair (LDAR) for fugitive emissions.

Criteria Pollutants: Pollutants for which National Ambient Air Quality Standards (NAAQS) were established in the 1970 Clean Air Act: Sulfur Dioxide (SO_2), Nitrogen Oxides (NO_x), Particulate Matter (PM_{10}), Carbon Monoxide (CO), Ozone (O_3), and Lead. Since NOx and Volatile Organic compounds (VOCs) are considered ozone precursors, they are regulated to control ozone levels.

De minimus: a quantity below which certain requirements do not apply.

De minimus Significant Net Emissions Increase: A level of emissions specified in the Non-Attainment New Source Review (NNSR) program above which emission offset credits and Lowest Achievable Emission Rate (LAER) technology are required.

Designated Representative: A responsible person authorized by the owners and operators of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with Subpart B of 40 CFR Part 72, to represent and legally bind each owner and operator, as a matter of federal law, and in matters pertaining to the Acid Rain Program. Whenever the term "responsible official" is used in 40 CFR Part 70 or in any other regulations implementing Title V of the Act, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program. **(LAC 33:III.505)**

De Novo Review: A re-examination of a LDEQ decision by a Louisiana court. The review will be conducted as if the issue has not been previously rendered by the Agency.

Dispersion Modeling: An analytical technique used to evaluate the impact of emissions into the atmosphere at various distances from the source. Dispersion modeling may be required for a Prevention of Significant Deterioration ("PSD") permit application under the Louisiana Comprehensive Toxic Air Pollutant Emission Control Program, or to ensure compliance with NAAQS.

Emission Source/Identifier: A point, area, or volume air emission source or a regulated section of a production unit at a facility.

Emission Reduction Credit Banking Program: Louisiana air program contained in LAC 33:III.Chapter 6 which establishes the mechanism which sources identify and preserve or acquire emission reductions for NSR offsets and for netting purposes. This program applies to nitrogen oxides (NOx) and volatile organic compounds (VOC) for sources in federally designated ozone nonattainment areas. **(LAC 33:III.Chapter 6)**

Emissions Trading Under a Cap: The trading of emissions increases and decreases in a permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. **(LAC 33:III.507.G.3)**

Emissions Unit: Collection of point and area sources within a facility or part of facility can be a single process unit or multiple process units.

Enhanced Monitoring: The methods used by an owner or operator to detect deviations from emission limits with sufficient representativeness, accuracy, precision, reliability, frequency, and timeliness in order to determine if compliance is continuous during a reporting period. Such monitoring shall be conducted through an Enhanced Monitoring Protocol established in accordance with proposed **40 CFR Part 64, 40 CFR §64.2 (proposed rule).**

Enhanced Monitoring Protocol: The methodology, and all installation, equipment, performance, operation, and quality assurance requirements applicable to such methodology, developed by the owner or operator and approved by the permitting authority for the purpose of conducting Enhanced Monitoring. **40 CFR §64.2 (proposed rule)**

Established Monitoring Techniques: A monitoring methodology that has been demonstrated to be a feasible means of assessing compliance with emission limitations or standards for a specific type of emissions unit.

Federally Applicable Requirements: Any of the following (including requirements which have been promulgated or approved by EPA through rulemaking at the time of permit issuance but which have future effective dates) as they apply to a source regulated under Louisiana's Air Operating permit program:

1) any standard or other requirement provided for in the Louisiana State Implementation Plan approved or promulgated by EPA through rulemaking under Title I of the Clean Air Act that implements the relevant requirements of the Clean Air Act, including any revision to that plan promulgated in 40 CFR part 52, Subpart T;

2) any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under Title I of the Clean Air Act, including Part C (Prevention of Significant Deterioration) or Part D (nonattainment);

3) any standard or other requirement under Section 111 (New Source Performance Standards) of the Clean Air Act, including Section 111(d) (Existing Source performance Standards);

4) any standard or other requirement under Section 112 (Hazardous Air Pollutants) of the Clean Air Act, including any requirement concerning accident prevention under Section 112(r)(7) of the Clean Air Act;

5) any standard or other requirement of the Acid Rain Program under Title IV of the Clean Air Act or of the regulations promulgated thereunder;

6) any requirements established pursuant to Section 504(b) (Monitoring and Analysis) or Section 114(a)(3) (Enhanced Monitoring and compliance Certification) of the Clean Air Act;

7) any standard or other requirement governing solid waste incineration under Section 129 (Solid Waste Combustion) of the Clean Air Act;

8) any standard or other requirement for consumer and commercial products under Section 183(e) (Control of Emissions, Federal Ozone Measures) of the Clean Air Act;

9) any standard or other requirement for tank vessels under Section 183(f) (Tank Vessel Standards) of the Clean Air Act;

10) any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Clean Air Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit; and

11) any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the Clean Air Act (Prevention of Significant Deterioration), but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Clean Air Act. **(LAC 33:III.502)**

Federally Enforceable: All limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60 - 64 requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program. **(40 CFR 51.165.a.xiv; LAC 33:III.504.G)**

Federally Enforceable Permit Term: Any specific permit term or condition contained within an operating permit that the owner proposes to maintain compliance with federally enforceable requirements and any applicable State regulations which are in the EPA approved State Implementation Plan.

Federally Enforceable Regulation: Any regulation that is included in the State Implementation Plan (SIP). A copy of the regulations included in the SIP can be found in 40 CFR 52.970 – 999.

Federally Enforceable Specific Condition: It is important to understand which conditions are considered federally enforceable and which ones are considered State Only Specific Conditions. When defining this term, there are three different types of regulations to consider. They are Federal Regulations, regulations from LAC 33 that are Federally Enforceable Regulations, and regulations from LAC 33 that are not Federally Enforceable Regulations.

Permit conditions that originate from a Federal Regulation are Federally Enforceable Specific Conditions. This is regardless of the type of permit in which the condition is placed.

For permit conditions that originate from LAC 33 that are Federally Enforceable Regulations (which means that they are included in the State Implementation Plan):

- When the condition is placed in a State Operating Permit, EPA has **no** right to bring enforcement actions against a violation. This means that the condition is **not** federally enforceable.
- When the condition is placed in a Title V permit, EPA has the right to bring enforcement actions against a violation. This means that the condition **is** federally enforceable.
- When the condition is placed in any permit for which there is a public participation timeframe, EPA has the right to bring enforcement actions against a violation. This means that the condition **is** federally enforceable. This happens most often in the case of a Synthetic Minor Source Permit.

For permit conditions that originate from LAC 33 that are **not** Federally Enforceable Regulations (which means that they are not included in the State Implementation Plan):

- When the condition:
  - is placed in any permit, regardless of type,
  - is used to satisfy the monitoring requirements under Part 70 when an applicable federal regulation does not require periodic testing or monitoring, and
  - is placed in any permit for which there is a public participation timeframe,

then, EPA has the right to bring enforcement actions against a violation. This means that the condition **is** federally enforceable.

For any Federally Enforceable Specific Condition within a permit, EPA has the right to bring enforcement actions against a violation.

Federal Regulation: Any regulation that appears in the Code of Federal Regulations or in the Federal Register that is authored by EPA.

Fee Schedule Listing: A listing of the annual fees required for funding the monitoring, investigation and other activities required to be conducted for the maintenance of a safe and healthful environment by the Department of Environmental Quality. Fees are required for all permits, licenses, registrations, and variances. The fee listing is found in **LAC 33:III.223**.

General Permit Condition XVII: A general permit condition established by LDEQ to authorize small, typical emissions which are associated with routine operations that are under control upon release and are predictable in nature.

Grandfathered Sources: Those facilities which were under actual construction or operation as of June 19, 1969, and granted grandfathered status by LDEQ and not modified or had a change of ownership.

Groundwater Certification: Groundwater certifications are required by the LDEQ Groundwater Division prior to construction of new facilities or modifications that require an air quality permit. The certification is to verify that construction is not over contaminated soil or groundwater or if there is contamination, that remediation efforts will not be impeded by the construction.

Hazardous Air Pollutants (HAPs): A list of substances that, pursuant to section 112 of the Clean Air Act, have been designated as hazardous air pollutants. **(Clean Air Act 42 U.S. C. 7401 through 7671(q) Section 112, 40 CFR 61.01, 40 CFR 61.101)**

Hazardous Organic NESHAP (HON): The rule applies to chemical manufacturing process units that are: (1) part of a major source as defined in section 112 of the Act; (2) produce as a primary product a Synthetic Organic Chemical Manufacturing Industry (SOCMI) chemical listed in Table 1 of Subpart F; and (3) use as a reactant or manufactures as a product, by product, or co-product, one or more of the organic HAP's listed in Table 2 of Subpart F. A chemical manufacturing process unit is subject to the provisions of Subpart F, G, and H only if all of the above three conditions are satisfied. Table 1 of Subpart F is a list of 385 chemicals which defines SOCMI products that may be produced by a HAP-emitting process.

For the SOCMI source category, a source comprises all the SOCMI chemical manufacturing process units that are subject to the rule and are located at contiguous or adjoining properties under common control. Subpart (F) defines the SOCMI source as the collection of process vents; storage vessels; transfer racks; wastewater and the associated treatment residuals; and pumps, compressors, agitators, pressure systems, open-ended valves or lines, valves, connectors, and instrumentation systems in the relevant manufacturing process units.

List of Insignificant Activities: A list of activities approved by the permitting authority as insignificant on the basis of size, emission or production rate, or type of pollutant. **(40 CFR 70.5.c, LAC 33:III.501.5)**

Louisiana Toxic Air Pollutant Ambient Air Standards: These standards set atmospheric concentration limits on certain pollutants that are recognized by the State of Louisiana to be detrimental to the general health in concentrations that exceed the listed standards. These standards can be found in LAC 33:III.5112, Table 51.2.

Lowest Achievable Emission Rate (LAER): Lowest achievable emission rate means, for any source, the more stringent rate of emissions based on the following:

a. the most stringent emissions limitation which is contained in the implementation plan of any State for such class or category of major stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

b. the most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance. **(40 CFR 51.165, LAC 33:III.504.G)**

MACT Floor: Maximum Achievable Control Technology (MACT) floor means:

(1) For existing sources:

(i) The average emission limitation achieved by the best performing 12 percent of the existing sources in the United States (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined in Section 171 of the Act) applicable to the source category and prevailing at the time, in the category or subcategory, for categories and subcategories of stationary sources with 30 or more sources; or

(ii) The average emission limitation achieved by the best performing five sources in the United States (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory, for a category or subcategory of stationary sources with fewer than 30 sources;

(2) For new sources, the emission limitation achieved in practice by the best controlled similar source. **(40 CFR 63.51)**

Major Source: A source can be defined as a major source under any of the following five conditions:

1. The entire facility or unit to be permitted emits or has the potential to emit 10 tons per year (TPY) or more of any single Hazardous Air Pollutant (HAP), or 25 TPY or more of any combination of HAP. This is known as being a Major Source of HAP. Toxic Air Pollutants (TAP) that are not HAP are not to be summed for major source determination under this condition.

2. The entire facility or unit to be permitted emits or has the potential to emit 100 TPY or more of any single regulated air pollutant, except for greenhouse gases, excluding those regulated solely under Section 112(r) of the Clean Air Act.

3. The entire facility or unit to be permitted emits or has the potential to emit 100 TPY or more of greenhouse gases on a mass basis (i.e., no global warming potentials applied) **and** 100,000 TPY or more of CO_2e.

4. For a nonattainment area, the entire facility or unit to be permitted emits or has the potential to emit, for any pollutant, amounts in excess of those found in Table 1 of LAC 33.III.504.L. The applicable amounts will differ according to the nonattainment area's classification.

5. The entire facility or unit to be permitted emits or has the potential to emit 10 tons per year (TPY) or more of any single Toxic Air Pollutant (TAP), or 25 TPY or more of any combination of TAP. This is known as being a Major Source of TAP. If a facility is defined as a major source solely based on this condition, it is not required to obtain a Part 70 permit. See the discussion of TAP earlier in this document for a discussion of Toxic Air Pollutants.

Louisiana does not allow portions of the facility that have different first two digits of the SIC

codes to be separate when determining the major source status.

Major Source Baseline Date: means:

a. in the case of particulate matter and sulfur dioxide, January 6, 1975, and
b. in the case of nitrogen dioxide, February 9, 1988. **(LAC 33:III.509)**

Malfunction: Any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Maximum Achievable Control Technology (MACT): The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques including, but not limited to, measures that:

a. reduce the volume of, or eliminate emissions of such pollutants through process changes, substitution of materials, or other modifications;

b. enclose systems or processes to eliminate emissions;

c. collect, capture, or treat such pollutants when released from a process, stack, storage, or fugitive emissions point;

d. are design, equipment, work practice, or operational standards (including requirements for operator training or certification); or

e. are a combination of the above. **(LAC 33:III.5103.A)**

Minor Source: A source that emits and has the potential to emit air contaminants in amounts less than the Major Source thresholds. See the definition of Major Source for details.

Minor Source Baseline Date: means the earliest date after the trigger date on which a major stationary source or a major modification subject to LAC 33:III.509 submits a complete application under the relevant regulations. The trigger date is:

a. in the case of particulate matter and sulfur dioxide, August 7, 1977; and,
b. in the case of nitrogen dioxide, February 9, 1988. **(LAC 33:II.509)**

Mobile Sources: Non-stationary sources including but not limited to automobiles, trucks, locomotives, and airplanes.

Modification: Any change in a facility including, but not limited to, a physical change, a change in the method of operation, a change in the raw materials or feedstocks used for products manufactured which increases the amount of any air pollutant emitted by such facility or which results in the emission of any air pollutant not previously emitted, except (1) routine maintenance

repair and replacement shall not be considered physical changes and (2) an increase in production rates (up to capacity) or hours of operations shall not be considered a change in the method of operation. **(LAC 33:III.111)**

Modification Under 112(g): A physical change in, or change in the method of operation of, a major source which results in a greater than de minimus increase in actual emissions of a hazardous air pollutant shall not be considered a modification, if such increase in the quantity of actual emissions of any hazardous air pollutant from such source will be offset by an equal or greater decrease in the quantity of emissions of another hazardous air pollutant (or pollutants) from such source which deemed more hazardous, pursuant to guidance issued by the Administrator.

NAAQS: This is an acronym that stands for National Ambient Air Quality Standards. These standards set atmospheric concentration limits on certain pollutants. No source is allowed, under any circumstances, to emit any of the listed pollutants in a manner that will cause a violation of these standards. These standards are listed in the following table.

National Ambient Air Quality Standards

	Primary Standards		Secondary Standards	
Pollutant	**Level**	**Averaging Time**	**Level**	**Averaging Time**
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour	None	
	35 ppm (40 mg/m^3)	1-hour		
Lead	0.15 $\mu g/m^3$	Rolling 3-Month Average	Same as Primary	
Nitrogen Dioxide	53 ppb	Annual (Arithmetic Average)	Same as Primary	
	100 ppb	1-hour	None	
Particulate Matter (PM_{10})	150 $\mu g/m^3$	24-hour	Same as Primary	
Particulate Matter ($PM_{2.5}$)	15.0 $\mu g/m^3$	Annual (Arithmetic Average)	Same as Primary	
	35 $\mu g/m^3$	24-hour	Same as Primary	
Ozone	0.075 ppm (2008 std)	8-hour	Same as Primary	
	0.08 ppm (1997 std)	8-hour	Same as Primary	
	0.12 ppm	1-hour	Same as Primary	
Sulfur Dioxide	0.03 ppm	Annual (Arithmetic Average)	0.5 ppm	3-hour
	0.14 ppm	24-hour		
	75 ppb	1-hour	None	

Nonattainment Areas: An area (parish or group of parishes) declared by the EPA to be not in compliance with a Federal National Ambient Air Quality Standard and listed in the Federal Register as a nonattainment area. **(LAC 33:III.111)**

Also, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.

Non-major Sources: Any stationary source that is not a major source.

NSPS (New Source Performance Standards): A standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

A standard of performance shall reflect the degree of emission limitation and the percentage reduction achievable through application of the best technological system of continuous emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

Official State Journal: *The Advocate*, Baton Rouge, LA

Offsetting: A method which allows decreases in the emission level to be used as a credit against a proposed increase. Emission offsets shall meet the following criteria;

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 NOx credit to offset a VOC emission increase, is not allowed.

2. All emission reductions claimed as offset credit must have occurred later than the date upon which the area was designated nonattainment.

3. All emission reductions claimed as offset credit shall be federally enforceable prior to commencement of construction of the proposed new source or major modification. All emission reductions claimed as offset credit shall occur prior to or concurrent with the start of operation of the proposed major stationary source.

4. Emission reductions claimed as offset credit shall be sufficient to ensure Reasonable Further Progress (RFP), as determined by the administrative authority. **(LAC 33:III.504.F)**

Operational Flexibility: Under LAC 33:III.507.G, the LDEQ allows for four different types of operational flexibility in a Part 70 operating permit:

- changes which contravene a permit term,
- terms allowing for emissions trading under a cap,
- alternative emissions limits under the SIP, and
- alternative operating scenarios.

Parametric Monitoring: Type of Enhanced Monitoring which requires an owner or operator to propose the use process or control device parameter monitoring and require the owner or operator to justify that a known and consistent relationship exists between the emissions subject to an applicable limitation or standard and the parameters being monitored. The generally known and consistent relationship would then be specifically correlated for the particular emissions unit by comparing emission test method data with contemporaneous parameter monitoring data as part of the performance verification test procedures for demonstrating the system's effectiveness.

Part 70 Source: Any source which is required to obtain a federally enforceable operating permit in accordance with 40 CFR Part 70, including the following:

a. any major source as defined in this Section;

b. any non-major (area) source of hazardous air pollutants required to obtain an operating permit pursuant to regulations promulgated under section 112 of the federal Clean Air Act;

c. any non-major source required to obtain an operating permit pursuant to regulations promulgated under section 111 (NSPS) of the federal Clean Air Act.

d. any affected source, as defined in this Section, pursuant to the acid rain provisions to Title IV of the federal Clean Air Act; and

e. any solid waste incineration unit required to obtain a permit pursuant to section 129(e) of the federal Clean Air Act. **(LAC 33:III.502)**

Particulate Matter/PM_{10}: Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J. **(LAC 33:III.111)**

Permit Deviation: Noncompliance with a term or condition of the permit, including those found using compliance method data from required monitoring, recordkeeping, reporting, or testing specified in and required to be collected by the permit. Reporting of compliance exceptions or events through other regulatory programs (i.e., NSPS, NESHAP, LAC 927 and LAC 5107) satisfy the reporting requirements of 40 CFR Part 70 General Permit Condition R. Further, exceptions or events which are corrected through compliance procedures established as compliance methods/activities in the Part 70 Operating Permit are not considered permit deviations for purposes of 40 CFR Part 70 General Permit Condition R.

Permit Number: A unique permit number is assigned to each permit issued. This number identifies the location of the facility and the type of permit that has been issued. Only permits are issued permit numbers. **No other permitting action is issued a permit number.**

Permit Terms and Conditions: Enforceable permit terms and conditions include: (1) emission limitations (i.e., maximum lb/hr and annual tons/yr) located in the Single Source Emission Inventory Questionnaire Sheet, (2) language contained in Specific and General Permit Conditions, (3) applicable regulatory requirements/activities contained in Tables 2, 3, and 4 of the issued permit; and the Annual Emission Rates sheet.

Permitting Authority: The Louisiana Department of Environmental Quality, its secretary, or the secretary's designee.

Potential to Emit: The maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable as an allowable emission limit or as a condition of a permit issued under a program to prevent the significant deterioration of air quality or under the Louisiana Air Quality Regulations. Secondary emissions do not count in determining the potential to emit of a stationary source. **(LAC 33:III.509)**

The maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type of amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emission specified by a state permit or a permit issued under a program to prevent the significant deterioration of air quality.
(LAC 33:III.5103)

The maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the Administrator. This term does not alter of affect the use of this term for any other purposes under the ACT, or the term "capacity factor" as used in title IV of the ACT or the regulations promulgated thereunder. **(40 CFR 70.2)**

Potentially Applicable Requirements: Includes the following scenarios:

1. The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified, or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.

2. The regulations apply to this type of emission source (i.e. tank) but does not meet the definition for this particular emission source. Example: NSPS K for Petroleum Liquid Storage Vessels does not apply to a isopropyl alcohol storage vessel because it is not a petroleum liquid.

Predictive Emission Monitoring System (PEMS): This Enhanced Monitoring system uses artificial intelligence and available process data (such as temperature, pressure, and flow rate) to derive accurate emission approximations.

Presumptive MACT Standard: Utilization of an existing 112(d) federal MACT standard for another source category for a source which does not have a 112(d) standard promulgation.

Prevention of Significant Deterioration (PSD): A program in attainment areas; requires

preconstruction review and application of BACT for all firms of a given size and industry category planning to construct, modify or reconstruct facilities.

Proprietary: Information owned by the applicant which is considered a patent, trade secret or is copyrighted against free competition as to name, product, composition, or process of manufacture.

Reasonably Available Control Technologies: Control equipment that is reasonably available and economically feasible to achieve the lowest emission limit applicable to a given existing source in nonattainment areas.

Technology required pursuant to Section 172 (nonattainment Plant Provision in General) to be installed on existing major sources in nonattainment areas; reflects controls U.S. EPA has identified in CTGs or negotiated on a case-by-case basis.

Reconstruction: Will be presumed to have taken place when the fixed capital cost of the new component exceeds 50 percent of the fixed capital cost of a comparable entirely new source. Any final decision as to whether reconstruction has occurred must be made in accordance with the provisions of the applicable regulation.

The replacement of components of an existing major source to such an extent that:

1. The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new source; and

2. Is technologically and economically feasible for the reconstructed source to meet the relevant emission standards. Upon reconstruction, an affected source is subject to relevant standards of new sources, including compliance dates, irrespective of any change in emission of hazardous air pollutants from that source. **(LAC 33:III.5103)**

Registered Professional Engineer: Engineer registered and licensed by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

Regulated Air Pollutant: refers to the following:

1. nitrogen oxides;
2. volatile organic compounds;
3. any pollutant for which a National Ambient Air Quality Standard has been promulgated;
4. any pollutant subject to a standard under Section 111 (NSPS) of the Clean Air Act;
5. any Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the Clean Air Act;
6. any pollutant regulated pursuant to Section 112 (Hazardous Air Pollutants) of the Clean Air Act;
7. any pollutant subject to review under Prevention of Significant Deterioration, LAC 33:III.509, including hydrogen sulfide, sulfuric acid mist, total reduced sulfur, and reduced sulfur compounds;

8. for the purposes of permitting requirements pursuant to LAC 33:III.Chapter 51, *regulated air pollutants* shall include all Louisiana toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3.

Regulated pollutant (for presumptive fee calculation), which is used only for purposes of §70.9(b)(2), means any "regulated air pollutant" except the following:

1. Carbon monoxide;

2. Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance to a standard promulgated under or established by title VI of the Act; or

3. Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under section 112(r) of the Act.

Replicable Procedures: Procedures or methods which will produce consistent results, information, or data within standard statistical limits.

Responsible Official: A person who fulfils any of the following criteria [LAC 33:III.502]:

For a corporation:

- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function
- Any other person who performs similar policy or decision-making functions for the corporation
- A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit. This person must also meet one of the following qualifications:
    1. The manufacturing, production, or operating facilities for which this person is responsible must employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars).
    2. The delegation of authority to such representatives is approved by LDEQ prior to submittal of any certification by such person.

For a partnership or sole proprietorship:

A general partner or the proprietor, respectively. If a general partner is a corporation, see the criteria above that apply to a corporation.

For a municipality, state, federal, or other public agency:

A principal executive officer or ranking elected official. For the purposes of this definition, a principal executive officer of a federal agency includes the chief executive officer having a responsibility for the overall operations of a principal geographic unit of the agency; or

For all affected sources:

1. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or 40 CFR Parts 72 and 75 are concerned will be considered to be a Responsible Official for matters pertaining to these regulations. See the definition of "designated representative" under 40 CFR 72.2 to determine who can be considered a designated representative.
2. The designated representative for any other purposes under 40 CFR Part 70 or LAC 33:III.507. See the definition of "designated representative" under 40 CFR 72.2 to determine who can be considered a designated representative.

Service Factor: Generally expressed as a percentage, provides the time for a particular control or recovery device is estimated to be in service.

Shutdown: The cessations of operation of an affected facility for any purpose.

Significant Emissions Increase: For a regulated NSR pollutant under the PSD program, it is an increase in emissions that is significant. Significant is defined to be an emissions increase above the amounts found in the following table:

Pollutant	Significant Amount (in TPY)
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Particulate matter	25 (TSP)
	15 (PM_{10})
	10 ($PM_{2.5}$), 40 (SO_2 or NO_X)
Ozone	40 (VOC or NO_X)
Lead	0.6
Fluorides	3
Sulfuric acid mist	7
Hydrogen sulfide (H_2S)	10
Total reduced sulfur (including H_2S)	10
Reduced sulfur compounds (including H_2S)	10
Municipal waste combustor organics[1]	0.0000035
Municipal waste combustor metals[2]	15
Municipal waste combustor acid gases[3]	40

[1] Measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.
[2] Measured as particulate matter.
[3] Measured as sulfur dioxide and hydrogen chloride.

Pollutant	Significant Amount (in TPY)
Municipal solid waste landfills emissions[4]	50
GHGs and GHGs as CO_2e	0 and 75,000, respectively[5]

Significant Modifications: Changes requiring a modification to a Part 70 Operating Permit which do not qualify for processing as either an administrative amendment or minor modification.

Source Industrial Classification (SIC Code): System which categorizes industrial facilities into standard groupings by manufacturing processes.

Speciation: Separation of aggregated components in stream into their individual chemical components.

Standard Industrial Classification (SIC) Code: A numerical classification system established by the United States government that is used to group various industries according to their functions.

Start-up: The setting in operation of an affected facility for any purpose.

State Implementation Plan (SIP) Approved: Any regulation that is included in the State Implementation Plan (SIP). A copy of the regulations included in the SIP can be found in 40 CFR 52.970 – 999.

State Only Regulation: Any regulation that is not included in the State Implementation Plan (SIP). A copy of the regulations included in the SIP can be found in 40 CFR 52.970 – 999.

State Only Requirements: Requirements which are not federally enforceable.

State Only Specific Condition: A condition for which there is no federally enforceable condition that requires the condition to be applicable. A State Only Specific Condition must meet the following criteria:

1. It must not be required by any federally enforceable regulation
2. It must not be used to avoid applicability of any federally enforceable regulation. (Any regulation applied for this purpose is also considered federally enforceable.)

A State Only Specific Condition could exist for several reasons:

1. The applicable condition is not part of the State Implementation Plan (SIP) and is therefore not federally enforceable.

[4] Measured as nonmethane organic compounds.

[5] Both of the following conditions must be met: (1) the net emissions increase of GHGs calculated as the sum of the six GHGs on a mass basis (i.e., no global warming potentials applied) equals or exceeds 0 TPY; and (2) the net emissions increase of GHGs calculated as the sum of the six GHGs on a CO_2e basis (i.e., global warming potentials applied) equals or exceeds 75,000 TPY CO_2e.

2. The applicable condition is one that was accepted voluntarily by the facility in order to facilitate operational flexibility. However, this type of condition can not have the added effect of avoiding applicability of any federally enforceable regulation.
3. The applicable condition is one that was accepted voluntarily by the facility in order to avoid applicability of a State Only Regulation.

Stationary Source: Any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulations.

Substantial Modification: Any modification that results in a significant increase in the amount of any regulated air pollutant or results in the significant emission of any air pollutant not previously emitted. See the definition of Significant Emissions Increase for more details.

Title I Modifications: Any physical change or change in the method of operation of a stationary source which increases the amount of any regulated air pollutant emitted or which results in the emissions of any regulated air pollutant not previously emitted and which meets one or more of the following descriptions:

a. the change will result in the applicability of a standard of performance for new stationary sources promulgated pursuant to section 111 of the Clean Air Act;
b. the change will result in a significant net emissions increase under the program for the Prevention of Significant Deterioration, as defined in LAC 33:III.509;
c. the change will result in a significant net emissions increase under the program for Nonattainment New Source Review, as defined in LAC 33:III.504;
d. the change will result in the applicability of a maximum achievable control technology (MACT) determination pursuant to regulations promulgated under section 112(g)(Modifications, Hazardous Air Pollutants) of the Clean Air Act.

Technology Transfer Network: Is a network of electronic bulletin boards developed and operated by OAQPS. The network provides information and technology exchange in different areas of air pollution control, ranging from emission test methods to regulatory air pollution models. The service is free, except for the cost of using the phone.

TEMPO: An acronym standing for Tools for Environmental Management and Protection Organizations. This is the main computer database program used by LDEQ to store data and generate permits on all facilities and units.

Upset: Any situation arising from sudden and reasonably unforeseen events beyond the control of the owner or operator, including acts of God, which situation requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emissions limitation under the permit due to unavoidable increases in emissions attributable to the situation. An upset shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

SUBMITTAL OF INFORMATION TO THE AIR PERMITS DIVISION

CHAPTER/ SUB-CHAPTER	CHAPTER TITLE	CITATION	WHERE TO SUBMIT?	REQUIRED NOTIFICATIONS, REPORTS, FORMS
OFFICE OF THE SECRETARY LAC 33:I				
15	Permits Review (410 rule)	All sections	Office of Environmental Services, Air Permits Division	All air permit application submittals
17	Permits Qualifications and Requirements	1701.C & D	Office of Environmental Services, Air Permits Division	Submit, as part of an air permit application, a list of states where the applicant has other environmental permits
AIR QUALITY LAC 33:III				
2	Rules and Regulations for the Fee System of the Air Quality Control Programs	All sections	Office of Environmental Services, Air Permits Division	Notification of permanent shutdown by official change in Emission Inventory Questionnaire (EIQ) and permit (Fee Methodology)
5	Permits Procedures	All sections except 507.H.4 and 507.H.5.d	Office of Environmental Services, Air Permits Division	Submittal and obtaining of permits (i.e. acid rain, emission offsets, etc.)

CHAPTER/ SUB-CHAPTER	CHAPTER TITLE	CITATION	WHERE TO SUBMIT?	REQUIRED NOTIFICATIONS, REPORTS, FORMS
6	Regulations on Control of Emissions Through the Use of Emission Reduction Credits Banking	All sections	Office of Environmental Services, Air Permits Division	Submittal of forms dealing with applications for banking of ERC's, and withdrawal, use, and transfer of emission reduction credits.
9	General Regulations on Control of Emissions and Emission Standards	All sections	Office of Environmental Services, Air Permits Division - Emissions Inventory	Submittal for data emission reports captured annually (Recordkeeping and Annual Reporting), emissions inventories for specific facilities in ERIC (Applicability), and Submittal of revised certified inventory (after final verification and signature)
21	Control of Emission of Organic Compounds	2103.D.4.a 2108.F.1 2159.A 2159.B 2159.C	Office of Environmental Services, Air Permits Division	Submittal of description of method of control and supporting calculations based upon Addendum to American Petroleum Institute Publication Number 2517, Evaporative Loss from External Floating Roof Tanks (dated May 2004), report semiannually containing leak information for each calendar quarter during reporting period, annual report to maintain exemption status demonstrating overall control of VOC emissions at affected source category, revised control plan, request for an exemption, results of appropriate test methods and CE protocols within 60 days of test date, notification of changes made to capture or control equipment, notification 30 days prior to performing any capture efficiency and/or control efficiency tests, and reporting of results of any test done in accordance with LAC

CHAPTER/ SUB-CHAPTER	CHAPTER TITLE	CITATION	WHERE TO SUBMIT?	REQUIRED NOTIFICATIONS, REPORTS, FORMS
				33:III.2108 within 45 days.
		2113.A.4, 2116.G.1, 2116.G.2, 2123.D.1	Office of Environmental Services, Air Permits Division	Submittal of a written plan for housekeeping and maintenance that places emphasis on prevention or reduction of VOC emissions from the facility, permit application after installation of controls unless exempted, new or updated emission inventory questionnaire after installation of controls, and design data for capture system and emission control device for proposed use (Housekeeping)
		2153.G.4.b 2153.G.4.c 2153.G.5.a 2153.G.5.c	Office of Environmental Services, Air Permits Division	Submittal of annual report, demonstrating overall control of VOC emissions at affected source category from which waste water is generated during preceding calendar year, submit revised control plan documenting overall reduction of VOC emissions from wastewater at affected source categories and submittal of request for exemption determination.
22	Control of Emissions of Nitrogen Oxides (NO_x)	2201.F.7.a	Office of Environmental Services, Air Permits Division	Submittal of a request for approval to use a facility-wide averaging plan
23	Control of Emissions for Specific Industries (Aluminum Plants)	2301.D.4.a, 2303.E	Office of Environmental Services, Air Permits Division	Submittal of results of source tests of recovery furnaces pursuant to the provisions in Table 4, Chapter 15 (Emissions Limitations) and of a detailed monitoring program subject to revision and approval (Monitoring)

CHAPTER/ SUB-CHAPTER	CHAPTER TITLE	CITATION	WHERE TO SUBMIT?	REQUIRED NOTIFICATIONS, REPORTS, FORMS
25	Miscellaneous Incineration Rules (Standards of Performance for Biomedical Waste Incinerators)	All sections except 2511.C1. and 2511.L	Office of Environmental Services, Air Permits Division - Manufacturing Permits Section	Submittal of a copy of all monitoring and tests results for review and approval and provide 30 days prior notice of any emission test to afford the department opportunity to conduct a pretest conference and to have an observer present.
30	Standards of Performance for New Stationary Sources (NSPS)	All sections	Office of Environmental Services, Air Permits Division - Manufacturing Permits Section	Submittals of reports, notifications, and other documentation required by referenced regulations (i.e., 40 CFR Part 60).
51	Comprehensive Toxic Air Pollutant Emission Control Program	5107.A	Office of Environmental Services, Air Permits Division - Manufacturing Permits Section - Emissions Inventory	Annual emissions reporting in ERIC
		5113.B.1, 5113.B.5, 5113.B.7, 5113.C.2, 5113.C.5	Office of Environmental Services, Air Permits Division - Manufacturing Section, Engineering Support Group	Submittal of test results within 45 days after completion of tests (Emission Test and Waiver of Emission), report determinations of emission test, and plan for approval describing affected sources and methods for ensuring compliance with continuous monitoring system. Notification of an emission test required demonstrating compliance with this subchapter at least 30 days before emission test and date of performance evaluation at least 30 days before the evaluation is to begin.

CHAPTER/ SUB-CHAPTER	CHAPTER TITLE	CITATION	WHERE TO SUBMIT?	REQUIRED NOTIFICATIONS, REPORTS, FORMS
		All other sections	Office of Environmental Services, Air Permits Division	Submittal of annual emissions report of a letter requesting permit modification, of a request for determination of whether actions intended to be taken by owner or operator constitute construction or modification or commencement of a stationary source.
53	Area Sources of Toxic Air Pollutants	All sections	Office of Environmental Services, Air Permits Division - Emissions Inventory	Submittal of an emissions inventory report in ERIC and of subsequent reports that include information requested for preceding calendar year.

APPENDIX C

RBLC STANDARD EMISSION LIMIT UNITS

Standard emission units have been established for the processes listed below. These units are required for reporting standardized emission limits in the RBLC data base for these processes. Standardization of emission units facilitates ranking of emission control requirements on a pollutant specific basis. For visible emissions (VE), percent (%) opacity has been established as the standardized unit for all processes

Clearinghouse Process Code	**/ Name or Description**	**Pollutant**	**Required Emission Units**
ALL	All Processes with Emission Limits for Visible Emissions	Visible Emissions	% Opacity
11.110 11.120 11.210 11.220 11.310	Utility and Large Industrial Size Boilers/ Furnaces (>250 MMBTU/H)	PM, PM10, PM2.5, SOx, NOx, CO	LB/MMBTU
12.110 12.120 12.210 12.220 12.310	Industrial-Size Boilers/Furnaces (> 100MMBTU/H and <= 250 MMBTU/H)	PM, PM10, PM2.5, SOx, NOx, CO	LB/MMBTU
13.110 13.120 13.210 13.220 13.310	Commercial/Institutional-Size Boilers/Furnaces (<= 100 MMBTU/H)	PM, PM10, PM2.5, SOx, NOx, CO	LB/MMBTU
15.110 15.190 15.210 15.290	Large Combustion Turbines (>25 MW)	NOx, CO	PPM @ 15% O_2

Clearinghouse Process Code	/ Name or Description	Pollutant	Required Emission Units
16.110 16.190 16.210 16.290	Small Combustion Turbine (<= 25 MW)	NOx, CO	PPM @ 15% O_2
17.110 17.130 17.210 17.230	Internal Combustion Engines	NOx, CO	G/B-HP-H
21.100	Commercial/Industrial Solid Waste Incinerator	CO, HCL, SO2, & Nox	PPMVD @7% O2
		PM, PM10, PM 2.5, CD, PB & HG	MG/DSCM @ 7% O2
		Dioxins / Furans	NG/DSCM TEQ @7% O2
21.200	Hazardous Waste Combustor	AS, BE, CR, CD, PB, HG	Micro G/DSCM @7% O2
		HCL, CL2, CO & HC	PPMV @7% O2
		PM, PM10 & PM2.5	MG/DSCM @7% O2
		Dioxins / Furans	NG/DSCM TEQ @7% O2
21.300	Hospital/Medical/Infectious Waste Incineration	CO, NOx, SO2 & HCL	PPMVD @7% O2

Clearinghouse Process Code	/ Name or Description	Pollutant	Required Emission Units
		PM, PM10, PM 2.5, CD, PB, HG	MG/DSCM @7% O2
		Dioxins / Furans	NG/DSCM TEQ @7% O2
21.400	Municipal Waste Combustor	PM, PM10, PM2.5, CD, PB, HG	MG/DSCM @7% O2
		SO2, HCL, & NOx (CO?)	PPMV @7% O2
		Dioxins / Furans	NG/DSCM @7% O2
21.500	Wastewater Treatment Sludge Incineration	PM, PM10 & PM2.5	LB/T of dry sludge input
		HG	G/24 HR Period
30.002	Kraft Pulp Mills - Recovery Furnace	PM, PM10 & PM2.5	GR/DSCF @ 8% O_2
	Kraft Pulp Mills - Lime Kiln	PM, PM10 & PM2.5	GR/DSCF @ 10% O_2
	Kraft Pulp Mills - Smelt Dissolving Tanks	PM, PM10 & PM2.5	LB/T BLS
	Kraft Pulp Mills - Digesters, Brown Stock Washers, Evaporators, Oxidation, & Stripping System	TRS	PPMV @ 10% O_2
41.002	Auto & Light Truck Surface Coating	VOC	LB/GAL ACS
41.004	Can Surface Coating	VOC	LB/GAL ACS
41.007	Flexible Vinyl & Urethane Coating and Printing	VOC	LB/LB ink solids
41.008	Large Appliance Surface Coating	VOC	LB/GAL ACS

Clearinghouse Process Code	/ Name or Description	Pollutant	Required Emission Units
41.011	Metal Coil Surface Coating	VOC	LB/GAL ACS
41.012	Metal Furniture Surface Coating	VOC	LB/GAL ACS
41.015	Plastic Parts for Business Machines Surface Coating	VOC	LB/GAL ACS
41.018	Pressure Sensitive Tape & Label Surface Coating	VOC	LB/LB ACS
50.003	Petroleum Refining - Cracking	PM, PM10 & PM2.5, SOx CO	LB/1000 LB PPMV
50.006	Petroleum Refining - Claus Sulfur Recovery Units	SOx, TRS, H_2S	PPMV @ 0% Excess Air
61.009	Phosphate Fertilizers Production	Total Fluoride	LB/T
62.001	Ammonium Sulfate Production	PM, PM10 & PM2.5	LB/T ammonium sulfate pdtn.
62.014	Nitric Acid Plants	NOX	LB/T of Acid Produced (100% acid)
62.015	Sulfuric Acid Plants	SO_2 & Acid Mist	LB/T
65.001 - 65.999	Synthetic Fibers Production	VOC	LB/1000 LB solvent feed
70.007	Grain Elevators	PM, PM10 & PM2.5	GR/DSCF
81.003	Ferroalloy Production	PM, PM10 & PM2.5 CO	LB/MW-H % (volume basis)
81.004	Iron Foundries	PM, PM10 & PM2.5	GR/DSCF
81.210	Electric Arc Furnaces (EAF) used in Integrated Iron & Steel Production & Mini Mills	PM, PM10 & PM2.5	GR/DSCF
81.310	Steel Foundries		
81.510	Ferroalloy Production (Includes Stainless & Specialty Steels)		
82.001	Lead Acid Battery Mfg. All Lead Emitting Operations	Pb (Lead)	GR/DSCF

Clearinghouse Process Code	/ Name or Description	Pollutant	Required Emission Units
82.005	Primary Aluminum Production	Total Fluorides	LB/T
82.006	Primary Copper Smelters	PM, PM10 & PM2.5	GR/DSCF
82.007	Primary Lead Smelting	PM, PM10 & PM2.5	GR/DSCF
82.009	Primary Zinc Smelting	PM, PM10 & PM2.5	GR/DSCF
82.011	Secondary Brass & Brass Ingot Production	PM, PM10 & PM2.5	GR/DSCF
82.013	Secondary Lead Smelting	PM, PM10 & PM2.5	GR/DSCF
90.004	Hot-Mix Asphalt Processing	PM, PM10 & PM2.5	GR/DSCF
90.011	Coal Handling/Processing/ Preparation/Cleaning	PM, PM10 & PM2.5	GR/DSCF
90.016	Glass Manufacturing Furnace	PM, PM10 & PM2.5	LB/T
90.019	Lime/Limestone Handling/Kilns/ Storage/Manufacturing.	PM, PM10 & PM2.5	LB/T
90.021	Metallic Mineral/Ore Processing	PM, PM10 & PM2.5	GR/DSCF
90.024	Non-metallic Mineral Processing	PM, PM10 & PM2.5	GR/DSCF
90.026	Phosphate Rock Processing	PM, PM10 & PM2.5	LB/T
90.028	Portland Cement Plants - kiln, in-line raw mill and kiln, clinker cooler	PM, PM10 & PM2.5	LB/T
90.033	Wool Fiberglass Manufacturing	PM, PM10 & PM2.5	LB/T glass pulled
90.034	Asphalt Roofing Products Manufacturing	PM, PM10 & PM2.5	LB/1000 LB
99.015	Rubber Tire Manufacturing Industry - Tread End Cementing, Water-Based Inside Green Tire Spray, & Water-Based Outside Green Tire Spray	VOC	G/TIRE/MO
	Bead Cementing	VOC	G/Bead/MO
	Organic Green Tire Spray, Michelin A Operations, Michelin B Operations Michelin C Operations, Sidewall Cementing, & Undertread Cementing	VOC	% Reduction

Louisiana Guidance for Air Permitting Actions

Air Permits Division
Office of Environmental Services
Louisiana Department of Environmental Quality

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DISCLAIMER

This document provides detailed guidance and instructions for an applicant to submit information to the Louisiana Department of Environmental Quality (LDEQ) for the implementation of the state and federal air quality permitting programs. This document is intended to serve as a guideline or "road map" through the complex set of regulatory programs administered by the Air Permits Division. Every attempt has been made to remain consistent with existing regulations and underlying standards. However, this manual is not intended to be an official statement of policy and standards and does not establish binding regulatory requirements. If instructions or guidance or references to regulatory language are in conflict with a state or federal regulation or standard, then the regulatory language or standard shall prevail.

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Table of Contents

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Introduction

The primary purpose of this manual is to document standard instructions and information to be used for the permit application process in Louisiana. These guidelines will be utilized by both the permit applicant and LDEQ personnel to ensure consistency in the permit review and approval process. The manual also serves as a reference document to facilitate public education and understanding of the federal Part 70 and New Source Review (NSR) permitting programs, as well as the state minor source permitting program.

Previous versions of this manual concentrated on implementation of Louisiana's Part 70 Operation Permits Program. Now that LDEQ's Title V program is well-established, we are taking this opportunity to reexamine the scope of the manual. We believe this document will be of more use to the regulated community as a whole if a more basic overview of air permitting procedures is provided. A great deal of new material has been added, and the majority of material contained in the previous versions of the manual has been retained in this edition.

A number of mechanisms exist by which the Louisiana Department of Environmental Quality (LDEQ) authorizes discharges of air contaminants into the atmosphere. These include several types of exemptions and various permitting programs.

Exemptions include:

- General Exemptions,
- Statutory Exemptions,
- Source Category Exemptions, and
- Source Specific Exemptions.

The various permit programs encompass Minor Source Permit Requirements (LAC 33:III.503), Acid Rain Program Permitting Requirements (§505), Part 70 Operating Permits (§507), Prevention of Significant Deterioration (§509), and Nonattainment New Source Review (§504). With few exceptions, all permits and source specific exemptions must be approved by LDEQ before construction can commence.

To the extent possible, this manual is organized to follow the permit application process. It begins with a discussion on determining whether or not a proposed facility or activity needs written approval from LDEQ. If so, the applicant will need to quantify emissions from the facility in order to determine what type of authorization is necessary. The manual outlines acceptable methodologies to calculate emissions and provides a list of resources that may be helpful in accomplishing this task. Next, an overview of the different types of permitting actions is provided, followed by a summary of factors to consider before submitting an application. The procedures describing how to apply for a permit are next and include suggestions to speed the processing of the application. A brief summary of what happens to a permit application when it

arrives at LDEQ then follows, and the manual concludes with other information of which a permittee needs to be aware once a permit has been approved.

Throughout this document, the definitions of the words used will have the same meanings as stated in the Air Quality regulations (LAC 33:III); however, note that a number of terms may have specific meanings within the context of a specific regulatory program (e.g., a "major source" of criteria pollutants may not be a "major source" of Hazardous Air Pollutants (HAP)).

Users of this manual should realize that clarifications and changes may occur, and that additional guidance on a given topic will be provided from time to time. The primary mechanism for communicating revised procedures will be the Air Permits Division's webpage, http://www.deq.louisiana.gov/portal/tabid/64/Default.aspx.

This guidance manual was developed by LDEQ with input from regulated entities. As with previous versions, comments on this edition were solicited from other interested individuals, organizations, and facilities.

Role of LDEQ

LDEQ is federally authorized to administer the federal Part 70 (Title V) and New Source Review (NSR) programs (as opposed to issuing permits for the United States Environmental Protection Agency (EPA)). As such, direct interaction with EPA is usually not necessary.

EPA has delegated to LDEQ the authority to implement and enforce certain New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) promulgated by EPA under 40 CFR 60, 61, and 63. This delegation applies to both Part 70 and non-Part 70 sources but does not extend to sources located in Indian Country.[1]

With respect to delegated NSPS and NESHAPs, LDEQ is the primary point of contact and has the primary responsibility to implement and enforce the federal standards. All notifications, reports, and other communications required by 40 CFR 60, 61, and 63 should be submitted directly to the LDEQ. Sources do not need to send a copy to EPA. EPA Region 6 has waived the requirement that notifications and reports for delegated standards be submitted to EPA in addition to LDEQ.[2]

If an applicant is subject to a subpart or provision for which LDEQ does not have delegation, all notifications, reports, and other communications required by 40 CFR 60, 61, and 63 should be submitted to:

U.S. EPA Region 6
Director; Air, Pesticides, and Toxics Division
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

[1] See 40 CFR 60.4(b)(T) & (e)(2), 61.04(b)(T) & (c)(6)(ii), and 63.99(a)(18).
[2] See 40 CFR 63.9(a)(4)(ii) and 63.10(a)(4)(ii).

LDEQ should be copied on all correspondence.

With respect to Alternative Test Methods or Monitoring Plans, requests should be directed to the Air Enforcement Section (Mail Code 6ENAA) at Region 6. If LDEQ has incorporated the pertinent subpart by reference (at either LAC 33:III.3003, 5116, 5122, or 5311), approval of both EPA and LDEQ is required.

Assistance with Preparing Applications

Those facilities that qualify as a Small Business are encouraged to take advantage of the free services offered by the Small Business and Small Community Assistance Program. See http://www.deq.louisiana.gov/portal/PROGRAMS/SmallBusinessSmallCommunityAssistanceSBSCAP.aspx.

To permit operations that do not qualify as Small Businesses, an applicant may retain the services of an environmental consulting firm to prepare a permit application. A number of firms are well-versed in the regulations and procedures necessary to submit a complete and accurate permit application. A listing of such firms can be found in the business directory or yellow pages of most telephone books. LDEQ does not endorse or recommend the use of any particular environmental consulting service, nor does LDEQ require the use of an environmental consulting service. LDEQ employees are prohibited from endorsing or recommending a particular environmental consulting service to an applicant.

Contact Information

LDEQ, Office of Environmental Services
Air Permits Division
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313
Phone: 225.219.3417
Fax: 225.219.3309

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1.0 Do I Need Written Approval From LDEQ?

Introduction

Any source that emits, or has the potential to emit, any air contaminant must determine whether it is required to obtain written approval from LDEQ. Please note that an "air contaminant" is defined as "particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any combination thereof, visible or not, produced by processes other than natural."

In general, if a facility does not fall under one of the exemptions listed in the section titled "Exemptions (that do not require LDEQ approval)," then the applicant will have to obtain written approval from LDEQ for the operations it proposes to perform. The types of written approvals, also known as permitting actions, are described in detail in Section 1.2 *All Other Activities That Require LDEQ Approval (What Do I Consider Now)?* It should be noted that the LDEQ approvals discussed throughout this document are those necessary to satisfy Air Quality requirements. These approvals do not satisfy the requirements to obtain any other LDEQ approvals (e.g., water discharge permit, hazardous waste permit) needed for the proposed activity, nor do they satisfy any need to obtain any other federal, state, or local permits or authorizations.

1.1 Exemptions That Do Not Require LDEQ Approval

The list that follows gives guidelines by which one can determine whether or not LDEQ approval is required for a facility or an operation at a facility. If there is any doubt about the applicability of one of these exemptions, please take the time to read the appropriate regulations. If the applicability of these exemptions still seems unclear, please contact the Air Permits Division at (225) 219-3181 for additional guidance.

1.1.1 General Exemptions

The requirement to obtain a permit does not apply to:

- activities conducted on residential property (unless it constitutes a Part 70 source);
- distribution or use of pesticides;
- mobile sources such as automobiles, trucks and aircraft; or
- any upset as defined in LAC 33.III.507.J.1.

1.1.2 Statutory Exemptions

The requirement to obtain a permit does not apply to:

- air pollution that does not leave the boundaries of the commercial or industrial plant from which it is emitted;

- controlled burning of agricultural by-products in the field or cotton gin agricultural waste; or

- controlled burning of timberland, pastureland, or marshlands in connection with timber management or trapping or livestock production.

1.1.3 Source Category Exemptions

A non-major source will not be required to obtain a permit if regulated solely because of one or more of the following:

- NESHAP for Asbestos Demolition and Renovation (40 CFR 61.145);

- Standards of Performance for New Residential Wood Heaters (40 CFR Part 60 AAA); and

- Regulations promulgated pursuant to the federal Clean Air Act under 112(r), Prevention of Accidental Releases (e.g., 40 CFR 68).

1.1.4 Grandfathered Sources

Facilities that were under construction or operation as of June 19, 1969, may have been granted "grandfathered" status by LDEQ. Grandfathered status may be maintained until one of the following conditions is met:

- the facility is a major source of Louisiana toxic air pollutants. A major source is one that emits or has the potential to emit 10 tons per year of any single toxic pollutant, or 25 tons per year of any combination of toxic pollutants (see LAC 33.III.Chapter 51);

- the facility is a "Part 70 Source" as defined in LAC 33:III.502;

- ownership of the facility has changed since grandfathered status was granted;

- since grandfathered status was granted, emissions have been initiated or increased at the facility, due to new construction, modification, change in process or raw materials, or a change in operating schedule; or

- the facility is otherwise required to obtain a permit based upon a determination by the LDEQ.

If any one of the above statements applies to the grandfathered facility in question, a permit application must be submitted for that facility. Until the LDEQ takes final action on the permit application, grandfathered status will be maintained providing that a permit application is submitted in a timely manner.

1.1.5 Act 547 (Statutory) Exemptions [LAC 33:III.501.B.2.d]

Senate Bill No. 384 of the 2008 Regular Session was signed by Governor Jindal on June 30, 2008, as Act 547. The Act, which became effective on August 15, 2008, provides for

exemptions from permitting requirements for certain air emissions sources by enacting R.S. 30:2054(B)(2)(b)(ix) to read as follows:

> (b) Nothing in this law shall be deemed to grant to the secretary any jurisdiction or authority to make any rule, regulation, recommendations, or determination with respect to any of the following:
>
> * * *
>
> (ix) Permitting regulations, with respect to air quality, requiring authorization to construct or operate any source for which facility-wide potential emissions are less than five tons per year for each of any regulated air pollutant as defined by the Clean Air Act, 42 U.S.C. 7401 et seq., less than fifteen tons per year emitted of all such defined pollutants combined, and less than the minimum emission rate for each toxic air pollutant established pursuant to R.S. 30:2060, unless such source is required to obtain a permit pursuant to the Clean Air Act, 42 U.S.C. 7661 et seq. Notwithstanding the provisions of this Item, the secretary may adopt, promulgate and enforce standards, limitations and other regulations applicable to sources which are not required to obtain a permit. The standards or regulations shall not include any requirement for approval by the department. The standards or regulations may include the requirement to determine, document and maintain records to demonstrate the potential or actual emissions of the facility. For purposes of this Item, "potential emissions" shall mean the emissions the facility is capable of emitting considering all control measures in place, utilized and properly maintained and historical practices, including hours of operation and number of employees at the facility.

In summary, R.S. 30:2054(B)(2)(b)(ix) exempts sources that meet all of the following criteria from the requirement to obtain a permit, unless such source is required to obtain a permit pursuant to the Federal Clean Air Act, Subchapter V, 42 U.S.C. 7661 et seq.:

- Facility-wide potential emissions are less than five tons per year of any criteria or toxic air pollutant as defined by the Federal Clean Air Act, 42 U.S.C. 7401 et seq.;
- Facility-wide potential emissions are less than fifteen tons per year emitted of all such defined pollutants combined; and
- Facility-wide potential emissions are less than the minimum emission rate (MER) for each toxic air pollutant established pursuant to La. R.S. 30:2060, toxic air pollutant emission control program (LAC 33:III.Chapter 51).

If the facility meets the requirements listed above, an air permit or exemption is not required. Even though an exemption is not required, facilities may choose to notify LDEQ of their exempt status by following the guidance on "Exemptions (granted by the permitting authority)." In order to determine if an Act 547 Exemption applies to the facility in question, it is necessary to understand how to calculate the emission rates of all regulated pollutants. Please read Section 1.2 *All Other Activities That Require LDEQ Approval (What Do I Consider Now?)* for further details on how to estimate emissions. However, prior to increasing the potential to emit of the

facility above the established limits established, you must apply for an air permit or small source exemption, as appropriate, in accordance with LAC 33:III.Chapter 5.

For purposes of an Act 547 Exemption, potential emissions shall be based on the maximum capacity of the source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design.

For portable sources, annual potential to emit shall be based on total expected emissions from all sites. Emissions shall not be evaluated separately for each site.

LDEQ has codified Act 547 exemption into LAC 33:III.501.B.2.d of the air quality regulations.

1.2 What Should I Consider If I Need Written Approval From LDEQ?

When the proposed activity needs written approval from LDEQ, what should be done? An assessment of the facility or activity to be permitted must be performed. If this assessment is done correctly, it can greatly reduce the processing time of the application. A well-prepared application can also aid in preventing any unexpected enforcement actions, which could result from operating an unpermitted piece of equipment or from inadvertently omitting information that would determine applicability of a regulation. The law requires that the applicant be in compliance with all rules and regulations, whether they are included in the approval document or not. Therefore, it is important to thoroughly prepare before submitting an application.

In order to prepare the best possible application for approval from LDEQ, it is important to understand which air contaminants are regulated, the types of air pollution emitting sources that comprise the facility or activity, the regulations that could be applicable to the facility or activity, and how to calculate the quantity of emissions produced.

1.2.1 Air Pollutants

There are two main categories of federally-regulated air pollutants: criteria pollutants and Hazardous Air Pollutants (HAP).

Criteria Pollutants include:

- Particulate matter (PM_{10} and $PM_{2.5}$)[3]
- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- Sulfur dioxide (SO_2)

[3] Particulate matter with an aerodynamic diameter of less than or equal to a nominal 10 and 2.5 microns, respectively.

- Ozone [Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) are the regulated precursors of ground-level ozone]]

- Lead

A good rule of thumb is that if a facility burns something or handles, in any way, any organic or dusty materials, then it emits at least one of these pollutants.

A special note about $PM_{2.5}$: Applications for Title V renewals and significant modifications submitted on or after March 1, 2011, should address $PM_{2.5}$ for all sources. Regarding minor modifications, applicants proposing physical changes or changes in the method of operation should address $PM_{2.5}$ emissions for the affected sources to show that the project increase (or net emissions increase, if necessary) is below 10 TPY. See Section 2.3.9.2 for more information on the Prevention of Significant Deterioration (PSD) program.

Hazardous Air Pollutants (HAP) are chemicals that, based on scientifically accepted data, are known to cause or can reasonably be expected to cause, either directly or indirectly through ambient concentrations, exposure levels, bioaccumulation levels, or deposit levels, adverse effects in humans. The HAP list can be found in Section 112(b) of Title III of the Clean Air Act.

Louisiana also regulates another group of compounds called Toxic Air Pollutants (TAPs). TAPs are classified as Class I, which are known and probable human carcinogens; Class II, which are suspected human carcinogens and known or suspected human reproductive toxins; or Class III, which are acute and chronic (non-carcinogenic) toxins. TAPs are identified in Tables 51.1 and 51.3 of LAC 33:III.5112. Louisiana's TAP list includes all federally-regulated HAPs and 14 additional compounds and compound types. A list of TAPs that are not HAPs is provided.

TAPs THAT ARE NOT ON THE HAP LIST	
Ammonia	Nitric Acid
Barium & compounds	Pyridine
N-Butyl alcohol	Toluene 2,6-diisocyanate
Copper & compounds	Zinc & compounds
Diaminotoluene	Chlorine dioxide
2,6-dinitrotoluene	Hydrogen sulfide
Sulfuric acid	Methyl ethyl ketone

Remember, all HAPs are TAPs, but not all TAPs are HAPs.

General Tips

Please take these tips into account when preparing an application. Incorporating these suggestions should lead to a more thorough application and reduce the need for additional technical information requests.

If any of the above pollutants are not listed in an application, it will be assumed that either the emissions unit in question does not emit that pollutant or that it does not emit that pollutant in a "significant" amount. See the "How Emissions Should Be Listed" section for a discussion of what LDEQ considers to be a significant amount of emissions.

In general, it is not helpful to list unregulated pollutants on the Emissions Inventory Questionnaire (EIQ) forms. With the exception of perchloroethylene, unregulated VOC pollutants are those compounds listed in 40 CFR 51.100(s)(1).

Speciation of non-TAP VOC (e.g., propane, cyclohexane) is not required.

Total Suspended Particulate (TSP) emissions should always be identified when LAC 33:III.1311.B is applicable to the emissions unit in question. The maximum emission rate of TSP as documented on the EIQ form will be compared to the allowable emission rate established in the process weight table.

1.2.2 Pollution Emitting Sources

A detailed survey at the facility should be conducted in order to determine the various sources of air pollutants. The focus should be for the types of pollutants and the means by which the pollutants enter the atmosphere. Many sources have a dedicated stack or vent from which exhaust or waste gases are emitted. Other sources have flanges, packing, or other connections that appear to be leak free; however, extensive surveys by industry and EPA have determined that a certain percentage of these components normally leak at a small rate; these emissions must be taken into account. In addition, all fired sources will generate emissions as a consequence of combustion.

Sources of emissions can be classified in three ways: direct emitters, indirect emitters, and fugitive emissions. Each of these types will need to be identified in a permit application, though a given facility may not have each type.

Direct Emitters

Direct emitters are sources that vent emissions directly to the atmosphere. Each direct emitter is responsible for 100% of the emissions that exit from its exhaust point(s). If a direct emitter has multiple discharge points, it is often appropriate to treat each stack as a separate emissions source. Applicable regulations may require direct measurement of emissions from and/or observation of each individual stack. This is usually the case for combustion units, especially engines, turbines, and boilers. On occasion, it is appropriate to treat all of the exhaust points of a source as one emissions source. An example is a cooling tower with multiple cells.

Indirect Emitters

Indirect emitters are sources that release their emissions to the atmosphere through other process equipment. The exhaust port may be combined with the exhaust ports of other emission sources at a single point of release, such as a common vent. The exhaust port may also be routed through one or more control devices.

Examine each process and the chemical or physical reactions that take place. Even if a piece of equipment such as a reactor has no direct vent, pollutants of concern may be released with the product and vent to the atmosphere downstream in distillation towers or during additional treatment processes.

Emissions may also be generated within a building with no direct vent. However, the building may have exhaust fans or large open doorways that would allow the pollutants to enter the atmosphere.

Fugitive Emissions

Fugitive emissions are those emissions which do not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. These can be divided into two subsets: Equipment Leak Fugitive Emissions and Non-Equipment Leak Fugitive Emissions.

Equipment-Leak Fugitive Emissions

A valve that controls flow through a pipe that transports organic materials is an example of an Equipment Leak Fugitive Emitter. This does not mean that leaky equipment is acceptable; rather, it suggests that a certain level of leakage is likely no matter how well a piece of equipment is constructed and maintained. Every effort must be taken to minimize these emissions. Equipment Leak Fugitive Emissions can also be defined as momentary emissions that are different in nature and location from the main emissions of the emission source. For example, VOC emissions that result from the opening of a sampling hatch on a storage vessel can be considered a fugitive emission. Fugitive emission regulations and emission rates are dependent on the number of affected potential sources of leaks and the rate at which they leak. For example, the fugitive emissions that result from valves depend upon the exact count of the number of valves at a given facility, and their associated leak rate(s).

Non-Equipment Leak Fugitive Emissions

Dust released from a road by vehicles is an example of a Non-Equipment Leak Fugitive Emitter. Non-Equipment Leak Fugitive Emitters usually consist of those pollutant emitters that do not easily fall within the category of having a specific stack or that are not of the equipment leak fugitive variety. Some examples of Non-Equipment Leak Fugitive Emitters are storage piles that have wind-driven emissions, emissions from road usage, ponds that release pollutants through evaporation, or other sources as identified by EPA within specific regulations.

Insignificant Activities

40 CFR 70.5(c) states that LDEQ may approve a list of insignificant activities which need not be included in permits. The regulation provides for the submittal of certain types of information so that

the permitting authority can verify that the activities qualify for the "exempt" status. For these actions, estimates of the emissions of the sources or activities will need to be submitted.

Insignificant Activities are emissions that result from extremely small emissions units or activities that are incidental to the main activities of the facility. A list of these types of activities can be found in LAC 33:III.501.B.5.

The introductory paragraph of LAC 33:III.501.B.5 is as follows. The table referenced in the regulation cited below can be found in LAC 33:III.501.B.5:

> Those activities listed in the following table are approved by the permitting authority as insignificant on the basis of size, emission or production rate, or type of pollutant. By such listing, the permitting authority exempts certain sources or types of sources from the requirement to obtain a permit under this Chapter unless it is determined by the permitting authority on a site-specific basis that any such exemption is not appropriate. The listing of any activity or emission unit as insignificant does not authorize the maintenance of a nuisance or a danger to public health or safety. Any activity for which a federal applicable requirement applies is not insignificant, even if the activity meets the criteria below. For the purpose of permitting requirements under LAC 33:III.507, no exemption listed in the following table shall become effective until approved by the administrator in accordance with 40 CFR Part 70. For purposes of the insignificant activities listed in this Paragraph, *aggregate emissions* shall mean the total emissions from a particular insignificant activity or group of similar insignificant activities (e.g., A.1, A.2, etc.) within a permit per year.

An applicant must provide calculations or other supporting documentation to demonstrate that the emissions unit or activity qualifies as an insignificant activity. Specifically, the demonstration should concentrate on such items as:

- proving that no federal applicable requirement applies;
- for tanks, documenting the volume of the tank and the true vapor pressure (at storage conditions) of organic liquids is less than the limits specified;
- for external combustion devices, documenting the fuel type and maximum heat input; and
- except for activities deemed insignificant under A.5 or A.7, documenting that the aggregate emissions from all similar types of sources qualifying as insignificant do not exceed 5 tons per year (tpy) or exceed any Minimum Emission Rate (MER) listed in Table 51.1 of LAC 33:III.5112.

  For example, if the potential Insignificant Activity is a 7500 gallon diesel storage tank, the applicant would have to document that aggregate VOC emissions from all storage tanks claimed as Insignificant Activities under A.3 emit less than 5 TPY.

LDEQ reserves the right to determine, on a site-specific basis, that any of the insignificant activity designations listed in this regulation are not appropriate.

Certain activities are clearly trivial (i.e., emissions units and activities without specific applicable requirements and with extremely small emissions) and can be omitted from the application even if they are not included on the list of insignificant activities found in LAC 33:III.501.B.5. For a list of examples of trivial activities, see the EPA's "White Paper for Streamlined Development of Part 70 Permit Applications," dated July 10, 1995. Activities which meet the criteria for classification as "trivial" and are not listed in the insignificant activities table found in LAC 33:III.501.B.5 need not be included in the permit application. In addition, it is not necessary to list in a permit application any activities that are listed in LAC 33:III.501.B.5, Table B and Table C.

General Condition XVII Activities

General Condition XVII Activities are activities that are periodic in nature, result in very small emissions, and are necessary to the operation of the plant or process. These activities are authorized pursuant to Louisiana General Condition XVII of a Part 70 or state minor source permit. Louisiana General Condition XVII is codified in the Louisiana air quality regulations under LAC 33:III.537.

The text of General Condition XVII is as follows:

> Very small emissions to the air resulting from routine operations that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
>
> 1. Generally be less than 5 TPY (tons per year)
> 2. Be less than the minimum emission rate (MER)
> 3. Be scheduled daily, weekly, monthly, etc., or
> 4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]
>
> These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

General Condition XVII Activities must be routine and must occur when the plant or process is running correctly. Emissions associated with upsets and malfunctions do not qualify as General Condition XVII Activities. General Condition XVII Activities must be reported annually pursuant to LAC 33:III.919, if applicable.

Hints and Tips

Visible emissions are the easiest means to determine that an emission is occurring. Although water vapor is excluded from any air permitting action, those processes that emit water vapor with chemicals or elements other than hydrogen and oxygen may need to be evaluated. It is therefore critical to examine whether the water vapor is pure or contaminated.

Examine every piece of pipe, valve, fitting, flange, tank, sump, instrumentation, pump, etc. for a potential location where product can be released.

A working knowledge of the chemicals within each piece of equipment or apparatus is necessary in order to identify if emissions can occur. Many chemicals have different properties depending on the temperature and pressure. Tanks held at elevated temperature need to be evaluated for releases at that temperature.

Material safety data sheets (MSDS) should be available for most compounds.

Standard reference books or industry-specific technical bulletins can also be used.

Mechanical processes such as crushers, conveyors, material movement, vehicle movement on dirt roads, and wind blown particulate from storage piles must also be evaluated.

Since chemical reactions are not 100 percent efficient, raw materials entering a process (reactants), an intermediate chemical produced during a multi-stage chemical reaction, and/or the end products may be emitted.

Most raw materials do not come in a 100% pure state. Phosphoric rock contains a portion of hydrogen fluoride. Oil and gas producing wells may emit hydrogen sulfide gas. Gravity separators usually allow a small portion of the oil to be directed to the water storage tank. As such, the oil floats to the top and various organic chemicals are released to the atmosphere. A dust suppressant is sprayed on coal as it is conveyed to a combustion furnace. The MSDS sheet for the dust suppressant indicates that a measurable portion of the dust suppressant is sulfur. This would affect the amount of sulfur dioxide emitted.

LDEQ may allow a research and development facility to be considered a separate source with regard to the requirements of LAC 33:III.Chapter 5, provided that the facility has a different two-digit Standard Industrial Classification (SIC) Code and is not a support facility of the source with which it is co-located.

Please take the time to consult the above guidance and take a complete and thorough inventory of the facility. This will reduce the application's processing time and help avoid instances of noncompliance.

1.2.3 Emissions Estimation Methods

In order to determine which type of LDEQ approval is required, it is necessary to know how much of each pollutant is being or will be emitted. Emission calculations and applicable federal

and state standards provide the bases for a permit's allowable emission rates in the permit application. Calculations should be of sufficient detail such that LDEQ personnel can replicate the results given the proper inputs and constraints. If the calculations are sufficiently detailed, technical review of the application may proceed more smoothly.

Here are a few resources that will help an applicant determine which pollutants, as well as how much of each pollutant, a given source emits. The level of confidence in the accuracy of the emissions estimation methodologies is roughly listed from the most reliable to the least reliable:

1. Continuous Monitoring Data

   A Continuous Emissions Monitoring System (CEMS), a Continuous Opacity Monitoring System (COMS), or other continuous monitoring system provides extremely reliable data if functioning properly. Actual continuous data from existing operations are the best data. Information regarding the EPA CEMS Performance Specifications can be found at http://www.epa.gov/ttn/emc.

2. Source-Specific Stack Tests

   Stack tests performed on the specific piece of equipment are even more useful. It is possible that the source has had a stack test performed recently. If so, this may detail in a very accurate way which pollutants the source emits, depending on the scope of the test. Stack testing is typically conducted at maximum operating rates and results indicate the actual emissions from the tested source during the test period. Testing must comply with acceptable EPA and/or LDEQ testing methods in order for the data to be accepted for the purpose of calculating emissions estimates. It may be necessary to conduct a pre-test meeting with the Office of Environmental Services before conducting a stack test.

   Gas analyses and stack testing are requirements when requested by the Department to demonstrate compliance. Applicable stack testing may be required prior to issuing an air permit and/or will be addressed in the issued air permit. Approved test methods can be found in LAC 33:III.2103.H.

   Emission tests performed in support of emission estimates must be done by an LDEQ accredited laboratory per LAC 33:I, Subpart 3, Laboratory Accreditation. Any laboratory other than one operated by the company seeking the permit that performs analyses or tests and provides chemical analyses, analytical results, or other test data to the department must be an accredited laboratory by LDEQ. The department will not accept laboratory data generated by any such laboratories that have not received accreditation for the test or analysis that was performed to obtain this data.

   If the applicant is interested in contracting an LDEQ accredited laboratory to perform any necessary gas analysis or emission testing, a list of all the LDEQ accredited laboratories can be found at the LDEQ website: http://www.deq.louisiana.gov.

   The submittal of the test results must contain all documentation of in-house data used in support of the testing. For example, if the testing was performed to show compliance

with a NSPS or NESHAP (which are discussed in the *Regulations* section to follow) limitation expressed in terms of pounds of pollutant emitted per ton of product produced, the tons produced value is normally supplied by the facility. Records supporting the documentation of the tons of product produced must be attached to the report. If the regulation specifies the method to determine the tons of product produced, the records must be sufficient to demonstrate compliance with that method. All reports must also clearly identify the operating conditions at the time of the test.

The documentation of the operating condition of the equipment being tested must include values directly associated with the emissions. For example, if AP-42 indicates that emissions from a boiler are directly related to the amount of fuel combusted, then the stack test report must indicate the amount of fuel being combusted at the time of the test. Documenting the amount of steam being produced as an indication of the percentage of the boiler rating has no validity if the fuel efficiency of the boiler is not known.

Information regarding the EPA test methods can be found at http://www.epa.gov/ttn/emc.

If stack tests are used to derive an emission factor used to calculate emissions from a source, the stack test results must be submitted with the permit application. The pertinent data should be prominently highlighted. If the stack test is older than 3 years, LDEQ may require that it be repeated by way of a permit condition.

If tests are performed in order to establish alternate parameter monitoring in accordance with any applicable regulations, the tests should be performed in accordance with the test methods prescribed by the regulation or alternate test methods as approved by the Office of Environmental Services.

More information regarding emissions testing can be found at the Office of Environmental Services', Source Emissions Testing Tools and Resources web site: http://www.deq.louisiana.gov/portal/tabid/2286/Default.aspx.

3. Manufacturer Supplied Emission Factors

Manufacturer Supplied Emission Factors that are developed by the manufacturer of the equipment in question are also useful. If available, the manufacturer can supply this to the applicant. They are more usually more accurate than and are preferred over AP-42 factors. If they are used, the applicant should provide these factors to LDEQ in the permit application.

4. Mass Balances

Mass Balances equations can be used and they should be dependent on a chemical analysis of the constituents contained in the product being affected. If this option will be used, it should be based on either a determination of the amount of contaminant contained in the raw material being introduced into the chemical process and the assumption that all of that contaminant is being emitted into the air; or a determination of the amount of the contaminant in the raw material and another determination of the

amount in the finished product. The difference is assumed to be emitted to the air. These are primarily utilized for emission sources when more specific information or stack test information is not available or required.

5. EPA Emission Estimation Tools and Other Technical Documentation

A. EPA Emission Estimation Tools

The following is not a comprehensive list. For more information on emission factors, or any of EPA's emission estimation tools, visit the EFIG and CHIEF web sites.

1) EFIG Web Site

The Emission Factor and Inventory Group (EFIG) of EPA's Office of Air Quality Planning and Standards (OAQPS) provides access to many documents and news alerts at http://www.epa.gov/ttn/chief/efpac/index.html.

2) CHIEF Bulletin Board on TTN

The Clearinghouse for Inventory and Emission Factors (CHIEF) is one of many technical bulletin boards on EPA's Technology Transfer Network. It provides access to the same materials offered by the EFIG site, as well as many additional resources for emission estimation. CHIEF is available on the TTN website at http://www.epa.gov/ttn/chief.

3) Software for Emission Estimation (FIRE, TANKS, SPECIATE, AIRCHIEF, etc.)

The TANKS program is a particularly useful program for estimating VOC evaporative emissions from both fixed and floating roof storage tanks. FIRE is an excellent database of emission factors. Visit the following TTN website for more information: http://www.epa.gov/ttn/chief/software.

4) EPA EIIP Protocol Documents

EPA's EIIP program has published emission estimation protocol documents for wastewater treatment, boilers, hot-mix asphalt, and other sources. These can be accessed at http://www.epa.gov/ttnchie1/eiip/techreport/index.html.

B. Other Technical Documentation

Various industries have performed tests or analyses similar to those developed or utilized by EPA in development AP-42 emission factors. This information may more accurately represent the actual emissions from an individual source. Documentation supporting the use of these factors is required. Supporting documentation should be included with calculations. If the documentation is in the form of a textbook or other large technical reference book, then it need not be attached.

1) American Petroleum Institute - Selected Documents (www.api.org)

- Evaporative Loss From External Floating-Roof Tanks - API Publication #2517, 1989.
- Evaporative Loss From Fixed-Roof Tanks - API Bulletin #2518, 2nd Edition, October 1991.
- Evaporative Loss From Internal Floating-Roof Tanks - API Publication #2519, 3rd Edition 1983 (Reaffirmed May 1996).
- Emission Factors for Oil and Gas Production Operations - API Publication #4589, December 1993.
- Emission Factors for Oil and Gas Production Operations - API Publication #4615 [Supplement to #4589 covering gas plants], January 1995.
- Calculation Workbook for Oil and Gas Production Equipment Fugitive Emissions -API Publication #4638, July 1996.

2) Gas Research Institute - Selected Documents

- Amine-Based Gas Sweetening and Claus Sulfur Recovery Process Chemistry and Waste Stream Survey - Gas Research Institute Topical Report No. GRI-95/0187, December 1995.
- Atmospheric Rich/Lean (ARL) Method for Determining Glycol Dehydrator Emissions - Gas Research Institute Topical Report No. GRI-95/0368, March 1996.
- BTEX and Other VOC Emissions from a Natural Gas Amine Treater - Gas Research Institute Topical Report No. GRI-96/0048, February 1996.
- Control Device Monitoring of Glycol Dehydrators: Condenser Efficiency Measurements and Modeling, Volume I - Gas Research Institute Topical Report No. GRI-97/0005.1, January 1997.
- Glycol Dehydrator Operations, Environmental Regulations, and Waste Stream Study - Gas Research Institute Topical Report No. GRI-96/0049, June 1996.

3) National Council for Air and Stream Improvement, Inc. (NCASI)

Technical Bulletins 768-774 – NCASI, January 1999

The LDEQ prefers that air permit applicants calculate fugitive emissions using one of the following guidance documents to obtain emission factors.

Oil & Gas Facilities (Including Gas Plants)
Oil and gas facilities should use the guidance document. Emission Factors for Oil and Gas Production Operations, API Publication 4615. -- American Petroleum Institute, January 1995. (Factors in this document are based on API data and EPA correlations).

4) All Other Facilities
All other facilities should use EPA's technical guidance document Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017. -- U.S. EPA, November 1995.

The leaks protocol document is available for downloading at the following web address: http://www.epa.gov/ttnchie1/efdocs/equiplks.pdf

6. EPA-compiled emission factors

AP-42: The Compilation of Air Pollutant Emission Factors, Volume I, 5th Edition is the commonly accepted source of air pollutant emission factors for point and area sources. AP-42 describes and details emission factors from activities producing both criteria and HAP emissions. Emission factor data found in AP-42 is obtained from source tests, material balance studies, engineering estimates, etc. These factors can be used to estimate emissions when no source-specific data is available. AP-42 also contains examples of emission calculations.

Due to the size of this document (over 2000 pages, not counting supplements), many permit applicants choose to order a hard copy. Hard copies are available from the Government Printing Office (GPO) (see www.gpoaccess.gov). When ordering a hard copy, requests AP-42, Volume I, 5th Edition and all subsequent supplements. It may also be available on a CD.

AP-42 is also available through EPA's CHIEF web site and may be downloaded in multiple files from http://www.epa.gov/ttn/chief/ap42/index.html.

As AP-42 is frequently revised, it is recommended that users check this website for updates on a periodic basis to ensure that they are using the most current information. **Please be sure to verify that the most current emission factors are used**. Use of outdated factors is a common problem when preparing permit modifications.

Additional background information regarding the origin and development of these factors can be found in an EPA document entitled "Draft Detailed Procedures for Developing Emission Factors," which can found at http://www.epa.gov/ttn/chief/efpac/procedures/procedure_draft.pdf.

7. Best Engineering Judgment

Best Engineering Judgment can be used in the absence of any other kind of information. These types of estimates are used when emissions cannot be practically quantified. (For example: particulate emissions from unloading operations). It is recommended that all other options be exhausted before using this option. Use of this option may cause LDEQ to require testing to verify the emissions.

1.2.4 How Emissions Should Be Listed

In What Quantities Should Emissions Be Listed?

Unless otherwise indicated, all emissions for all pollutants should be listed in three quantities: average pounds per hour (average lb/hr), maximum pounds per hour (maximum lb/hr), and tons per year (TPY). The average lb/hr should be based on the expected, normal operating rate, though emissions in any given hour of the year would be expected to be higher or lower than this average rate. When multiplied by the actual, anticipated hours of operation in a year and converted to tons, it should result in the TPY entry. For continuous year-round operations, the TPY is based on the average lb/hr emission rate multiplied by 4.38 (8760 hours per year/2000 pounds per ton).

Inclusion of Maximum Pound per Hour Limits in Air Permit Applications

Maximum pound per hour limits are used to verify compliance with National Ambient Air Quality Standards (NAAQS) and/or Louisiana Ambient Air Standards (AAS) with short-term averaging periods (i.e., 1-hour, 3-hour, 8-hour, or 24-hour).[4]

An applicant should ensure the maximum lb/hr will cover all anticipated operations. However, the applicant should not use excessive buffers for this value. The supporting calculations should clearly justify large differences between average and maximum lb/hr by providing an explanation of the process conditions or other variables on which the higher rate is based.

Averaging Periods

Because emissions data must be reported "in such terms as are necessary to establish compliance consistent with applicable test methods," averaging periods should also be consistent with applicable test methods. Therefore, in some instances, short-term limits for a given pollutant may be established with averaging periods longer than one hour. However, be aware that most testing procedures require runs of one hour or less.[5]

In no event should the averaging period be longer than that associated with the corresponding NAAQS, even if an underlying federal or state standard allows for compliance to be evaluated over a longer period (as in 40 CFR 60.105(e)(4)).

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[4] See LAC 33:III.519.C.5 & LAC 33:III.5109.B.3.

[5] For example, 40 CFR 60 Subpart KKKK (§60.4400(b)) requires three separate test runs for each performance test (the minimum time per run is 20 minutes) for the initial and subsequent performance tests to demonstrate compliance with the NO_X standard. Further, CEMS data must be reduced to 1-hour averages (§60.13(h), §63.8(g)(2), and §75.10(d)(1)).

How Should I Incorporate Significant Digits Into My Emissions Estimates?

In selecting the number of digits and decimal places in a lb/hr or TPY emission rate calculation, it is necessary that there is (1) sufficient detail to determine if a requirement applies, and (2) an adequate and meaningful reference to assist in demonstrating compliance after permit issuance.

In all cases, the rounding convention is to round up if the trailing digit is 5 or greater, and to round down if it is 4 or less.

It is not necessary to list or speciate a pollutant as being emitted by a given emissions unit if it is emitted at a rate of less than 0.0005 tons per year (TPY). The only exceptions to this rule are chlorinated dibenzofurans and chlorinated dibenzo-p-dioxins, each of which has a Minimum Emission Rate (MER) of 0.0001 lb/year.

Criteria Pollutants

Report annual (i.e., TPY) emissions to 2 decimal places. If emission rate does not round to 0.01 TPY, report emissions as being < 0.01 TPY. Also report hourly (i.e., average lb/hr and maximum lb/hr) emissions to 2 decimal places unless the emission rate does not round to 0.01 lb/hr. If the hourly emissions rate rounds to 0.001, 0.002, 0.003, 0.004, or 0.005, report emissions as such. If the hourly emissions rate does not round to 0.001, report emissions as < 0.001.

Examples:

lb/hr or TPY rates greater than 1

- 25.444 would be reported as 25.44
- 25.445 would be reported as 25.45

lb/hr rates less than 1

- 0.244 would be reported as 0.24
- 0.058 would be reported as 0.06
- 0.005 would be reported as 0.01
- 0.0045 would be reported as 0.005
- 0.0044 would be reported as 0.004
- rates less than (<) 0.001 lb/hr would be reported as < 0.001

TPY rates less than 1

- rates less than 0.005 TPY would be reported as < 0.01

Toxic Air Pollutants

The annual emission rate in tons per year (TPY) should generally be listed to two (2) decimal places according to the guidance above, with the following exceptions:

- annual and hourly emissions of chlorinated dibenzofurans and chlorinated dibenzo-p-dioxins, which have a Minimum Emission Rate (MER) of 0.0001 lb/year, must be reported to eight (8) decimal places; and

- annual and hourly emissions of all other TAPs that have an MER of 50 lb/year or less should be rounded to three decimal places.

Examples include:

lb/hr rates for TAPS with an MER greater than 50 lbs/yr

Follow the guidance shown above for Non-TAPs

lb/hr rates less than one for TAPS with an MER less than or equal to 50 lbs/yr
° 0.0045 would be reported as 0.005
° 0.0044 would be reported as 0.004
° rates less than (<) 0.001 lb/hr would be reported as < 0.001

TPY rates for TAPS with an MER greater than 50 lbs/yr

Follow the guidance shown above for Non-TAPs

TPY rates less than one for TAPS with an MER less than or equal to 50 lbs/yr

° 0.0045 would be reported as 0.005
° 0.0044 would be reported as 0.004
rates less than (<) 0.001 TPY would be reported as < 0.001

Polynuclear Aromatic Hydrocarbons (PAH) are a grouping of pollutants that are classified collectively as a Class II Toxic Air Pollutant (TAP). They are part of a larger group of pollutants known as Polycyclic Organic Matter (POM). When it is impossible to distinguish PAH from POM in order to report emissions, POM should be reported instead of PAH. POM will then be regulated as a surrogate for PAH.

Facility Emission Rate Totals

When adding the emissions rates of each emissions unit at the facility, consider the "less than" rates to be the shown digit(s) (e.g., < 0.01 would be added as 0.01).

EQT001 <0.25 TPY
EQT002 <0.74 TPY
EQT003 <0.38 TPY
EQT004 <0.01 TPY
<1.38 TPY Total

However, if all the sources for a particular pollutant are small and include "less than" rates, it may be preferable to sum in a manner reflecting facility specific process knowledge to avoid the incorrect conclusion that there is a quantifiable (and perhaps significant) total emission, when there is not. Finally, in rounding off total emission rates, utilize the same protocols as described above (e.g., 24.51 lb/hr + 0.002 lb/hr = 24.512 lb/hr would be reported as 24.51 lb/hr).

Greenhouse Gases (GHG)

40 CFR 70.5(c)(3) requires Part 70 permit applications to "describe all emissions of regulated air pollutants" and provide their "emissions rate in tpy and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method." However, EPA "interprets the tpy estimates to not be required at all where they would serve no useful purpose, where a quantifiable emissions rate is not applicable (e.g., section 112(r) requirements or a work practice standard), or where emissions units are subject to a generic requirement."[6] Instead, a "general description of emissions (i.e., simple identification of the significant pollutant or family of pollutants believed to be emitted by the emissions unit) should suffice."[7]

With respect to greenhouse gases (i.e., CO_2e), LDEQ requires permit applicants to disclose only whether or not the facility at hand is a major source of this pollutant. There are several exceptions.

- Applications requesting a synthetic restriction on CO_2e emissions to avoid Title V or PSD applicability.
- Applications proposing physical changes or changes in the method of operation at facilities that are or will become major stationary sources under the PSD program should address CO_2e emissions for the project-affected sources to show that the project increase (or net emissions increase, if necessary) does not trigger PSD review.
- Applications for a PSD permit for GHGs.

GHG emissions should be rounded the nearest whole ton. It is not necessary to represent GHG emissions using any decimals. Also, it is not necessary to represent GHG average or maximum pound per hour emission limits in air permit applications. Please see Section 2.3.9.2 – Prevention of Significant Deterioration for more details regarding GHG and CO_2e.

1.2.5 Regulations

Below is a short introduction of the different regulations to which a facility may be subject. It is the responsibility of the permittee to ensure that the facility or activity complies with all applicable regulations. If there are any questions regarding any of these regulations and how they may apply, please contact the Air Permits Division at (225) 219-3181.

[6] Memo from Lydia N. Wegman, OAQPS, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995, pp.6-7.

[7] *Id*., p. 8.

Louisiana Air Quality Regulations (LAC 33:III)

Louisiana is federally authorized to administer its own air quality program. Louisiana follows the federal scheme concerning air pollution control. The State issues permits for construction of new sources and for modifications to existing sources. The Louisiana Air Quality Regulations specify the minimum control requirements for all sources including those not covered by the federal regulations, which are introduced below. There are instances where state and federal requirements may overlap. However, compliance is required for both state and federal programs.

Not all state regulations are federally enforceable. Only state regulations which are in the EPA approved State Implementation Plan (SIP) are federally enforceable. Only violations of the federally enforceable requirements can be subject to enforcement by EPA or citizen suits in federal courts. See the "Commonly Used Terms" section of the "What Do I Need To Apply For?" chapter for more information regarding Louisiana's SIP.

Here is a short list of some of the state regulations that are most commonly applicable:

LAC 33:III.Chapter 2 – This chapter lists what fees must be paid and how they must be paid
LAC 33:III.Chapter 5 – This chapter regulates how a permit must be applied for and other related actions. This will be discussed in detail in a later section.
LAC 33:III.Chapter 11 – Control of Emissions of Smoke
LAC 33:III.Chapter 13 – Control of Emissions of Particulate Matter
LAC 33:III.Chapter 15 – Control of Emissions of Sulfur Dioxide
LAC 33:III.Chapter 21 – Control of Emissions of Organic Compounds
LAC 33:III.Chapter 51 – Comprehensive Toxic Air Pollutant Emission Control Program

The link to the most current version of LAC 33:III is http://www.deq.louisiana.gov/portal/Default.aspx?tabid=1674.

State Only regulations include, but are not necessarily limited to, the following:

LAC 33:III.2104
LAC 33:III.2116
LAC 33:III.Chapter 25
LAC 33:III.Chapter 27
LAC 33:III.Chapter 28
LAC 33:III.Chapter 29
LAC 33:III.Chapter 51
LAC 33:III.Chapter 53
LAC 33:III.Chapter 59

Federal Regulations (40 CFR Part 51 through 82)

These regulations cover the federal air quality program. Two of the most commonly applicable parts of these regulations are New Source Performance Standards (NSPS) found in 40 CFR 60 and National Emission Standards for Hazardous Air Pollutants (NESHAP) found in 40 CFR 61 and 40 CFR 63. Other regulations include, but are not limited to, Compliance Assurance

Monitoring found in 40 CFR 64, the Acid Rain Program found in 40 CFR 72-76, the Clean Air Interstate Rule found in 40 CFR 51.123 – 125, and Prevention of Significant Deterioration (PSD), the regulations for which are found in 40 CFR 51.166.

New Source Performance Standards (NSPS)

The Clean Air Act required the EPA to develop standards for the control of emissions from industrial source categories. The New Source Performance Standards (NSPS) are based on Best Demonstrated Technology. NSPS typically applies to newly constructed, modified or reconstructed affected source. NSPS establishes technology based emission limits that place restrictions on specified industry source categories. The requirements are codified in 40 CFR Part 60. Other regulations which require best available control technology (BACT) or lowest achievable emission rates (LAER), such as PSD, are generally more stringent than NSPS.

NSPS applies to any stationary source which contains an affected facility of which the construction, modification, or reconstruction is commenced after the effective date cited in the standard. Unlike other federal regulations, once the final rule has been published, **an NSPS regulation is effective retroactively to the date the proposal was published, not the date the final rule was published.**

NSPS regulations are located in 40 CFR 60. Each subpart addresses the equipment for which a standard applies. For example:

Subpart Kb - Volatile Organic Liquid Storage Vessels
Subpart NNN - VOC Emissions from Distillation Operations
Subpart DDD - VOC Emissions from Polymer Manufacturing Industry

Subpart A of 40 CFR 60 contains the General Provision for the NSPS program. These requirements take precedence if a subpart does not address specific items. For example, the timetable for notifications for construction of a new reactor is not given in Subpart RRR for SOCMI Reactors, but in Subpart A (40 CFR 60.7) instead. Subpart A also defines the terms "modification" and "reconstruction." Even though the terms are summarized below, consult Subpart A for a more thorough definition.

A "modification" requires an increase or initiation of an emission to the atmosphere of any pollutant to which the standard applies. Therefore, a project which involves a decrease in emissions would not be a "modification." There are also some activities that by themselves are not considered a "modification" under NSPS. Examples of these are:

- increase in production rate if that increase can be accomplished without a capital expenditure on that facility; and

- addition of any system or device whose primary function is the reduction of air pollutants.

There are some changes that result in the increase of emissions which, by themselves, are not considered "modifications." These types of changes can be found in 40 CFR 60.14(e).

Reconstruction means the replacement of components, such that the fixed cost of the new components exceed 50% of the fixed capital cost to construct a comparable entirely new facility regardless of any change in emissions rate. Generally, fixed capital costs are the capital needed to provide the depreciable components, the cost of engineering and contractor's fees, and any project related foundations, piping, instrumentation, control facilities, canopies and other auxiliary buildings, structures, or facilities. This determination is made on a project by project basis. Costs associated with pollution control equipment are not included in the determination of reconstruction unless the equipment would be installed for reasons other than environmental, such as product recovery. A determination of reconstruction for the proposed replacement is required by the LDEQ (or EPA if the state has not been delegated authority for a specific NSPS standard). The facility is encouraged to carefully review each applicable NSPS standard when a determination of reconstruction is being made because some subparts have unique criteria on determining replacement costs.

If it has been determined that the project will create an affected facility under any subpart of the NSPS, there are notifications, possible continuous monitoring and/or performance tests, record keeping, and reporting requirements. Subpart A and the specific NSPS standard that applies to the affected facility should be reviewed thoroughly to ensure compliance.

Please consult 40 CFR 60 for a listing of all applicable NSPS standards. The following link provides a listing of some commonly applicable NSPS standards: http://www.epa.gov/ttn/atw/nsps/nspstbl.html. This list is not all inclusive.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

In 1977, section 112 of the Clean Air Act was amended to require EPA to promulgate National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61). The primary purpose of the amendments was to reduce the emissions of certain pollutants through the application of controls. However, only seven pollutants have specific NESHAP standards. These include asbestos, benzene, beryllium, inorganic arsenic, mercury, radionuclides, and vinyl chloride.

Other more general NESHAP regulations apply to source categories can be found in 40 CFR Part 63. NESHAP requirements only apply to Hazardous Air Pollutants (HAP) and do not apply to Toxic Air Pollutants (TAP). In most cases, NESHAP will not apply to a facility unless the facility is considered a major source of HAPs; however, some area source rules have recently been promulgated by EPA and more are scheduled for development. A major source of HAPs is defined as any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any single HAP or 25 tons per year or more of multiple HAPs. Sources that emit levels less than these amounts are known as area sources.

Pollutant-Specific NESHAPs (40 CFR Part 61)

As stated earlier, only seven pollutants have specific NESHAP standards. These include asbestos, benzene, beryllium, inorganic arsenic, mercury, radionuclides, and vinyl chloride. In general, NESHAP apply to both existing and new stationary sources.

NESHAP regulations are located in 40 CFR 61. Each subpart addresses the equipment for which a standard applies. For example:

- Subpart F – Vinyl Chloride
- Subpart J – Equipment Leaks of Benzene
- Subpart M– Asbestos

Like NSPS, Subpart A contains the General Provisions for the NESHAP program. These requirements take precedence if a subpart does not address specific items. For example, the timetable for notifications for construction of a new tank is not given in Subpart Y for Benzene Storage Vessels, but in Subpart A (40 CFR 61.7). Subpart A also defines the terms "modification" and "reconstruction."

Please consult 40 CFR 61 for a listing of all applicable pollutant-specific NESHAP standards. The following link provides a listing of the pollutant-specific NESHAP standards: http://www.epa.gov/enviro/html/rad/rad_cfr_part61.html

Source-Category NESHAPs (40 CFR Part 63)

In 1990, the NESHAP program under Section 112 of the Clean Air Act was amended. Congress took over the designation process through the amendments to speed up this process and in one action declared 189 chemicals and chemical categories as HAPs requiring regulation. Furthermore, Congress established specific deadlines for the identification of source categories subject to control and for the establishment of control technology standards. These NESHAP standards are based on maximum achievable control technology (MACT) and are located in 40 CFR Part 63.

In general, NESHAP regulations apply to any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any single HAP or 25 tons per year or more of multiple HAPs. However, there are some NESHAP regulations that have requirements for sources that do not meet the thresholds stated above. For example, applicability for Subpart AAAA is based on capacity. Another example is Subpart Y, which imposes recordkeeping and reporting requirements on some sources that are below the thresholds stated above.

Please consult 40 CFR 63 for a listing of all applicable source-category-specific NESHAP standards. The following link provides a listing of some commonly applicable source-category-specific NESHAP standards: http://www.epa.gov/ttn/atw/mactfnlalph.html.

Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring (CAM) is a method of assuring compliance with established federally enforceable emission limitations by setting forth terms and conditions sufficient to reasonably assure compliance with applicable emission limitations. In certain situations, federal regulations do not provide sufficient methods to assure compliance with the emission limitation.

The CAM rule, codified in 40 CFR 64, establishes criteria that define what monitoring the owner or operator must conduct to provide a reasonable assurance of compliance with emission limits and standards.

Applicability

CAM is applicable to each pollutant specific emissions unit. This means that CAM applies to an emissions unit (i.e., a boiler or process vent, not a facility). In general, CAM applies to emissions units that meet all of the following conditions:

1) The unit is located at a major source for which a Title V permit is required.

2) The unit is subject to a federally enforceable emission limitation or standard. This includes mass limitations (lb/hr and TPY limits).

3) The unit uses an active control device to achieve compliance with a federally enforceable limit or standard.

4) The unit has potential pre-control emissions of at least 100% of the major source amount (see the "Commonly Used Terms" section of the "What Should I Apply For?" chapter for a definition of Major Source). Potential emissions should be calculated without considering the effect of any control devices. This is otherwise known as "pre-control potential to emit."

5) The unit is not otherwise exempt from CAM.

Each pollutant must be evaluated independently for CAM applicability. CAM may be applicable for only one of the pollutants emitted by the unit, or it may be applicable to more than one.

The CAM requirements do not apply to:

1) Emission limitations or standards promulgated by the Administrator after November 15, 1990 pursuant to Section 111 (NSPS) or 112 (NESHAP) of the Amendments (Regulations promulgated under these sections after November 15, 1990, will include monitoring requirements);

2) Stratospheric ozone protection requirements under Title VI of the Act;

3) Acid Rain program requirements;

4) Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved by the Administrator used for trading emissions within a source or between sources;

5) An emissions cap that meets the requirements specified in 40 Code of Federal Regulations (CFR) Part 70.4(b)(12) or Part 71.6(a)(13)(iii);

6) Emission limitations or standards for which a 40 CFR Part 70 or 71 permit specifies a continuous compliance determination method. This does not apply if the compliance method includes an assumed control device emission reduction factor (Example: A surface coating line controlled by an incinerator that calculated emissions on an assumed control device efficiency factor based on an initial performance test would not be exempt.); or

7) Certain backup utility power units, that are municipally owned, that:
   a) Are exempt from all Acid Rain monitoring requirements;
   b) Are operated solely for providing electricity during periods of peak electrical demand or emergency situations (Some operational and contractual data will be needed.); and,
   c) Where actual emissions (annual) averaged over the last three calendar years (or shorter time if it hasn't operated that long) are less than 50 percent of the amount in tons per year for the source to be considered major.

CAM Plan

If an emissions unit is subject to CAM, the permit applicant must submit a CAM plan. Since CAM will become applicable upon a significant permit revision or permit renewal (these terms will be explained in detail in the "What Do I Need To Apply For?" section), the CAM plan must be included with the renewal or modification application. A CAM Plan must be developed for each affected source for each affected pollutant emitted. The focus of each CAM Plan should be to document proper operation of the control device which will assure compliance with the applicable emission limit.

The CAM Plan should use indicator ranges for one or more key operating parameters (e.g., temperature, pressure, voltage, flow measurements, etc.) to establish reasonable assurance that the control device is operating properly. Indicators of performance may include direct or predicted emission measurements such as visible emissions observations, opacity measurements, or continuous emissions monitoring (CEM) data. In any event, there is no restriction on the operating parameters that may be chosen, so long as they effectively assure that the control device is working properly and in accordance with the manner in which its operation is presented in the permit application.

Key operating parameters can be identified and indicator ranges selected using design information, historical data, data from similar sources, and test data. Any indicators that can be used to detect any control device bypass must also be included in the CAM Plan. Indicator ranges may be presented as:

- Single maximum or minimum values (e.g., a maximum condenser temperature);
- A series of maximum or minimum values that relate to various process conditions;
- A function of process variables (e.g., an indicator range expressed as a minimum to maximum pressure drop across a venturi scrubber relative to process throughput);

- Particular, designated operational conditions (e.g., the position of a damper in a bypass duct); or

- Interdependent values that vary as one or more other indicator ranges vary.

The CAM Plan must show that the data collected for each parameter is accurate and representative. The operational status of all monitoring equipment installed or modified for the purposes of complying with CAM requirements must be verified. Quality assurance and quality control (QA/QC) procedures that adequately ensure continuing validity of the data may be required by LDEQ. If necessary, owners and operators must justify differences in proposed CAM Plan and manufacturers' performance specifications.

In addition, the frequency of conducting the monitoring and data collection procedures must be shown. For sources that have a potential to emit that is below the major source threshold after the effect of the control device(s) is taken into effect, the frequency must be at least once daily. For sources that have a potential to emit that is equal to or above the major source threshold after the effect of the control device(s) is taken into effect, the frequency must be four times per hour. Each of these four readings must be taken at evenly spaced intervals. For any applicable time interval, it is acceptable to monitor more frequently. The limits stated above are the minimum frequency necessary to comply with CAM.

What Should I Include In My CAM Plan?

Each CAM Plan must include a description of the:

1. Indicators to be monitored;
2. The frequency at which the indicators will be monitored;
3. The method by which the indicators will be recorded;
4. The averaging period for the indicator data recorded;
5. Ranges or designated conditions for each indicator, or the process that will be used to establish the ranges and designated conditions;
6. Performance criteria and quality assurance activities required to obtain accurate and representative data;
7. Reasons and supporting justifications for any differences that may exist between the manufacturer's recommended performance specifications and those proposed in the CAM Plan; and
8. Justification for the elements in each proposed CAM Plan.

If a control device is common to more than one pollutant or more than unit, a single CAM Plan may be submitted for that device. If a pollutant is controlled using more than one device, a single pollutant-specific CAM Plan may be submitted.

Is There Any Additional Guidance?

The text of 40 CFR 64, as well as additional guidance, can be found at http://www.epa.gov/ttn/emc/cam.html.

Acid Rain Regulations

The Acid Rain Program regulations are stated in 40 CFR 72 – 78. These regulations were introduced under Title IV of the 1990 Clean Air Act Amendments. Phase I of the program targeted 110 fossil-fuel-fired power stations, which are listed in the 1990 Clean Air Act Amendments as being the greatest polluters of sulfur dioxides. Phase I required these power stations to reduce their emissions to a level equivalent to 2.5 pounds of sulfur dioxide per million BTU multiplied by their 1985 baseline heat input rate in million BTU. Phase I went into effect in January 1995.

In Phase II of the program, more than 2000 fossil-fuel-fired sources were required to reduce their emissions of sulfur dioxide to levels equivalent to 1.2 pounds per million BTU times their 1985 baseline heat input rate in million BTUs. These requirements became effective on January 1, 2000.

The Acid Rain Program also includes a reduction in nitrogen oxides emissions of two million tons per year. This reduction must be accomplished without the aid of the cap and trade program. NO_X limits have been established for coal-fired boilers and are addressed in 40 CFR 76.

Owners or operators of stationary sources subject to these regulations may be required to install continuous emission monitoring systems (CEMS) for sulfur dioxide, nitrogen oxides, volumetric flue gas flow, and opacity for each unit, depending on fuel type. These instruments are meant to be the primary sources of information for calculating the total pollutant emission rates in terms of tons per year. Alternative emission calculation procedures based on general plant operating parameters must be used when CEMS data are unavailable. The emission data must be reported to EPA on a regular basis. EPA personnel review this data to confirm that emissions are less than the allotment for that specific facility.

Excess emission penalties are assessed if any source exceeds the yearly emission limitation. Furthermore, sources will be required to offset the excess emissions by an equal tonnage amount in the subsequent year.

Other Regulations

Part 70 Operating Permits reference these regulations, though requirements may not be explicitly detailed in the permit itself.

Asbestos

Many older facilities have insulation containing asbestos. Every facility needs to evaluate whether asbestos-containing material is present on the site

CFCs

The regulations for the affected chemicals are handled by 40 CFR 82 – Protection of Stratospheric Ozone.

SARA

The Superfund Amendments and Reauthorization Act (SARA) amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on October 17, 1986. The definition of Hazardous Substances can be found in Title 42, Chapter 103, Section 9601(14).

Chemical Accident Prevention

Chemicals listed in Table 130 of 40 CFR 68 – Chemical Accident Prevention Provisions are supplemented with additional chemicals listed in LAC 33:III Chapter 59. Although these may not be identified as pollutant emissions, any quantities at a stationary source greater than the threshold quantity must be identified.

General Tips

Please take these tips into account when preparing an application for approval. Incorporating these suggestions will lead to a more thorough application and reduced requests for additional information.

- When trying to determine whether or not a piece of equipment or facility is subject to any NSPS or NESHAP regulation, it is helpful to read the Table of Contents for 40 CFR 60 (NSPS), 40 CFR 61, and 40 CFR 63 (NESHAP). If any of the titles of the subparts seem to relate to the source in question, then read the Applicability section of that subpart. If the source is applicable, then read the rest of the subpart to determine the requirements. There are a number of tools available on the internet that can aid with this task, which are discussed above.

- Be aware that some of the above mentioned regulations have chapters or subparts that establish recordkeeping and reporting requirements, even though the source in question may be exempt from the standards or controls prescribed by the regulation.

- When an applicant chooses between optional compliance methods, the application should document which compliance option is being followed, along with the citation of the regulation that allows for the option.

- When making the determination of what parts or exemptions of the regulation apply, the applicant should note this with specific citations from the regulation. If the applicant claims that the regulation does not apply, this should be documented as well.

- LDEQ's TEMPO Requirements Library is available on the LDEQ website. This library shows all of the requirements that LDEQ air permit writers use to populate air permits. The applicant can use this searchable resource to populate an air permit application with the correct regulatory applicability. The TEMPO Requirements Library can be accessed from the LDEQ web site at www.deq.louisiana.gov.

2.0 What Do I Need To Apply For?

2.1 Background

Now that it has been decided that approval is needed for the activity, an inventory of the emission points has been taken, and the amounts of all of the pollutants have been calculated, a discussion of what type of approval will be needed becomes pertinent.

This discussion is divided into two general sections. The first section, entitled "Exemptions (that do require LDEQ approval)," describes variances and several types of exemptions that the permittee must obtain before engaging in the pollution-emitting activity. The second section, entitled "Permits," describes the types of activities that will require an air permit.

Any applications that are submitted for any of the actions discussed in this guidance document should be addressed to the Assistant Secretary of the Office of Environmental Services at the following address:

Office of Environmental Services
Air Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313

When making a submittal that requires a fee, be sure to send a check for the fee with the application submittal. The check should be made payable to the Louisiana Department of Environmental Quality.

When paying an application fee using an Electronic Fund Transfer (EFT), complete the relevant "Remarks" field provided by your financial institution. These remarks should, at a minimum, state the Agency Interest Number(s) and the name of the facility(ies) or process unit(s) (for process unit-specific permits) to which the EFT should apply.

LDEQ strongly encourages applicants **NOT** to use EFT for newly constructed facilities or for facilities that do not have an Agency Interest Number assigned to them. If the applicant must use an EFT for such a facility, please contact LDEQ prior to submittal of the EFT for guidance.

All forms of written approval that are issued by LDEQ become effective upon issuance, unless another date is specified. This means that the permittee must come into compliance with any terms, limits, conditions, and/or restrictions on issuance of the written approval, unless otherwise stated in the written approval. [La R.S. 30:2024]

2.2 Exemptions/Variances That Require LDEQ Approval

If an emissions unit or activity requires an exemption or variance as described below, and if the activity is located at a "Major Stationary Source" as defined in LAC 33:III.509, then it will be necessary to perform a Prevention of Significant Deterioration (PSD) review to show that the activity will not be subject to PSD. Please see the "Prevention of Significant Deterioration (PSD)" section in the following pages for details on how to perform this review.

2.2.1 Exemptions (granted by the permitting authority)

Description of Action

Exemptions are permitting actions that are primarily used for two reasons. The first reason is that a facility needs to make a small, permanent change that is immediately necessary. The second reason is to document the exemption status of a facility from permitting requirements. Even though a facility may be exempted from any permitting actions as stated in the "Exemptions (that do not require LDEQ action)" section, they may still wish to have documentation of this for their records. In all cases, the applicability requirements have to apply to the exemption request.

The owner of operator of a major source (see the definition of "Major Source" in Appendix A – Glossary) may apply for an exemption for certain emissions units provided the following requirements are met.

1. The emissions unit emits or has the potential to emit less than or equal to five (5) tons per year or less of any criteria or toxic air pollutant.

2. The emissions unit emits toxic air pollutants in quantities less than their respective Minimum Emission Rates as stated in LAC 33:III.Chapter 51, Table 51.1.

3. The source emits less than the de minimus rate for each hazardous air pollutant as listed in Section 112(g) of the federal Clean Air Act.

4. The source does not require any enforceable conditions in order to comply with any applicable requirement. This means that the emissions unit must not need an artificial limitation on any operating parameter in order to qualify for the exemption. An example of an artificial limitation would be to limit the operation of Engine A to 4000 hours per year in order for the emissions to remain below five tons per year of any regulated pollutant. Assuming that Engine A is physically able to operate longer than 4000 hours per year, this limitation would constitute an enforceable condition. However, if Engine A was used to provide energy to Machine B that could not operate longer than 4000 hours per year due to an inherent limitation (e.g., Machine B can only be operated during daylight hours), then the limitation of 4000 hours per year would not necessarily prohibit Engine A from qualifying for an exemption.

Certain very small sources may also apply for exemptions from permitting requirements, but the regulations governing their exemptions are different than those that apply to Major Sources. The requirements are:

1. The source emits less than or equal to five (5) tons per year of any criteria or toxic air pollutant.

2. The source emits all toxic air pollutants in quantities less than the Minimum Emission Rates as stated in LAC 33:III.Chapter 51, Table 51.1.

3. The source does not require any enforceable conditions in order to comply with any applicable requirement. See the previous discussion.

4. Public notice is not required.

Sources receiving an exemption must operate in accordance with any terms stated in the issued exemption.

Document(s) to Submit

An Exemption request should include the following items:

- Louisiana Application for Approval of Misc. Permitting Actions;
- Detailed calculations of emissions;
- Descriptions of the process and operating conditions as they relate to the request;
- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1; and
- Supporting documentation, which may include:
  - MSDS sheets;
  - Performance test data, fuel analysis, etc.; or
  - References to standard engineering properties and practices.

Regulation Reference

For non-major sources:

LAC 33:III.501.B.4 – Exemptions Granted by the Permitting Authority

a. The owner or operator of any source which is not a major source may apply for an exemption from the permitting requirements of this Chapter [5] provided each of the following criteria is met:
   i. the source emits and has the potential to emit no more than five tons per year of any criteria or toxic air pollutant;
   ii. the source emits and has the potential to emit less than the minimum emission rate listed in Table 51.1, LAC 33:III.Chapter 51, for each Louisiana toxic air pollutant;
   iii. no enforceable permit conditions are necessary to ensure compliance with any applicable requirement; and
   iv. no public notice is required for any permitting or other activity at the source.

b. Any source to which an exemption is granted under this Paragraph [501.B.4] shall be operated in accordance with any terms stated in the exemption and upon which the decision to grant the exemption

was based. Failure to operate the source in accordance with the terms of the exemption may terminate such exemption and shall constitute a violation of the general duty to operate under a permit established pursuant to Subsection C of this Section.

For major sources:

LAC 33:III.501.B.5.D – Exemptions Based on Emissions Levels with Prior Approval Granted by the Permitting Authority

> The owner or operator of any source may apply for an exemption from the permitting requirements of this Chapter for any emissions unit provided each of the following criteria are met. Activities or emissions units exempt as insignificant based on these criteria shall be included in the permit at the next renewal.
>
> a. the emissions unit emits and has the potential to emit no more than five tons per year of any criteria or toxic air pollutant;
> b. the emissions unit emits and has the potential to emit less than the minimum emission rate listed in Table 51.1, LAC 33:III.Chapter 51, for each Louisiana toxic air pollutant;
> c. the emissions unit emits and has the potential to emit less than the de minimis rate established pursuant to section 112(g) of the federal Clean Air Act for each hazardous air pollutant; and
> d. no enforceable permit conditions are necessary to ensure compliance with any applicable requirement.

Fee to be Submitted

Proof of submittal of the required fee must be attached to the application. If paying by check, the check must be made out to "Louisiana Department of Environmental Quality."

When paying an application fee using an Electronic Fund Transfer (EFT), complete the relevant "Remarks" field provided by your financial institution. These remarks should, at a minimum, state the Agency Interest Number(s) and the name of the facility(ies) or process unit(s) (for process unit-specific permits) to which the EFT should apply. LDEQ strongly encourages applicants **NOT** to use EFT for newly constructed facilities or for facilities that do not have an Agency Interest Number assigned to them. If the applicant must use an EFT for such a facility, please contact LDEQ prior to submittal of the EFT for guidance.

The fee amount is in accordance with §223, Fee No. 2010.

Explanatory Notes

This type of exemption can be used for an entire facility or for just a single piece of equipment being added to an existing facility that has already been issued a permit.

Exemptions are appropriate for actions that involve the permanent installation of equipment. If the request is temporary in nature, then a variance or case-by-case insignificant activity notification would be the more appropriate request.

Exemptions cannot be used to establish an emission cap. A permit modification is the appropriate method by which to establish an emission cap.

The EPA has allowed the potential to emit for emergency generators to be calculated based on 500 hours per year of operation. This determination is documented in the EPA memo issued by John Seitz on September 6, 1995, a copy of which can be found at the following web address: http://www.epa.gov/ttncaaa1/t5/memoranda/emgen.pdf.

2.2.2 Exemptions to Test

Description of Action

LDEQ may grant a temporary exemption not to exceed three months to allow a source to perform tests to determine the effect of a proposed modification, or to confirm an emission reduction project (e.g., installation of low NOx burners). An exemption to test will only be allowed for special situations where calculations would not be reliable indicators of the expected emissions, and there is insufficient information in existing literature. Testing should not place ambient air standards in jeopardy during the testing period.

The conditions for granting an Exemption to Test are:

- The exemption should be for the purpose of testing the effect of a modification on emission rates.
- There should not be a reliable way to determine the effect of this modification without testing.
- The test will be conducted long enough to assure the accuracy of the results.

Within 30 days of the completion of the test, a report must be submitted to LDEQ showing the results of the test. If the facility intends to proceed with the modification as a result of this test, all regulations must be followed that apply to the type of modification being requested. The facility must then obtain a permit modification before the modification can be incorporated into the facility's operations.

Document(s) to Submit

An Exemption to Test request should include the following items:

- Louisiana Application for Approval of Misc. Permitting Actions
- Detailed calculations of the estimated emissions
- Description of the test to be performed
- Explanation of the need for the test

- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1
- Supporting documentation, which may include but not be limited to:
    - MSDS sheets
    - Performance test data, fuel analysis, etc., as necessary
    - References to standard engineering properties and practices

Regulation Reference

LAC 33:III.523.B – Temporary Exemption for Testing

1. The administrative authority may, on behalf of the Department of Environmental Quality, grant temporary exemptions, not to exceed three months in duration, from the requirement to revise the permit prior to making a change in emissions in order to allow tests to determine the effect of the proposed modification on emission rates. This temporary exemption may be allowed only in cases where such an exemption is not prohibited under 40 CFR Part 70 or under any federally applicable requirement and where the effect of the proposed modification cannot reliably be determined from calculations or from published technical literature but is not expected to place ambient air standards in jeopardy during the testing period.
2. Persons requesting permission to test under these provisions shall submit the information specified in LAC 33:III.517 (with the exception of the data being measured in the test). Tests will be conducted for the minimum duration consistent with obtaining valid results.
3. Within 30 days of test completion, the administrative authority shall be given a report detailing the conditions that were found to exist. If there is to be no permanent change in emissions from pretest conditions, that should be stated.
4. If there is to be a permanent change made which increases emissions, all applicable requirements of this Chapter must be met. If emissions are to be reduced by the modification, the requirements of LAC 33:III.511 are applicable.

Fee to be Submitted

Proof of submittal of the required fee must be attached to the application. If paying by check, the check must be made out to "Louisiana Department of Environmental Quality."

When paying an application fee using an Electronic Fund Transfer (EFT), complete the relevant "Remarks" field provided by your financial institution. These remarks should, at a minimum, state the Agency Interest Number(s) and the name of the facility(ies) or process unit(s) (for process unit-specific permits) to which the EFT should apply. LDEQ strongly encourages applicants **NOT** to use EFT for newly constructed facilities or for facilities that do not have an Agency Interest Number assigned to them. If the applicant must use an EFT for such a facility, please contact LDEQ prior to submittal of the EFT for guidance.

The fee amount is in accordance with §223, Fee No. 2010.

2.2.3 Variances

Description of Action

In the event that extenuating circumstances cause a facility to be unable to strictly adhere to the terms in their permit and/or the provisions of an applicable regulation,[8] LDEQ may allow a variance from any air regulation for up to one year. A variance can also be used to allow for temporary emissions from a facility that is exempted from permitting, where these temporary emissions would cause the facility to be subject to permitting requirements. No variance may permit or authorize the maintenance of a nuisance, or a danger to public health or safety. In addition, the National Ambient Air Quality Standards cannot be exceeded under any circumstances.

It is important that the reason for the variance request is plainly stated. There should be extenuating circumstances that cause the source(s) in question to be unable to conform to the limits placed upon them by the permit and/or any applicable regulations. This reason will form the primary basis upon which LDEQ will either grant or deny the variance request.

There are few regulations that define exactly what can be accepted as a variance request. This determination is made by LDEQ on a case-by-case basis.

Document(s) to Submit

A Variance request should include the following items:

- Louisiana Application for Approval of Misc. Permitting Actions
- Detailed calculations of emissions
- Descriptions of the process and operating conditions as they relate to the request
- Explanation of the need for the variance
    - Identification of affected source(s), permit, and applicable regulation(s) from which the source(s) would need a variance
    - Reason the facility is unable to comply in strict conformity with applicable regulations
- The beginning and ending time of the event for which a variance is being requested
- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1
- Supporting documentation, which may include but not be limited to:

[8] A variance may provide relief from any aspect of a federal regulation only as it is incorporated by reference in LAC 33:III. Adoption of federal regulations by the state in no way voids or diminishes federal enforcement authority with respect to independently applicable federal regulations. EPA retains oversight of the federal program and may institute enforcement action at its discretion.

- MSDS sheets
- Performance test data, fuel analysis, etc., as necessary
- References to standard engineering properties and practices

Regulation Reference

LAC 33:III.917 – Variances

A. Where, upon written application of the responsible person or persons, the administrative authority finds that by reason of exceptional circumstances strict conformity with any provisions of these regulations would cause undue hardship, would be unreasonable, impractical or not feasible under the circumstances, the administrative authority may permit a variance from these regulations.

B. No variance may permit or authorize the maintenance of a nuisance or a danger to public health or safety.

Fee to be Submitted

Proof of submittal of the required fee must be attached to the application. If paying by check, the check must be made out to "Louisiana Department of Environmental Quality."

When paying an application fee using an Electronic Fund Transfer (EFT), complete the relevant "Remarks" field provided by your financial institution. These remarks should, at a minimum, state the Agency Interest Number(s) and the name of the facility(ies) or process unit(s) (for process unit-specific permits) to which the EFT should apply. LDEQ strongly encourages applicants **NOT** to use EFT for newly constructed facilities or for facilities that do not have an Agency Interest Number assigned to them. If the applicant must use an EFT for such a facility, please contact LDEQ prior to submittal of the EFT for guidance.

The fee amount is in accordance with §223, Fee No. 2010.

Explanatory Notes

Variances are suitable for temporary events. If the proposed action is permanent in nature, especially if it will require the permanent installation of equipment, an Exemption or a Permit Modification would be more appropriate actions.

- Variances are suitable for temporary events. If the proposed action is permanent in nature, especially if it includes the permanent installation of equipment, the facility should apply for an Exemption or a Permit Modification.

- Variances can be issued to actions performed at unpermitted facilities or facilities that that do not require permits according to the "Exemptions (that do not require LDEQ approval)" Section.

- Variances should be used primarily for emissions or operations that could not reasonably be anticipated during the permitting process. Variations in operations and operational flexibility should be written into the permit whenever possible. However, variances can be used for some anticipated maintenance activities (i.e., pigging activities). 40 CFR 70.6(a)(6)(ii) states that the facility cannot use the defense that it would have been necessary to halt or reduce an activity in order to maintain compliance with the conditions of the permit.

- A variance shall not normally be issued to allow a specialty production facility run a particular product line with increased emissions for a specific client. A permit modification is the appropriate method to provide operational flexibility to handle multiple product production.

- Variances **cannot** be used for emissions, events, or operations **that have already occurred**. 40 CFR 70.6(g) is the Emergency Provision and provides the basis by which a facility can implement immediate corrective actions from sudden and reasonably unforeseeable events beyond the control of the source. There is no need for a variance to be issued to authorize those events. Variances can be used for the actions that are required once the immediate corrective actions have been implemented.

- Variances cannot be used to establish emission caps. A permit modification is the appropriate method by which to establish an emission cap.

- **Variances cannot be used to permanently change any limitations or conditions that exist in any permit.** A permit modification is the appropriate method by which to change any limitations or conditions established by the permit.

- If the activity for which a variance was granted will take longer than the variance permits, the variance will not be extended. A new variance should be applied for to cover the remaining time.

- One special situation is for releases of natural gas. The special provisions for natural gas releases are outlined on the department's web page at: http://www.deq.louisiana.gov/portal/tabid/2348/Default.aspx.

- The source(s) is(are) only authorized to deviate from requirements **specifically** identified in the variance. Authorization to deviate from other requirements shall not be implied by the variance. For example, if a source has to vent a pressurized tank to effect repairs, the temporary flare used to control the emissions needs to still comply with LAC 33:III.1105. The variance shall also identify all requirements necessary to demonstrate compliance with the variance.

- A variance shall not be used to correct a mistake contained within an application that was entered into the operating permit and issued.

- A variance shall not be used to correct an ongoing violation of a permit.

- A variance may be requested for events and conditions that are reasonably certain to occur within the given time frame. A variance shall not be requested for "in case", or "when this happens…" situations. Scenarios such as this can be incorporated into a permit modification with sufficient forethought and planning.

2.3 Permits

LDEQ issues a number of different types of air quality permits. They include state (minor source) permits, Part 70 (Title V) Operating Permits, Prevention of Significant Deterioration (PSD) Permits, Nonattainment New Source Review (NNSR) Permits (which are a component of the Title V permit), and the Acid Rain Permits. Louisiana will also be issuing Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) permits in the near future. The requirements for obtaining these permits, detailed below, are dependent upon the amount of pollutants that are emitted, the type of source or facility that emits them, and the location of the facility. It should be noted that Louisiana administers a single permit program which means a facility's permit application serves as a request for both a construction and operating permit. Further, under Louisiana's permit program, a facility's permit will contain both federal requirements and "State-Only" requirements. It is important to note that all the provisions of a PSD, NNSR, CAIR, and/or Acid Rain Permit will be incorporated into the Part 70 Operating Permit, even though separate permits will be issued for PSD, CAIR, and Acid Rain, as appropriate.

When applying for any of these permits, the applicant should follow the guidance provided for the appropriate type of permit(s) in addition to the guidance in the Section 4.0 *How To Apply For A Permit* in order to properly apply for the desired permit.

If there will be any changes to a facility that already possesses one of the permit types described below and this change will result in an increase in the amount of any air pollutant emitted or results in the emission of an air pollutant not previously emitted, then that facility will be required to obtain a permit modification. The different types of permit modifications are defined below. The type of permit that will be issued will depend upon the type that the facility qualifies for AFTER the proposed modification takes place.

Before a discussion of the different types of permits can commence, it is necessary to define a few commonly used terms.

2.3.1 Commonly Used Terms

Federal Regulation: Any regulation that appears in the Code of Federal Regulations or in the "Federal Register" that is authored by the federal government.

Major Modification: Any physical change or change in the method of operation of a Major Stationary Source that would result in a Significant Net Emissions Increase. Please see the definition of Major Modification in LAC 33:III.504.K and LAC 33.III.509.B for more details.

Major Source: A source can be defined as a major source under any of the following five conditions:

1. The entire facility or unit to be permitted emits or has the potential to emit 10 tons per year (TPY) or more of any single Hazardous Air Pollutant (HAP), or 25 TPY or more of any combination of HAP. This is known as being a Major Source of HAP. Toxic Air Pollutants (TAP) that are not HAP are not to be summed for major source determination under this condition.

2. The entire facility or unit to be permitted emits or has the potential to emit 100 TPY or more of any single regulated air pollutant, except for greenhouse gases, excluding those regulated solely under Section 112(r) of the Clean Air Act.

3. The entire facility or unit to be permitted emits or has the potential to emit 100 TPY or more of greenhouse gases on a mass basis (i.e., no global warming potentials applied) **and** 100,000 TPY or more of CO_2e.

4. For a nonattainment area, the entire facility or unit to be permitted emits or has the potential to emit, for any pollutant, amounts in excess of those found in Table 1 of LAC 33.III.504.L. The applicable amounts will differ according to the nonattainment area's classification.

5. The entire facility or unit to be permitted emits or has the potential to emit 10 tons per year (TPY) or more of any single Toxic Air Pollutant (TAP), or 25 TPY or more of any combination of TAP. This is known as being a Major Source of TAP. If a facility is defined as a major source solely based on this condition, it is not required to obtain a Part 70 permit. See the discussion of TAP earlier in this document for a discussion of Toxic Air Pollutants.

Louisiana does not allow portions of the facility that have different first two digits of the SIC codes to be considered separately when determining the major source status for Part 70 purposes. A possible exception to this provision is when the parts of the facility are not under common control and not interdependent.

Modification: Any change in a facility including, but not limited to, a physical change, a change in the method of operation, a change in the raw materials or feedstocks used for products manufactured which increases the amount of any air pollutant emitted by such facility or which results in the emission of any air pollutant not previously emitted, except (1) routine maintenance repair and replacement shall not be considered physical changes, and (2) an increase in production rates (up to capacity) or hours of operation shall not be considered a change in the method of operation.

Minor Source: A source that emits and has the potential to emit air contaminants in amounts less than the major source thresholds. See the definition of "Major Source" for details.

North American Industry Classification System (NAICS): A numerical classification formulated by the governments of the Unites States of America, Canada, and Mexico to provide new comparability in statistics about business activity across North America. Some federal regulations require facilities to be identified according to this classification system.

State Implementation Plan (SIP) Approved: Any regulation that is included in the State Implementation Plan (SIP). A copy of the regulations included in the SIP can be found in 40 CFR 52.970 – 999. SIP-approved regulations are federally enforceable. The link to the EPA Region VI web site for the Louisiana SIP is http://www.epa.gov/earth1r6/6pd/air/sip/sip.htm.

Standard Industrial Classification (SIC) Code: A numerical classification system established by the United States government that is used to group various industries according to their functions.

State Only Specific Condition: A condition for which there is no federally enforceable condition that requires the condition to be applicable. A State Only Specific Condition must meet the following criteria:

- It must not be required by any federally enforceable regulation.
- It must not be used to avoid applicability of any federally enforceable regulation. (Any regulation established for this purpose is also considered federally enforceable.)

A State Only Specific Condition could exist for several reasons:

- The underlying regulation is not part of the State Implementation Plan (SIP) and is therefore not federally enforceable.

- The applicable condition is one that was accepted voluntarily by the facility in order to facilitate operational flexibility. However, this type of condition cannot have the added effect of preventing applicability of any federally enforceable regulation.

- The applicable condition is one that was accepted voluntarily by the facility in order to avoid applicability of a State-Only regulation.

State Only Regulation: Any regulation in LAC 33:III that is not included in the State Implementation Plan (SIP). A copy of the regulations included in the SIP can be found in 40 CFR 52.970 – 999.

Substantial Modification: A modification that results in a significant emissions increase. See the definition of this term in LAC 33:I.1503 for more details.

2.3.2 State Permit

This is also referred to as a minor source permit. This type of permit is typically issued to smaller facilities with few emissions sources. They generally have fewer recordkeeping and reporting requirements than the other permit types. They also tend to have few, if any, applicable federal regulations.

When Do I Have to Apply for a State Permit?

If the facility does not qualify for any of the exemptions discussed previously in Section 1.1 Exemptions *That Do Not Require LDEQ Approval* and the facility is not a "Part 70 Source" as defined in LAC 33:III.502, then the applicant will have to obtain a minor source permit.

Use the Louisiana Application for Approval of Emissions from Minor Sources form in order to apply for a State Operating Permit. This form can be found on the LDEQ website: http://www.deq.louisiana.gov/portal/tabid/2758/Default.aspx.

When and How Do I Modify a State Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or facility. Please read Section 4.3.2 *How Do I Calculate the Fee?* to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until the entire fee has been received.

In order to apply for a modification, complete the Louisiana Application for Approval of Emissions from Minor Sources form according to the guidance in Section 4.0 *How To Apply For a Permit*. All sections of the permit application form should be completed as directed. This would normally mean that the applicant should complete the application so as to reflect all sources of emissions to be authorized by the permit. However, for modification applications, the applicant may complete the EIQs, example calculations, and Section 19 of the application so as to reflect only the new and modified sources. Regardless of the above statements, the applicant should be prepared to submit a full and complete application that reflects all sources of emissions represented in the permit in question if requested by LDEQ.

What Kind of Public Participation Timeframe Can I Expect?

In most cases, there is no public participation timeframe associated with this type of permit. If federally enforceable specific conditions are established, then a public participation timeframe of no less than 30 days will be required per LAC 33:III.531.A.1. If the facility is a major source of TAP (but a minor source of criteria pollutants and HAP), a public participation timeframe of no less than 30 days will also be required if any of the following are true:

- Emissions of any TAP will increase above its Minimum Emission Rate (MER) if the facility is a major source as defined in LAC 33:III.Chapter 51.

- Any new point source will emit any TAP in an amount above its MER if the facility is a major source as defined in LAC 33:III.Chapter 51.

- If the source has a PTE of greater than or equal to 95% of any major source threshold, then LDEQ will require a public participation timeframe of no less than 30 days. Here are some examples of this concept:

- All sources with PTE of any criteria pollutant greater than 94.9 TPY and located in an attainment area.

- All sources with PTE of NOX and/or VOC greater than 47.49 TPY and located in the Baton Rouge Nonattainment Area.

- All sources with PTE of total HAP/TAP greater than 23.749 TPY.

- All sources with PTE of a single HAP/TAP greater than 9.49.

A public participation timeframe may be required for a proposed permit at the discretion of LDEQ per LAC 33:III.531.A.1. If sufficient interest is generated, a public hearing may also be conducted.

2.3.3 Standard Oil and Gas Air (SOGA) Permit

This permit is a special type of State Permit. It is issued to minor source oil and gas facilities that fall under the Standard Industrial Classification (SIC) code 1311 and the LAC 33:III.223.Table 1 Fee Code 0040.

LDEQ no longer issues initial SOGA permits. If a facility operates under an existing SOGA permit, the facility may continue to do so provided the facility continues to qualify for a SOGA permit. If the facility wishes to modify its operations such that it no longer qualifies for a SOGA permit, it must apply for one of the other permit types for which it qualifies. It is likely that such a facility would be covered under the Minor Source Oil and Gas (MSOG) permit discussed later in this chapter. Once a facility is no longer covered under a SOGA permit, it may not seek coverage under a SOGA permit at a later date.

If the facility continues to qualify for a SOGA permit, then this permit allows the facility to make minor modifications to the facility without prior notification to LDEQ. The permittee is still required to submit a permit modification application and the modification is still subject to approval by LDEQ, even though the permittee may proceed with the modification before approval is granted.

In order to qualify for a SOGA permit, the facility must meet the following criteria:

- The facility must not be a Major source as defined in LAC 33:III.502.

- The facility's primary Standard Industrial Classification (SIC) code must be 1311.

- The facility must not emit or have the potential to emit criteria pollutants and/or toxic air pollutants (TAP) in amounts greater than or equal to those listed in the following table. Limits are given in tons per year (TPY).

Pollutant	Emissions
PM_{10}	25
SO_2	25
NO_X (attainment parishes)	95
CO	95
Total VOC (attainment parishes)	95
NO_X (nonattainment parishes)	47.5
Total VOC (nonattainment parishes)	47.5
Total TAPs (including, but not limited to the following):	20
benzene	8
ethylbenzene	8
toluene	8
xylene	8
n-hexane	8
formaldehyde	8
hydrogen sulfide	8

- The facility must not be subject to any federal requirements contained in 40 CFR Parts 60, 61, 63, or 64, except that facilities subject to 40 CFR 61.145, National Emission Standard for Asbestos-Standard for demolition and renovation may be covered. See LAC 33:III.501.B.3.a.

- The facility must not be subject to LAC 33:III.Chapter 59-Chemical Accident Prevention or 40 CFR Part 68-Chemical Accident Prevention Provisions.

- The facility must not have been formerly operated as a major source if Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) controls were installed and are being maintained on an existing point source.

- The facility must not be located in Pointe Coupee Parish with equipment subject to LAC 33:III.2115.

- The facility must not consist of any steam generating units (e.g., boilers) and/or turbines.

Additionally, the individual pieces of equipment at the facility must not be subject to the certain regulations.

Storage vessels eligible to be covered under the SOGA permit must not be subject to the following regulations:

- 40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978;

- 40 CFR 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984;

- 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984; or

- LAC 33:III.2103.B.

Fugitive emissions to be covered under the SOGA permit must not be subject to the following regulations:

- Subpart KKK-Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants;

- LAC 33:III.2121-Fugitive Emission Control; or

- LAC 33:III.2122-Fugitive Emission Control for Ozone Nonattainment Areas and Other Specified Areas.

Loading facilities to be covered under the SOGA permit must not:

- employ a control device to restrict VOC emissions from marine loading for purposes of compliance with LAC 33:III.2108;

- load gasoline; or

- load compounds (other than crude or condensate) having a true vapor pressure at loading conditions of 1.5 psia or greater at a rate of 20,000 gallons per day or more (averaged over any 30-day period).

Natural gas sweetening units to be covered under the SOGA permit must not be subject to the following regulation:

- 40 CFR 60 Subpart LLL-Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions.

When Do I Have to Apply for This Type of Permit?

LDEQ no longer issues initial SOGA permits. For those facilities that are currently covered under a SOGA permit, consult the guidance below that discusses how to modify a SOGA permit.

When and How Do I Modify a SOGA Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or

facility. Please read the section below entitled Permit Modifications to determine which type of modification is appropriate. In most cases, a SOGA Permit will require a Minor Modification. Please read the How Do I Calculate the Fee? section of the How To Apply For a Permit chapter to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until the entire fee has been received.

Within seven (7) calendar days after effecting any modification to a facility authorized to operate under this standard oil and gas permit (generally commencement of construction), the permittee shall submit an updated Emission Point List, Emissions Inventory Questionnaire (EIQ), emissions calculations, and certification statement as described in LAC 33:III.517.B.1 to the Air Permits Division. The cover letter for this submittal should read "Updated SOGA Application," and include the Agency Interest Number and Activity Number found on the signature page of the issued permit.

Unlike other permit types, the permittee may begin to effect the proposed modification prior to LDEQ's approval provided that the modification does not disqualify a facility from being eligible for a SOGA permit. This does not preclude LDEQ from taking enforcement action if it is determined that the proposed modification disqualifies the facility from being eligible for a SOGA Permit or is otherwise considered to be a violation of the facility's SOGA Permit.

When and How Do I Renew This Permit?

LDEQ is no longer offering renewals for SOGA permits. The permittee should apply for one of the other air permit types offered by LDEQ. The application must be submitted at least six (6) months prior to the expiration of the permit but in no event more than eighteen (18) months prior to the permit expiration date. If an application is not submitted in a timely manner as defined above, the currently effective permit will expire on its expiration date. Permit expiration terminates the owner's and operator's right to operate the source. In addition, the Enforcement Division may assess a penalty for late submittal of a renewal application.

What Kind of Public Participation Timeframe Can I Expect?

There is no public participation timeframe associated with this type of permit.

2.3.4 Synthetic Minor Source Permit

This type of permit is another type of State Permit. This type of permit is used for facilities that would otherwise require a Part 70 Operating Permit, but choose to accept federally enforceable operational limits in order to avoid major source status. Some of the limits commonly applied include, but are not limited to, production, operating time, capacity, and throughput restrictions.

A facility requesting a Synthetic Minor Source Permit will be given additional limitation(s), monitoring, recordkeeping, and reporting requirements such that LDEQ can verify minor source status. It is the responsibility of the applicant to propose what type of artificial limitation(s) will be used to qualify for this type of permit. The limitation must limit something that is easily quantifiable and proportional to the Potential to Emit (PTE) of the facility. It is possible that the facility will need to establish more than one limitation in order to properly limit the PTE.

When Do I Have to Apply for a Synthetic Minor Source Permit?

This type of permit is necessary when a facility that would otherwise be required to obtain a Part 70 Operating Permit wishes to avoid the need to obtain a Part 70 Operating Permit. In order to avoid obtaining a Part 70 Operating Permit, the applicant will be required to accept certain limitations that restrict the facility's operations to the point that the facility no longer qualifies as a Part 70 source. The applicant must specify what operational limitations will be necessary to assure that the facility is not required to obtain a Part 70 Operating Permit.

Use the Louisiana Application for Approval of Emissions from Minor Sources form in order to apply for a Synthetic Minor Source Permit. This form can be found on the LDEQ website: www.deq.louisiana.gov.

When and How Do I Modify a Synthetic Minor Source Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or facility. Please read the section below entitled Permit Modifications to determine which type of modification is appropriate. In most cases, a State Operating Permit will require a Minor Modification. Please read Section 4.3.2 *How Do I Calculate the Fee?* to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until the entire fee has been received.

In order to apply for a modification, complete the Louisiana Application for Approval of Emissions from Minor Sources form according to the guidance in Section 4.0 *How To Apply For a Permit*. All sections of the permit application form should be completed as directed. This would normally mean that the applicant should complete the application so as to reflect all sources of emissions to be authorized by the permit. However, for modification applications, the applicant may complete the EIQs, example calculations, and Section 19 of the application so as to reflect only the new and modified sources. Regardless of the above statements, the applicant should be prepared to submit a full and complete application that reflects all sources of emissions represented in the permit in question if requested by LDEQ.

What Kind of Public Participation Timeframe Can I Expect?

A public participation timeframe of no less than 30 days is associated with this type of permit per LAC 33:III.531.A.1. If the applicant seeks to modify an existing Synthetic Minor Source Permit and does not seek to establish a new federally enforceable operational limitation or modify an existing federally enforceable operational limitation, then no public participation timeframe will be required.

If sufficient interest is generated, a public hearing may also be required.

2.3.5 Minor Source General Permits

Currently, LDEQ issues two different types of Minor Source General Permits: Surface Coating and Fabrication (MSCF) and Crude Oil and Natural Gas Production (MSOG). These permits are available to those facilities that are classified under certain SIC Codes, which are discussed in greater detail below.

2.3.5.1 Minor Source General Permit – Crude Oil and Natural Gas Production (MSOG)

On September 15, 2010, LDEQ issued the MSOG General Permit, which covers operations from certain types of crude oil and natural gas production facilities. In order to be eligible for coverage under this general permit, the facility must be classified under one of the following criteria:

1. Crude oil and natural gas production facilities classified under Standard Industrial Classification (SIC) Code 1311 – Crude Petroleum and Natural Gas (North American Industry Classification System (NAICS) 211111)
2. "Midstream" facilities, contracted facilities which generally compress and/or process natural gas between the producing property and a natural gas processing plant or sales gas pipeline compressor station. Midstream facilities may be classified under SIC Code 1389 – Oil and Gas Field Services, Not Elsewhere Classified (NAICS 213112).

The MSOG does not address operations engaged in the transmission and/or storage of natural gas under SIC 4922 – Natural Gas Transmission (NAICS 486210) or those engaged in the processing of natural gas under SIC 1321 – Natural Gas Liquids (NAICS 211112), unless a facility is classified as such only by its use of Joule-Thompson (J-T) equipment as part of a "forced" process to extract natural gas liquids (NGL).

In addition to the above requirements, the potential to emit from the facility (or grouping of contiguous facilities) must be less than the following amounts, in tons per year:

Pollutant	Emissions (TPY)
PM_{10}	15
SO_2	40
NO_X (located in BRNA[9])	20
NO_X (not located in BRNA)	90
CO	90
Total VOC (located in BRNA)	20
Total VOC (not located in BRNA)	90
Total TAPs	20
Any Individual TAP	8

[9] Baton Rouge Nonattainment Area, which consists of the Parishes of West Baton Rouge, East Baton Rouge, Livingston, Ascension, and Iberville.

In order to qualify, the facility must also meet the eligibility requirements summarized in the General Permit Applicability Questionnaire – Crude Oil and Natural Gas Production, which can be found at the following web address: http://www.deq.louisiana.gov/portal/Default.aspx?tabid=3022. These conditions are presented in greater detail in the full MSOG permit, which can be found on LDEQ's web site: www.deq.louisiana.gov.

When Do I Have to Apply for an MSOG General Permit?

If the facility qualifies for an MSOG General Permit, it would be to the applicant's advantage to apply for one. However, the applicant is not specifically required to apply for this type of permit.

If a facility qualifies for the MSOG General Permit, then the permittee should apply for this permit using the same procedure as for a State Permit. The application should clearly state that the permittee is requesting an MSOG General Permit. If this is not done, the permittee may be issued a standard State Permit.

Use the Louisiana Application for Approval of Emissions from Minor Sources form in order to apply for an MSOG General Permit. This form can be found on the LDEQ website: http://www.deq.louisiana.gov/portal/tabid/2758/Default.aspx. In addition, include a copy of the General Permit Applicability Questionnaire – Crude Oil and Natural Gas Production, which can be found at the following web address: http://www.deq.louisiana.gov/portal/Default.aspx?tabid=3022. If the applicant can answer "yes" to any of the questions in the questionnaire for the facility, then the facility is not eligible for coverage under the MSOG General Permit. The applicant must obtain a standard State Permit instead.

When and How Do I Modify an MSOG General Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or facility. Please read Section 4.3.2 *How Do I Calculate the Fee?* to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until the entire fee has been received.

In order to apply for a modification, complete the Louisiana Application for Approval of Emissions from Minor Sources form according to the guidance in Section 4.0 *How To Apply For a Permit*. All sections of the permit application form should be completed as directed. This would normally mean that the applicant should complete the application so as to reflect all sources of emissions to be authorized by the permit. However, for modification applications, the applicant may complete the EIQs, example calculations, and Section 19 of the application so as to reflect only the new and modified sources. Regardless of the above statements, the applicant should be prepared to submit a full and complete application that reflects all sources of emissions represented in the permit in question if requested by LDEQ.

It should be noted that the MSOG incorporates conditions that affect when a facility may begin construction associated with a modification. In some cases, construction can commence without prior approval from LDEQ. Consult the following table:

Pollutant	Emissions (TPY)
NOx	47.1
Acrolein	2.1
Benzene	1.7
Formaldehyde	5.9

If facility-wide emissions are less than the thresholds shown in the above table and if the proposed modification will not cause the facility-wide emissions to increase above these thresholds, then the facility may begin to modify the facility. Within 10 calendar days after beginning the modification, the facility must submit a permit application. The permit application must only reflect the modification. See Section VII.A of the MSOG for more details.

If facility-wide emissions are greater than the thresholds shown in the above table or if the proposed modification will cause the facility-wide emissions to increase above these thresholds, then the facility must submit a permit modification and wait for it to be approved before commencing the modification at the facility. See Section VII.B of the MSOG for more details.

The facility may add or replace the following equipment types without having to comply with Section VII.B of the MSOG. See Section VII.C of the MSOG for more details:

1. Line Heaters
2. Heater Treaters that do not represent a source of flash gas emissions
3. Pneumatic Pumps
4. Pneumatic Valves
5. Pneumatic Controllers
6. Fugitive Components

The facility may add or replace these equipment types without having to comply with Section VII.B of the MSOG, provided:

1. They disclose the modifications in the next permit modification that they submit;
2. They remain compliant with the eligibility conditions of the MSOG; and
3. They maintain records of the modification on site and available for inspection for 2 years.
    a. The records are not required for Pneumatic valves, pneumatic controllers, and fugitive components.

The facility may make "in-kind" replacements of equipment not listed in Section VII.C of the MSOG without having to submit a permit modification as required in Sections VII.A or VII.B of the MSOG, provided:

1. The new unit does not increase the lb/hr or the TPY of a regulated pollutant;
2. The new unit is not subject to any regulations to which the old unit was not subject;
3. The new unit is identical or functionally equivalent to the old one.
4. The old unit is permanently removed from the facility or permanently disabled;
5. The modification is disclosed in the next permit modification; and

6. They maintain records of the modification on site and available for inspection for 2 years.

This does not preclude LDEQ from taking enforcement action if it is determined that the proposed modification disqualifies the facility from being eligible for an MSOG General Permit or is otherwise considered to be a violation of the facility's MSOG General Permit.

What Kind of Public Participation Timeframe Can I Expect?

There is no public participation timeframe associated with this type of permit.

2.3.5.2 Minor Source General Permit – Surface Coating and Fabrication (MSCF)

On March 9, 2010, LDEQ issued the MSCF General Permit, which covers operations from facilities that engage in surface coating and fabrication activities. In order to be eligible for coverage under this general permit, the facility must be classified under the following criteria:

1. Facilities eligible for coverage under the MSCF General Permit include facilities primarily engaged in surface coating and fabrication. These facilities are typically classified under SIC Codes beginning with 34xx, 35xx, 36xx, or 37xx.
2. Facilities which are subject to any 40 CFR 60 New Source Performance Standard or any 40 CFR 63 National Emission Standard for Hazardous Air Pollutants (NESHAP) not specified in this permit are not eligible for coverage.
3. Facilities which strip paint using chloromethane (MeCl) are not eligible for coverage.

In order to qualify, the facility must also meet the eligibility requirements shown in the General Permit Applicability Questionnaire – Surface Coating and Fabrication, which can be found at the following web address: http://www.deq.louisiana.gov/portal/Default.aspx?tabid=3022.

When Do I Have to Apply for an MSCF General Permit?

If the facility qualifies for a MSCF General Permit, it would be to the applicant's advantage to apply for one. However, the applicant is not specifically required to apply for this type of permit.

If a facility qualifies for the MSCF General Permit, then the permittee should apply for this permit using the same procedure as for a State Permit. The application should clearly state that the permittee is requesting an MSCF General Permit. If this is not done, the permittee may be issued a standard State Permit.

Use the Louisiana Application for Approval of Emissions from Minor Sources form in order to apply for an MSCF General Permit. This form can be found on the LDEQ website: http://www.deq.louisiana.gov/portal/tabid/2758/Default.aspx. In addition, include a copy of the General Permit Applicability Questionnaire – Surface Coating and Fabrication, which can be found at the following web address: http://www.deq.louisiana.gov/portal/Default.aspx?tabid=3022. If the applicant can answer "yes"

to any of the questions in the questionnaire for the facility, then the facility is not eligible for coverage under the MSCF General Permit. The applicant must obtain a standard State Permit instead.

When and How Do I Modify an MSCF General Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or facility. Please read Section 4.3.2 *How Do I Calculate the Fee?* to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until the entire fee has been received.

In order to apply for a modification, complete the Louisiana Application for Approval of Emissions from Minor Sources form according to the guidance in Section 4.0 *How To Apply For a Permit*. All sections of the permit application form should be completed as directed. This would normally mean that the applicant should complete the application so as to reflect all sources of emissions to be authorized by the permit. However, for modification applications, the applicant may complete the EIQs, example calculations, and Section 19 of the application so as to reflect only the new and modified sources. Regardless of the above statements, the applicant should be prepared to submit a full and complete application that reflects all sources of emissions represented in the permit in question if requested by LDEQ.

Replacement of an existing emissions unit with an "in-kind" unit shall not require submittal of a completed Louisiana Application for Approval of Emissions from Minor Sources to LDEQ, provided:

1. The replacement does not result in an increase in hourly or annual potential emissions of a regulated pollutant;
2. The replacement is not subject to fedral or state regulations not applicable to the replaced emissions unit;
3. The replacement is an identical or functionally equivalent unit. A "functionally equivalent unit" means a component that serves the same purpose as the replaced component;
4. The replaced emissions unit is permanently removed from the facility or otherwise permanently disabled;
5. Such modifications are disclosed in the next Louisiana Application for Approval of Emissions from Minor Sources submitted pursuant to Subsection VII.A or VII.B of the MSCF General Permit; and
6. Records of such modifications are retained on site or at another approved location for a minimum of two (2) years and made available for inspection by the Office of Environmental Compliance.

This does not preclude LDEQ from taking enforcement action if it is determined that the proposed modification disqualifies the facility from being eligible for an MSCF General Permit or is otherwise considered to be a violation of the facility's MSCF General Permit.

What Kind of Public Participation Timeframe Can I Expect?

There is no public participation timeframe associated with this type of permit.

2.3.6 Regulatory Permits

LDEQ currently offers five (5) different types of Regulatory Permits. These permits are codified in the regulations identified below. All of the terms and conditions of each respective permit and the expiration dates (if applicable) of each Regualtory Permit can be found in the referenced regulation:

1. Oil and Gas Well Testing [LAC 33:III.307]
2. Release of Natural Gas from Pipelines and Associated Equipment [LAC 33:III.309]
3. Emergency Engines [LAC 33:III.311]
4. Portable Air Curtain Incinerators [LAC 33:III.313]
5. Concrete Manufacturing Facilities [LAC 33:III.315]

When Do I Have to Apply for a Regulatory Permit?

If the facility qualifies for a Regulatory Permit, it would be to the applicant's advantage to apply for one. However, the applicant is not specifically required to apply for this type of permit.

If a facility qualifies for a Regulatory Permit, then the permittee should apply for this permit using the appropriate form found at the following web address: http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2945.

When and How Do I Modify a Regulatory Permit?

A Regulatory Permit can not be modified. If the facility makes changes such that the permit application no longer accurately represents the facility's operations, then the facility should apply for a new Regulatory Permit.

What Kind of Public Participation Timeframe Can I Expect?

There is no public participation timeframe associated with this type of permit.

2.3.7 Part 70 Regular Operating Permit

Part 70 Operating Permits are also referred to as a Title V Permit, in reference to Title V of the Clean Air Act.

Title V of the 1990 Clean Air Act Amendments required EPA to promulgate regulations setting forth provisions under which States would develop operating permit programs and submit them to EPA for approval. These regulations are codified under 40 CFR part 70; hence, operating permits are often referred to as Title V permits or Part 70 permits. EPA has fully approved LDEQ's Part 70 Operating Permits Program.

Part 70, or Title V, permits combine all enforceable requirements, including emissions limits, monitoring, recordkeeping, and reporting provisions, into one document. Owners of sources with operating permits must certify that the source is in compliance each year, and the permits

must be renewed every 5 years. Each proposed initial Part 70 permit, renewal, and significant modification is subject to a 30-day public comment period, with an opportunity for a hearing, and a 45-day EPA review period.

When Do I Have to Apply for a Part 70 Regular Operating Permit?

Sources are required to obtain a Part 70 Regular Operating Permit due to one of the following (LAC 33:III.507.A.1):

- the facility is defined as a major source of any regulated air pollutant, as defined in LAC 33:III.502.A. For a source that is major solely due to its emissions of greenhouse gases (GHGs) [i.e., emits or has the potential to emit 100 tpy or more of GHGs on a mass basis (i.e., no global warming potentials applied) **and** 100,000 tpy or more of CO_2e], the initial Title V permit application will be due on July 1, 2012.

- the facility is a major source of federal hazardous air pollutants (HAP). A major source of federal hazardous air pollutants is one that emits or has the potential to emit 10 tons per year of any single hazardous air pollutant, or 25 tons per year of any combination of hazardous air pollutants as defined in section 112 of the Clean Air Act. In this instance, it is important to note the difference between Toxic Air Pollutants (TAP) and Hazardous Air Pollutants (HAP). If a facility is considered a major source of TAP, but not a major source of HAP, then a Part 70 permit is not required.

- the facility is a non-major (area) source of hazardous air pollutants required to obtain a Part 70 permit under section 112 of the Clean Air Act

- the facility is a non-major source required to obtain a Part 70 permit under section 111 (NSPS) of the Clean Air Act

- the facility is an affected source under the acid rain provisions (See the Acid Rain Permit section of the Types of Permits chapter for more details.)

- the facility is a solid waste incineration unit required to obtain a Part 70 permit under Section 129(e) of the Clean Air Act.

- the facility is a municipal solid waste (MSW) landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters and subject to 40 CFR 60.752(b) is subject to Part 70 permitting requirements.

Use the Louisiana Application for Approval of Emissions from Part 70 Sources form in order to apply for a Part 70 Operating Permit. This form can be found on the LDEQ website: www.deq.louisiana.gov.

If applying for an initial Part 70 Regular Operating Permit or for a Substantial Modification (see definition earlier in this chapter), a copy of the applicant's Environmental Assessment Statement associated with the project (also known as answers to the "IT" questions) must be submitted to LDEQ. Per R.S. 30:2018(C), copies must also be forwarded to the local governmental authority

and to the designated public library at no additional cost to the local governmental authority or the designated public library. The questions that must be answered as part of the Environmental Assessment Statement can be found in Section 25 of the Louisiana Application for Approval of Emissions from Part 70 Sources.

When and How Do I Modify a Part 70 Regular Operating Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or facility. Please read the section below entitled Permit Modifications to determine which type of modification is appropriate. Please read Section 4.3.2 *How Do I Calculate the Fee?* to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until a sufficient fee has been received.

In order to apply for a modification, complete the Louisiana Application for Approval of Emissions from Part 70 Sources form according to the guidance in Section 4.0 *How To Apply For a Permit*. All sections of the permit application form should be completed as directed. This would normally mean that the applicant should complete the application so as to reflect all sources of emissions to be authorized by the permit. However, for modification applications, the applicant may complete the EIQs, example calculations, and Section 23 of the application so as to reflect only the new and modified sources. Regardless of the above statements, the applicant should be prepared to submit a full and complete application that reflects all sources of emissions represented in the permit in question if requested by LDEQ.

When and How Do I Renew a Part 70 Regular Operating Permit?

This type of permit is effective for and must be renewed every five (5) years. The renewal application must be submitted at least six (6) months prior to the expiration of the permit but in no event more than eighteen (18) months prior to the permit expiration date. If a renewal is not submitted in a timely manner as defined above, the currently effective permit will expire on its expiration date. Permit expiration terminates the owner's and operator's authority to operate the source [LAC 33:III.507.E]. Operation of a major source without authorization may subject the facility to enforcement action, including a penalty assessment.

Upon the next renewal, any Acid Rain Permit for a given facility will be set to expire at the same time as the Part 70 permit, if this is not already the case.

When submitting a renewal, it is possible to request a modification using the same application. If this is done, then the fees will be in accordance with the appropriate modification fee.

If a renewal does not request any modification(s) to the facility, then no fee is required. See the How Do I Calculate the Fee? Section of the How To Apply for a Permit chapter for more details on what qualifies as a change for fee purposes.

A renewal application should be full and complete. It should have the same level of detail as an application for an initial permit. All sections of the Louisiana Application for Approval of Emissions from Part 70 Sources form should be filled out. Emission Inventory Questionnaires

(EIQs) and example calculations should be provided for all sources, even if the emissions will not change from currently permitted levels [LAC 33:III.507.E.5].

What Kind of Public Participation Timeframe Can I Expect?

A public participation timeframe of no less than 30 days is associated with this type of permit, except for minor modifications that do not require a public participation timeframe. Any states within 50 miles of the proposed source will also be notified. For initial permits, permit renewals, and significant modifications, an EPA comment period of no less than 45 days is also required. Generally, these time periods overlap such that the total period is 45 days. If adverse comments are received, EPA is entitled to another 45-day review period, which would commence upon receipt of the final proposed permit and LDEQ's Public Comments Response Summary.

If sufficient interest is generated, a public hearing may also be required.

Is There Any Additional Guidance?

Any permit application for any type of Part 70 permit must be prepared by or under the supervision of a Professional Engineer registered in Louisiana or a responsible person authorized to act on his behalf (his designee). A Louisiana Professional Engineer or his designee must certify the technical design, calculations and/or drawings provided in the permit application. This certification applies only to accuracy and completeness of the technical aspects of the facility and engineering being permitted. The signature and seal of a Professional Engineer that is **not** registered in the State of Louisiana may not be used to certify a permit application.

If a facility is required to obtain a Part 70 permit solely due to being a major source of HAP, and the facility reduces its HAP emissions such that it becomes a minor source of HAP after the effective date of a MACT standard, the requirement to operate under a Part 70 permit still applies. The facility may NOT receive a State Permit.

Throughout the years, EPA has issued a number of policy and guidance documents that interpret Title V. If there are any questions that relate to Title V, these policy and guidance documents are a good place to begin a search for the answer. To help quickly locate subject matter of interest, EPA has developed a searchable database, which can be found at http://www.epa.gov/region07/programs/artd/air/title5/title5pg.htm.

2.3.8 Part 70 General Operating Permit

40 CFR Part 70 allows LDEQ to issue Title V general permits covering numerous similar sources. All public participation, including EPA and affected state review, takes place when the initial general permit is drafted and issued. LDEQ may grant or deny a source's request to be covered by a general permit without further public participation or review.

Since the permit was developed based on equipment types (e.g., storage tanks) versus facility types (e.g., natural gas processing plants), the general permits are not limited in their use to a specific industry category.

The Part 70 General Operating Permit can be issued for new facilities or portions thereof, modifications to existing facilities and permit renewals. If a facility is subject to any regulation not listed in Table 1, then a General Permit cannot be issued for that facility. An exception to this is when the facility requires a specific condition that meets all of the requirements of being a state only requirement.

In addition, the facility in question must not require a Prevention of Significant Deterioration (PSD) permit in order to construct or operate the facility. The facility must not currently be subject to any PSD requirements. Performing a PSD applicability analysis does not restrain a facility from obtaining a Part 70 General Operating Permit. However, if the analysis shows that a PSD permit will be necessary, then a Part 70 Regular Operating Permit will be necessary. PSD applicability is discussed in detail in the next section.

If a facility wishes to establish enforceable limitations to avoid the applicability of regulations that would otherwise stop the facility from obtaining a Part 70 General Operating Permit, then the facility will not be able to obtain a Part 70 General Operating Permit.

In the event that specific conditions are needed, they will appear in this general format:

Limitation: Equipment/operational data <=_ (appropriate units). Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division if [parameter(s)] exceeds the maximum listed in this specific condition for any twelve consecutive month period. [LAC 33:III.501.C.6]

Monitoring: Equipment/operational data monitored by technically sound method continuously. [LAC 33:III.501.C.6]

Recordkeeping: Equipment/operational data recordkeeping by electronic or hard copy monthly. Keep records of the total [parameter(s)] each month, as well as the total [parameter] for the last twelve months. Make records available for inspection by DEQ personnel. [LAC 33:III.501.C.6]

Submittal: Submit report: Due annually, by the 31st of March. Report the [parameter(s)] for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division. [LAC 33:III.501.C.6]

This language should be modified on a case-by-case basis for whatever requirements the LDEQ deems "reasonable and/or necessary." All four elements of this generic State Only Specific Condition do not need to be utilized. The use of the default "continuous" for monitoring must be modified to conform to the associated limitation.

Table 1

List of Regulations to Be Included In General Permits	Presumptive CAM
LAC 33:III.219 LAC 33:III.919 LAC 33:III.Chapter 11 Control of Emissions of Smoke LAC 33:III.Chapter 13 Emission Standards for Particulate Matter LAC 33:III.Chapter 15 Emission Standards for Sulfur Dioxide	

Table 1	
List of Regulations to Be Included In General Permits	**Presumptive CAM**
LAC 33:III.2103 Storage of Volatile Organic Compounds	
LAC 33:III.2104 Crude Oil and Condensate	
LAC 33:III.2107 Volatile Organic Compounds - Loading	
LAC 33:III.2108 Marine Vapor Recovery	
LAC 33:III.2109 Oil/Water Separation	
LAC 33:III.2111 Pumps and Compressors	
LAC 33:III.2113 Housekeeping	
LAC 33:III.2115 Waste Gas Disposal	
LAC 33:III.2116 Glycol Dehydrators	
LAC 33:III.2121 Fugitive Emission Control	
LAC 33:III.2122 Fugitive Emission Control for Non-Attainment Areas	
LAC 33:III.2123 Organic Solvents	
LAC 33:III.2125 Vapor Degreasers	
LAC 33:III.Chapter 22 Ozone Non-Attainment	
LAC 33:III.Chapter 29 Odor Regulations	
LAC 33:III.Chapter 51 TAP Control	
LAC 33:III.Chapter 56 Emergency Episodes	
LAC 33:III.Chapter 59 Accident Prevention	
La. Policy - Stack Testing	
La. Policy - Non-NSPS Flares	
La. Policy - Glycol Dehydrators	
La. Policy - Emission Rates	
La. Policy - Cyclone Collectors	
La. Policy - Dust Filters	
La. Policy - Wet Scrubbers	
La. Policy - Carbon Adsorbers	
40 CFR 60 Subpart A General Provisions	
40 CFR 60 Subpart D Steam Boilers after 1971	
40 CFR 60 Subpart Db Steam Boilers 100 - 250 MM Btu/hr	
40 CFR 60 Subpart Dc Steam Boilers 10 - 100 MM Btu/hr	
40 CFR 60 Subpart K Tanks after 1973	
40 CFR 60 Subpart Ka Tanks after 1978	
40 CFR 60 Subpart Kb Tanks after 1984	
40 CFR 60 Subpart GG Turbines	
40 CFR 60 Subpart VV VOC Leaks for SOCMI*	X
40 CFR 60 Subpart KKK VOC Leaks for Nat Gas Onshore Plants*	X
40 CFR 60 Subpart LLL Onshore Nat Gas Sulfur Dioxide Emissions*	X**
40 CFR 61 Subpart A General Provisions	
40 CFR 61 Subpart M Asbestos	
40 CFR 61 Subpart V Fugitive Leaks	X
40 CFR 61 Subpart FF Benzene Waste Operations	X
40 CFR 63 Subpart A General Provisions	
40 CFR 63 Subpart T Halogenated Solvent Cleaning	
40 CFR 63 Subpart HH HAP's from Oil and Gas Production	X
40 CFR 63 Subpart HHH Natural Gas Transmission and Storage	X

Table 1	
List of Regulations to Be Included In General Permits	**Presumptive CAM**
40 CFR 64 Compliance Assurance Monitoring (CAM) 40 CFR 70 PART 70 Operating Permit Regulations 40 CFR 82 Protection of Stratospheric Ozone	

** Subparts KKK and LLL refer to Subpart VV, therefore VV is included. If Subpart VV is directly applicable to the facility due to VOC leaks for Synthetic Organic Chemical Manufacturing Industry (SOCMI), the General Permit cannot be used.*

*** Must add data collection procedure.*

When Do I Have to Apply for a Part 70 General Operating Permit?

There are no regulations that require any facility to apply for this type of permit. If a facility meets the qualifications, then that facility may apply for a Part 70 General Operating Permit.

If a facility qualifies for the Part 70 General Operating Permit, then the permittee should apply for this permit using the same procedure as for a Part 70 Regular Operating Permit. The application should clearly state that the permittee is requesting a Part 70 General Operating Permit. If this is not done, the permittee may be issued a standard Part 70 Regular Operating Permit.

Use the Louisiana Application for Approval of Emissions from Part 70 Sources form in order to apply for a Part 70 General Operating Permit. This form can be found on the LDEQ website: www.deq.louisiana.gov.

If applying for an initial Part 70 General Operating Permit, a copy of the applicant's Environmental Assessment Statement associated with the project (also known as answers to the "IT" questions) must be submitted to LDEQ. Per R.S. 30:2018(C), copies must also be forwarded to the local governmental authority and to the designated public library at no additional cost to the local governmental authority or the designated public library. The questions that must be answered as part of the Environmental Assessment Statement can be found in Section 25 of the Louisiana Application for Approval of Emissions from Part 70 Sources.

In addition, the owner or operator must publish a notice of the application in a newspaper of general circulation in the local area where the source is or will be located. The format of the notice should be the same as that found at the following web address: http://www.deq.louisiana.gov/portal/Portals/0/permits/air/General%20Permit%20Public%20Notice.doc. It should be noted that this notice requirement only applies to sources that apply for an initial Part 70 General Operating Permit. It does not apply to any subsequent modification applications.

When and How Do I Modify a Part 70 General Operating Permit?

A permit should be modified when it becomes necessary to change the permitted limits or conditions to represent planned changes to the pollution emitting capabilities of a source or

facility. Please read the section below entitled Permit Modifications to determine which type of modification is appropriate. Please read Section 4.3.2 *How Do I Calculate the Fee?* to determine the correct fee for the modification. If an insufficient application fee is submitted, the application will not be processed until a sufficient fee has been received.

In order to apply for a modification, complete the Louisiana Application for Approval of Emissions from Part 70 Sources form according to the guidance in the Section 4.0 *How To Apply For a Permit.* All sections of the permit application form should be completed as directed. This would normally mean that the applicant should complete the application so as to reflect all sources of emissions to be authorized by the permit. However, for modification applications, the applicant may complete the EIQs, example calculations, and Section 23 of the application so as to reflect only the new and modified sources. Regardless of the above statements, the applicant should be prepared to submit a full and complete application that reflects all sources of emissions represented in the permit in question if requested by LDEQ.

When and How Do I Renew a Part 70 General Operating Permit?

This type of permit must be renewed every five (5) years. The renewal application must be submitted at least six (6) months prior to the expiration of the permit but in no event more than eighteen (18) months prior to the permit expiration date. If a renewal is not submitted in a timely manner as defined above, the currently effective permit will expire on its expiration date. Permit expiration terminates the owner's and operator's authority to operate the source [LAC 33:III.507.E]. Operation of a major source without authorization may subject the facility to enforcement action, including a penalty assessment.

When submitting a renewal, it is possible to request a modification using the same application. If this is done, then the fees will be in accordance with the appropriate modification fee.

If a renewal does not request any modification(s) to the facility, then no fee is required. See Section 4.3.2 *How Do I Calculate the Fee?* for more details on what qualifies as a change for fee purposes.

A renewal application should be full and complete. It should have the same level of detail as an application for an initial permit. All sections of the Louisiana Application for Approval of Emissions from Part 70 Sources form should be filled out. Emission Inventory Questionnaires (EIQs) and example calculations should be provided for all sources, even if the emissions will not change from currently permitted levels [LAC 33:III.507.E.5].

What Kind of Public Participation Timeframe Can I Expect?

There is no public participation timeframe associated with this type of permit.

Is There Any Additional Guidance?

Any permit application for any type of Part 70 permit must be prepared by or under the supervision of a Professional Engineer registered in Louisiana or a responsible person authorized to act on his behalf (his designee). A Louisiana Professional Engineer or his designee must

certify the technical design, calculations and/or drawings provided in the permit application. This certification applies only to accuracy and completeness of the technical aspects of the facility and engineering being permitted. The signature and seal of a Professional Engineer that is not registered in the State of Louisiana may **not** be used to certify a permit application.

A list of Frequently Asked Questions has been compiled for this type of permit. It can be found at the following web address, along with other additional information: http://www.deq.louisiana.gov/portal/tabid/64/Default.aspx.

2.3.9 New Source Review

New Source Review (NSR) applies to the construction of new major stationary sources and to major modifications of existing sources. The NSR program imposes more stringent requirements on companies building new plants or increasing emissions via modifications to existing plants. NSR encompasses two distinct programs – Nonattainment New Source Review (NNSR) and Prevention of Significant Deterioration (PSD). NNSR is required in areas that are not in attainment with the National Ambient Air Quality Standard (NAAQS) for a given pollutant, whereas PSD requirements apply in areas determined to be in attainment with the NAAQS for that pollutant.

NSR is a complex regulatory program. Literally thousands of pages of guidance documents, implementation memos, and applicability determinations have been generated by EPA since the December 5, 1974, regulations were promulgated. This manual cannot possibly address all possible nuances of NSR. Rather, it's intended to provide a general overview of the applicability procedures, as well as a discussion of the control technology selection process and modeling analyses required in the event NSR is triggered. Other available resources include EPA's NSR website (www.epa.gov/nsr) and EPA's New Source Review Policy and Guidance Database (http://www.epa.gov/region07/air/policy/search.htm), a searchable database which contains EPA-issued policy and guidance documents.

2.3.9.1 Nonattainment New Source Review (NNSR)

NNSR procedures are set forth in LAC 33:III.504. Affected parishes, pollutants, and nonattainment designations are provided in the following table.

Parish	Nonattainment for	Designation
Ascension	Ozone	Marginal
East Baton Rouge	Ozone	Marginal
Iberville	Ozone	Marginal
Livingston	Ozone	Marginal
West Baton Rouge	Ozone	Marginal

Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge Parishes are referred to as the Baton Rouge [ozone] Nonattainment Area (BRNA). Both NO_X and VOC are regulated as nonattainment pollutants because both were determined to contribute to tropospheric ozone formation.[10]

With respect to the 1-hour SO_2 NAAQS promulgated on June 22, 2010,[11] LDEQ has recommended that only St. Bernard Parish be designated as a nonattainment area.

EPA must designate areas as "attainment," "nonattainment," or "unclassifiable" for the new 1-hour SO_2 NAAQS by June 3, 2012. Until the effective date of any nonattainment designation, emissions of SO_2 will be evaluated pursuant to PSD regulations.

Ambient concentrations of particulate matter (PM_{10} and $PM_{2.5}$), NO_X, CO, and lead are in compliance with their respective NAAQS; therefore, emissions of these pollutants are evaluated pursuant to PSD regulations.

NNSR Applicability

The following table will be referenced throughout the NNSR discussion.

Table 2

Pollutant	Designation	Major Stationary Source Threshold Value (tons/year)	Major Modification Significant Net Increase Value (tons/year)	Minimum Offset Ratio
Ozone (VOC/NO_X) [12]	Marginal	100 / **50**	40 (40) / **25 (25)**	1.10 to 1
	Moderate	100 / **50**	40 (40) / **25 (25)**	1.15 to 1
	Serious	50	25 (5)	1.20 to 1 w/LAER; 1.40 to 1 internal w/o LAER
	Severe	25	25 (5)	1.30 to 1 w/LAER; 1.50 to 1 internal w/o LAER
	Extreme	10	Any increase	1.50 to 1
CO	Moderate	100	100	> 1.00 to 1
	Serious	50	50	> 1.00 to 1

[10] LDEQ began regulating NO_X as a nonattainment pollutant on December 20, 2001 (upon promulgation of amendments to LAC 33:III.504). EPA proposed to rescind the BRNA's Section 182(f) and 182(b)(1) NO_X exemptions on May 7, 2002. EPA's proposal was finalized on May 5, 2003 (68 FR 23597), and effective June 4, 2003.

[11] 75 FR 35520

[12] For sources located in Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge Parishes, reduced thresholds (in bold) have been established for offset purposes. See the discussion under the heading "The 2008 8-Hour Ozone NAAQS" for more information.

Pollutant	Designation	Major Stationary Source Threshold Value (tons/year)	Major Modification Significant Net Increase Value (tons/year)	Minimum Offset Ratio
SO_2		100	40	> 1.00 to 1
PM_{10}	Moderate	100	15	> 1.00 to 1
	Serious	70	15	> 1.00 to 1
$PM_{2.5}$		100	10 ($PM_{2.5}$) [13] 40 (SO_2) 40 (NO_X)	> 1.00 to 1
Lead		100	0.6	> 1.00 to 1

NNSR applies only to the construction of new major stationary sources and to major modifications of existing major stationary sources where such new source or modification is located in a nonattainment area for the regulated pollutant for which the source is major. In other words, the source must be major for the same regulated pollutant for which the area is designated nonattainment. As previously mentioned, VOC and NO_X are pollutants of concern in ozone nonattainment areas. Finally, NNSR also applies to modifications of existing minor stationary sources if the modification would constitute a new major stationary source in and of itself.

Use the following steps to determine if NNSR applies to a proposed project.

Step 1 Determine if the source is or will be a "major stationary source."

A major stationary source is any stationary source which emits or has the potential to emit a regulated NNSR pollutant at or above the Major Stationary Source Threshold Value as given in Table 2. For example, a major stationary source in a serious ozone nonattainment area is one that emits or has the potential to emit 50 tons per year (TPY) or more of VOC or NO_X.

All emission units that are located within a contiguous area, under common control, and belong to the same industrial grouping must be aggregated in order to determine if they constitute a major stationary source. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., share the same first two digits in their Standard Industrial Classification (SIC) Code), or if some of the emission units act as a support facility for the other emission sources.

Do not include "secondary emissions" (i.e., emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the source or modification itself) in order to determine major source status.

[13] SO_2 and NO_X are regulated as precursors to $PM_{2.5}$ in $PM_{2.5}$ nonattainment areas.

Step 2 Determine if there will be a physical change or change in the method of operation.

The term "physical change or change in the method of operation" is left intentionally broad, but some changes are specifically excluded from consideration. Changes which are not considered physical changes or changes in the method of operation include:

- routine maintenance, repair, and replacement (RMRR). Replacement is generally limited to small maintenance items, not an entire emissions unit. See Section 2.3.9.7 for an additional material regarding RMRR;

- use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan in accordance with the Federal Power Act;

- use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act;

- use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

- use of an alternative fuel or raw material by a stationary source that:

  - the source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition that was established after December 12, 1976, in accordance with 40 CFR 52.21 or under regulations approved in accordance with 40 CFR Part 51, Subpart I or 40 CFR 51.166; **or**

  - the source is approved to use under any permit issued under regulations approved in accordance with 40 CFR 51.165;

- an increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition that was established after December 21, 1976, in accordance with 40 CFR 52.21 or regulations approved in accordance with 40 CFR Part 51, Subpart I or 40 CFR 51.166; and

- any change in ownership at a stationary source.

Step 3 Determine which emissions units at the stationary source will experience an increase in actual or allowable emissions as a result of the physical change or change in the method of operation (i.e., the affected emissions units).

Identify the emissions units that will affected by the proposed modification. An "emissions unit" is defined as "any part of a major stationary source which emits or would

have the potential to emit any regulated pollutant, and includes an electric utility steam generating unit."

It is not necessary that the emissions unit itself be physically modified as a result of the contemplated project. If the emissions unit will experience an increase in actual emissions as a result of the project, it should be included in the NNSR analysis. For example, if the addition of a new process unit to an existing facility will necessitate an increase in steam demand from an existing boiler, that boiler would be an affected emissions unit, even if the boiler's permit limits did not have to be modified.

Step 4 Determine "baseline actual emissions" for each affected emissions unit.

The procedures used to calculate baseline actual emissions for existing electric utility steam generating units, other existing emissions units, and new emissions units differ. Accordingly, each will be addressed separately.

Existing Electric Utility Steam Generating Units (EUSGUs)

Baseline actual emissions equal the average rate, in TPY, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the **five (5)**-year period immediately preceding when the owner or operator begins actual construction of the project. LDEQ shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

Baseline actual emissions shall:

- include fugitive emissions and authorized emissions associated with startups, shutdowns, and malfunctions;
- be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period; and
- when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated pollutant.

Other Existing Emissions Units

Baseline actual emissions equal the average rate, in TPY, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the **ten (10)**-year period immediately preceding *either* the date the owner or operator begins actual construction of the project *or* the date a complete permit application is received by LDEQ, except that the 10-year period shall not include any period earlier than November 15, 1990.

Baseline actual emissions shall:

- include fugitive emissions and authorized emissions associated with startups, shutdowns, and malfunctions;

- be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;

- adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the source must currently comply, had such source been required to comply with such limitations during the consecutive 24-month period; and

- when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated pollutant.

New Emissions Units

A new emissions unit is any emissions unit that is, or will be, newly constructed and that has existed for less than two years from the date such emissions unit first operated.

Baseline actual emissions, for purposes of determining the emissions increase that will result from the initial construction and operation of such unit, shall equal zero, and thereafter, for all other purposes, shall equal the unit's potential to emit.

Replacement Units

A replacement unit, by definition, is an existing emissions unit. In order to qualify as a replacement unit, the emission unit must:

- be a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or completely take the place of an existing emissions unit;

- be identical to or functionally equivalent to the replaced emissions unit; and

- not alter the basic design parameters of the process unit.

The replaced emissions unit must be permanently removed from the facility, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

Step 5 Determine "projected actual emissions" (or "potential to emit") for each existing affected emissions unit, and "potential to emit" for each new emissions unit.

For existing emissions units, the applicant has the option to use projected actual emissions or potential to emit.

Projected actual emissions equal the maximum annual rate, in TPY, at which an existing emissions unit is projected to emit a regulated pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, *or* in any one of the 10 years following that date if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the source. In determining the *projected actual emissions* before beginning actual construction, the owner or operator of the source shall:

- consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved State Implementation Plan (SIP);

- include fugitive emissions to the extent quantifiable, and authorized emissions associated with startups, shutdowns, and malfunctions; and

- exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the "baseline actual emissions" and that are also unrelated to the particular project, including any increased utilization due to product demand growth [the demand growth exclusion].

For new sources, the applicant must use potential to emit.

"Potential to emit" is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

Step 6 Compare "baseline actual emissions" (Step 4) to "projected actual emissions"/ "potential to emit" (Step 5).

Calculate the difference between projected actual emissions (or potential to emit, if selected) and baseline actual emissions for each **existing** emissions unit, and the difference between potential to emit and baseline actual emissions (normally zero) for each **new** emissions unit.

Sum only the increases associated with the proposed project. In this step, decreases are ignored, even if they are associated with the project. If the increase is equal to or greater than the appropriate Major Modification Significant Net Increase Value listed in Table 2 (the second number (in parantheses) listed in the column in the case of marginal, moderate, serious, and severe ozone nonattainment areas), a netting analysis must be performed (Step 7).

If the increase is *less* than the appropriate Major Modification Significant Net Increase Value listed in Table 2, then the project does not trigger NNSR (though reasonable possibility provisions may apply).

Marginal and Moderate Ozone Nonattainment Areas

In marginal and moderate ozone nonattainment areas (except as provided in LAC 33:III.504.M), consideration of the net emissions increase (i.e., netting) is required for any project that would increase emissions of VOC or NO_X by 40 TPY or more.

Serious and Severe Ozone Nonattainment Areas

In serious and severe ozone nonattainment areas, consideration of the net emissions increase is required for any project that would increase VOC or NO_X emissions by 5 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 (defined in Step 7) or of NO_X for a period of 5 years after the effective date of the rescission of the NO_X waiver (i.e., June 4, 2003), and within the contemporaneous period thereafter.

Reasonable Possibility

If, in Step 5, the applicant elects to use potential to emit in lieu of projected actual emissions, reasonable possibility provisions are not applicable. However, if the applicant uses projected actual emissions, two additional comparisons must be made to determine if there is a "reasonable possibility" that the proposed project (now projected *not* to be a part of a major modification) may result in a significant emissions increase of a regulated NSR pollutant.

A "reasonable possibility" exists if:

1. increases from the project are 50% or more of the appropriate Major Modification Significant Net Increase Value (based on the Clean Air Act thresholds set forth in the following table) for the regulated NSR pollutant; or

2. increases from the project, added to the amount of emissions excluded from the projected actual emissions estimate in Step 5 (the demand growth exclusion), sums to at least 50% of the appropriate Major Modification Significant Net Increase Value for the regulated NSR pollutant.

Pollutant	Designation	Major Modification Significant Net Increase Value (tons/year)	50% of Major Modification Significant Net Increase Value (tons/year)
Ozone (VOC/NO_X)	Marginal	40	20
	Moderate	40	20
	Serious	25	12.5
	Severe	25	12.5
	Extreme	Any increase	N/A
CO	Moderate	100	50
	Serious	50	25
SO_2		40	20
PM_{10}		15	7.5
$PM_{2.5}$		10 ($PM_{2.5}$) 40 (SO_2) 40 (NO_X)	5 20 20
Lead		0.6	0.3

If the answer to the first question is **"yes,"** then the requirements of LAC 33:III.504.D.9 will apply.

Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

- a description of the project;
- the emissions units whose emissions of a regulated pollutant could be affected by the project; and
- a description of the applicability test used to determine that the project is not a major modification for any regulated pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded from the projected actual emissions estimate in Step 5 (the demand growth exclusion) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the above information to LDEQ.

Monitoring

The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by an affected emissions unit, and calculate and maintain a record of the annual emissions, in TPY on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, **or** for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity *or* potential to emit of that regulated NSR pollutant.

Reporting

If the emissions unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to LDEQ within 60 days after the end of each year during which the records described above must be generated setting out the unit's annual emissions during the calendar year that preceded submission of the report.

If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to LDEQ within 60 days after the end of the year if annual emissions, in TPY, from the project in question exceed the baseline actual emissions by a "significant" (as defined in LAC 33:III.504.K) amount, and if such emissions differ from the preconstruction projection. This report shall contain the following:

- the name, address, and telephone number of the major stationary source;
- the annual emissions; and
- any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

If the answer to the first question is "**no**," but the answer to the second question is "**yes**," then before beginning actual construction of the project, the owner or operator is required only to document and maintain a record of the following information:

- a description of the project;
- identification of the emissions units whose emissions of a regulated pollutant could be affected by the project; and
- a description of the applicability test used to determine that the project is not a major modification for any regulated pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded from the projected actual emissions estimate in Step 5 (the demand growth exclusion) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

Step 7 Determine the contemporaneous period.

The contemporaneous period is the period which includes the calendar year in which the proposed increase will occur and the preceding four consecutive calendar years. Note that this period is not tied to the project commencement of construction.

Step 8 Determine which emissions increases and decreases during the contemporaneous period are creditable.

Review other physical changes or changes in the method of operation during the contemporaneous period to determine if they are "creditable."

Contemporaneous Increases

An increase in actual emissions is creditable only to the extent that the new level of allowable emissions exceeds the old level of actual emissions.

An increase in actual emissions is creditable only if neither LDEQ nor EPA has relied on it in issuing a permit for the source under NNSR regulations that is in effect when the increase in actual emissions from the proposed change occurs.

An increase that results from a physical change at a major stationary source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

Contemporaneous Decreases

A decrease in actual emissions is creditable only to the extent that:

- the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of allowable emissions;
- it is enforceable as a practical matter at and after the time that actual construction of the particular change begins;
- it has not been relied on by the state in demonstrating attainment or reasonable further progress; and
- it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

A decrease in actual emissions is creditable only if neither LDEQ nor EPA has relied on it in issuing a permit for the source under NNSR regulations or PSD regulations (in the case of NO_X) that is in effect when the increase in actual emissions from the proposed change occurs.

Additional Details to Consider

EPA has not extended the "actual-to-projected-actual" methodology to the computation of contemporaneous emissions changes for netting.

- Contemporaneous increases = post-change allowable emissions minus baseline actual emissions.

- Contemporaneous decreases = lower of allowable emissions or baseline actual emissions minus post-change allowable emissions.

The applicant may select any consecutive 24-month period during the 10-year period immediately preceding the contemporaneous change to determine baseline actual emissions (provided the emissions unit was an "existing" unit at the time of the contemporaneous change) and may select a different 24-month period for each emissions unit.

The applicant's ability to use the full 10 years for calculating any contemporaneous emissions change is contingent upon the availability of valid and sufficient source information for the selected 24-month period to calculate an average annual emissions rate in TPY. Also, the 24-month period cannot include any period of time prior to November 15, 1990.

Further, contemporaneous changes do **not** have to adhere to the restrictions in Clauses a.iii and b.iv in the definition of "baseline actual emissions" (requiring that when a project involves multiple emission units, only one consecutive 24-month period can be used to determine baseline actual emissions for all emissions units being changed). When evaluating emissions increases from multi-unit modifications, if more than one emissions unit was changed as part of a single project during the contemporaneous period, the applicant may select a separate consecutive 24-month period to represent each emissions unit that is part of the project.

The rules also allow a source to change baseline periods for a given project over time. For example, a single baseline selected at the time the project is proposed could be replaced with multiple baselines, each for a different emissions unit, after the project is constructed (e.g., if the project is now in the netting window of another project).

In any case, the calculated baseline actual emissions for each emissions unit must be reduced to account for any noncompliant or excess emissions and adjusted to reflect the most current emission limitations (including operational restrictions) applying to that unit. "Current" in the context of a contemporaneous emissions change refers to limitations on emissions and source operation that existed just prior to the date of the contemporaneous change.

Also, baseline actual emissions for EUSGUs are calculated differently. The "any consecutive 24-month period within the 5-year period immediately preceding actual construction" baseline method does not apply when calculating contemporaneous

emissions changes for netting purposes. Instead, EUSGUs must use the procedures described in the definition of "actual emissions."

Note that reductions achieved by complying with Reasonably Available Control Technology (RACT) regulations (i.e., Chapters 21 & 22) cannot be used in netting (as EPA considers RACT and NSR part of the same pollutant program).

However, reductions achieved as a result of compliance with other regulatory programs (e.g., MACT) are generally creditable. If an emission limitation is part of a MACT standard that EPA proposed or promulgated under 40 CFR 63, baseline actual emissions need only be adjusted if LDEQ has taken credit for such emissions reductions in an attainment demonstration or maintenance plan.

Step 9 Sum all contemporaneous and creditable increases and decreases in actual emissions with the increase associated with the proposed modification to determine if a significant net emissions increase will occur.

In calculating the "net emissions increase," source-wide creditable emissions decreases are subtracted from source-wide creditable emissions increases and added to the emissions change (including decreases) associated with the proposed modification. This is done for each NNSR pollutant which triggered netting in Step 6.

After the net emissions increase has been determined, it should be compared to the appropriate Major Modification Significant Net Increase Value listed in Table 2 – the first number listed in the column in the case of marginal, moderate, serious, and severe ozone nonattainment areas. If the net emissions increase for a pollutant is greater than its threshold level, then the pollutant is subject to NNSR. If the creditable and contemporaneous decreases reduce the net emissions increase to a level below its threshold level, then NNSR does not apply. The project is said to have "netted out" of NNSR for that pollutant.

NNSR Requirements

Prior to commencement of construction, a NNSR permit must be obtained from the LDEQ in accordance with the requirements of LAC 33:III.504. An NNSR permit is not a stand-alone document. Rather, NNSR provisions are incorporated in the source's Title V permit.

In order for a permit to be granted, all of the following conditions shall be met:

1. All existing major stationary sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in Louisiana shall be in compliance with all applicable state and federal emission limitations and standards, the federal Clean Air Act, and all conditions in a state or federally enforceable permit, or be on schedules for compliance. For purposes of meeting this condition, the applicant shall provide a list of all major sources it owns and operates within the state and certify that all such sources are in compliance with all applicable state and federal emission limitations

and standards, the federal Clean Air Act, and all conditions in a state or federally enforceable permit, or are on schedules for compliance.

2. Lowest achievable emission rate (LAER) technology shall be applied to each new emissions unit and to each existing emissions unit at which an emissions increase will occur as the result of the proposed modification unless internal offsets are provided at an increased rate and the source is located in a serious or severe ozone nonattainment area (see 4 below). Emissions units that are not being physically modified do not require LAER.

   LAER is defined as the more stringent rate of emissions based on the following:

   a. the most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of major stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

   b. the most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified major stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

   When selecting LAER, it is important to note that a viable technology **cannot** be eliminated for economic reasons. To the extent possible, LAER limitations should be reported using RACT/BACT/LAER Clearinghouse (RBLC) standard emission units by process type code. See Appendix C.

3. The increase in emissions associated with the change (the project which triggered netting, not the net emissions increase) shall be offset by equal or greater emission reductions according to the appropriate offset ratio set forth in Table 2 to ensure that a net air quality benefit will occur. All emission reductions claimed as offset credit must be from decreases of the same regulated pollutant or pollutant class (e.g., VOCs). Interpollutant trading is not allowed. Emission reduction credits (ERC) may be generated from the source or may be purchased from another source within the same nonattainment area.

4. In the case of any major stationary source located in an area classified as serious or severe, if the owner or operator of the source elects to offset the emissions increase by a reduction in emissions of VOC or NO_X from other operations, units, or activities within the same source (i.e., apply internal offsets) at a ratio of at least 1.40 to 1 (if reviewed under requirements for serious areas) or 1.50 to 1 (if reviewed under requirements for severe areas), then the requirement for LAER shall not apply. Note that in marginal, moderate, and extreme ozone nonattainment areas, there is not an option to avoid LAER by applying internal offsets at an increased ratio.

5. The proposed major stationary source or major modification must meet all applicable emission requirements in the Louisiana SIP, any applicable New Source Performance Standards (NSPS) in 40 CFR Part 60, and any National Emission Standard for Hazardous Air Pollutants (NESHAP) in 40 CFR Part 61 or Part 63.

6. As a condition for issuing a permit to construct a major stationary source or major modification in a nonattainment area, the public record must contain an analysis, provided by the applicant, of alternate sites, sizes, production processes, and environmental control techniques and demonstrate that the benefits of locating the source in a nonattainment area significantly outweigh the environmental and social costs imposed. Per R.S. 30:2018(C), a copy of this Environmental Assessment Statement must also be forwarded to the local governmental authority and to the designated public library at no additional cost to the local governmental authority or the designated public library. The questions that must be answered as part of the Environmental Assessment Statement can be found in Section 25 of the Louisiana Application for Approval of Emissions from Part 70 Sources.

Transition from the 1-Hour Ozone NAAQS to the 1997 8-Hour Ozone NAAQS

In order to transition from the 1-hour ozone NAAQS (0.12 ppm) to the 8-hour ozone NAAQS (0.08 ppm), the U.S. Environmental Protection Agency (EPA) adopted a rule for implementation of the 8-hour standard, the "Phase 1 Implementation Rule," on April 30, 2004 (69 FR 23951). The Phase 1 Implementation Rule revoked the 1-hour standard in full, including the associated designations and classifications, effective June 15, 2005.[14] On that date, the BRNA (again, Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge Parishes) was redesignated from severe (under the 1-hour standard) to marginal (under the 8-hour standard).

On March 21, 2008, EPA finalized its finding that Baton Rouge did not attain the 8-hour ozone NAAQS by June 15, 2007, the attainment deadline set forth in the Clean Air Act (CAA) for "marginal" nonattainment areas (73 FR 15087). Consequently, by operation of law, the BRNA was reclassified from a "marginal" to a "moderate" nonattainment area, effective April 21, 2008.

On November 30, 2011, EPA redesignated Baton Rouge to attainment of the 1997 8-hour ozone NAAQS, effective December 30, 2011 (76 FR 74000). At the same time, EPA approved LDEQ's ozone maintenance plan, which projected no net growth in point source NO_X and VOC emissions in the five parish area through 2020.

[14] On December 22, 2006, the U.S. Court of Appeals for the D.C. Circuit Court issued a decision (*South Coast Air Quality Management District v. EPA*) ruling that EPA "failed to heed the restrictions" in the Clean Air Act when it promulgated the Phase 1 8-Hour Ozone Implementation Rule and, accordingly, vacated the rule and remanded the matter to EPA for further proceedings. The Court rejected EPA's classifying of 8-hour ozone nonattainment areas under Subpart 1. It also rejected EPA's treatment of NSR, contingency measures, Section 185 penalties, and conformity because the court concluded that withdrawing any of these measures from a SIP "would constitute impermissible backsliding."

The 2008 8-Hour Ozone NAAQS

On March 27, 2008, EPA lowered the primary ozone NAAQS from 0.08 ppm to 0.075 ppm. This standard became effective on May 27, 2008. Before designations under this standard were finalized, the agency announced on September 16, 2009, that it would reconsider the new NAAQS and therefore delayed its implementation. On January 19, 2010, EPA proposed that the NAAQS should instead be set within the range of 0.060 to 0.070 ppm. However, on September 2, 2011, President Obama "requested that Administrator Jackson withdraw the draft Ozone National Ambient Air Quality Standards." Therefore, EPA moved forward with certain required actions to implement the 2008 standard. One such action was to designate areas as either attainment, nonattainment, or unclassifiable.

Based on air quality data from 2008 - 2010, LDEQ recommended to EPA that only East Baton Rouge Parish be designated as nonattainment. However, by letter dated December 9, 2011, EPA informed LDEQ that, in addition to East Baton Rouge, the agency intends "to designate as nonattainment the parishes of Ascension, Iberville, Livingston, and West Baton Rouge" and "plans to promulgate final ozone designations in spring of 2012." On May 21, 2012, EPA promulgated a rule entitled "Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards." This rule formally designated the five parishes as a "marginal" nonattainment area, effective July 20, 2012.[15]

Under the CAA, the major source threshold in marginal ozone nonattainment areas is 100 tons per year (TPY) of NO_X and/or VOC, and the major modification net emissions increase trigger value is 40 TPY of these same compounds (see Table 2). However, LDEQ continues to require owners or operators of stationary sources with potential NO_X and/or VOC emissions of 50 TPY or more to offset certain increases of these compounds. See LAC 33:III.504.M.

The following provisions apply if:

- potential NO_X and/or VOC emissions are less than 100 TPY; **or**
- potential NO_X and/or VOC emissions are greater than or equal to 100 TPY **and** the parish is designated as an ozone *attainment* area.

New Stationary Sources

- The owner or operator of a new stationary source shall provide offsets for potential VOC and NO_X emissions **in excess of** 50 TPY. Offsets shall be required at a ratio of 1.1 to 1.

Existing Stationary Sources

[15] Between December 30, 2011, and July 20, 2012, NNSR provisions, including those requiring offsets for significant NO_X and VOC increases, were not mandated by the CAA. However, in order to ensure that the Baton Rouge area continued to make progress toward attainment of the 2008 ozone NAAQS and to mitigate increases of NO_X and VOC emissions consistent with the area's approved ozone maintenance plan, LDEQ required owners or operators of stationary sources with potential NO_X and/or VOC emissions of 50 TPY or more to offset certain increases of NO_X and VOC emissions. See AQ327E.

- Consideration of the net emissions increase (i.e., a netting analysis) is required for any physical change or change in the method of operation that would increase emissions of NO_X and/or VOC by 25 TPY or more, without regard to any project decreases (the project increase).

- The owner or operator of an existing stationary source with a potential to emit of 50 TPY or more of NO_X shall provide NO_X offsets for each physical change or change in the method of operation that would result in a net emissions increase of 25 TPY or more of NO_X.

- The owner or operator of an existing stationary source with a potential to emit of 50 TPY or more of VOC shall provide VOC offsets for each physical change or change in the method of operation that would result in a net emissions increase of 25 TPY or more of VOC.

- Offsets shall be required at a ratio of 1.1 to 1.

The following provisions apply if potential NO_X and/or VOC emissions are greater than or equal to 100 TPY **and** the parish is designated as a "marginal" or "moderate" ozone nonattainment area.

New Stationary Sources

- If potential NO_X and/or VOC emissions exceed 100 TPY, the federal NNSR program will apply. LAER and the other provisions of LAC 33:III.504, including offsets, are applicable.

Existing Stationary Sources

- Consideration of the net emissions increase (i.e., a netting analysis) is required for any physical change or change in the method of operation that would increase emissions of NO_X and/or VOC by 25 TPY or more, without regard to any project decreases (the project iucrease).

- If the project increase is greater than or equal to 40 TPY **and** the net emissions increase is greater than or equal to 40 TPY, the federal NNSR program applies. LAER and the other provisions of LAC 33:III.504, including offsets, are applicable.

- If the project increase or net emissions increase is below 40 TPY, but both the project increase **and** the net emissions increase are greater than or equal to 25 TPY:

  – offsets are required at a ratio of 1.1 to 1, *but*
  – LAER and the other provisions of LAC 33:III.504 are not applicable.

Note that NO_X and VOC are evaluated independently. For example, assume an existing major stationary source located in a marginal ozone nonattainment area proposed a project that would increase NO_X emissions by 50 TPY and VOC emissions by 30 TPY and that there are no contemporaneous decreases of either pollutant. In this example, the NO_X increase would be

subject to the federal NNSR program, but the VOC increase would be subject only to the state offset requirement of LAC 33:III.504.M.

2.3.9.2 Prevention of Significant Deterioration (PSD)

PSD procedures are set forth in LAC 33:III.509. Except for St. Bernard and West Baton Rouge Parishes (see below), all parishes in Louisiana are in compliance with the NAAQS for particulate matter (PM_{10} and $PM_{2.5}$), SO_2, NO_X, CO, and ozone; therefore, increases of these pollutants are evaluated pursuant to PSD regulations.

As noted in the previous section, St. Bernard and West Baton Rouge Parishes will be designated as nonattainment areas with respect to the 1-hour SO_2 NAAQS, effective June 2012. Until that time, emissions of SO_2 will be evaluated pursuant to PSD regulations.

The basic goals of the PSD program are to:

- ensure that economic growth will occur in harmony with the preservation of existing clean air resources;
- protect the public health and welfare from any adverse effects that might occur, even at air pollution levels better than the NAAQS; and
- preserve, protect, and enhance the air quality in areas of special natural, recreational, scenic or historic value, such as national parks and wilderness areas (Class I Areas).

When Do I Have to Apply for a PSD Permit?

The PSD program applies only to the construction of new major stationary sources, the major modification of an existing major stationary source, or a modification (of a minor stationary source) which would be a major source in and of itself in an attainment area. Because PSD is pollutant-specific, a significant net emissions increase of one pollutant subjects an affected source to PSD for that pollutant only. It is important to note that a source that is major for one pollutant can trigger PSD requirements due to a significant net emissions increase of any NSR regulated pollutant. For example, if NO_X and CO emissions exceed 250 TPY, a 15 TPY net emissions increase in PM_{10} emissions is subject to PSD review, even if facility-wide PM_{10} emissions are less than 250 TPY.

Care must be taken in determining whether a proposed action will constitute the modification of an existing source or the construction of a new source. The broad definition of stationary source under PSD (any building, structure, facility, or installation that emits, or may emit, any air pollutant) may lead one to consider an action to be the construction of a new source when, under PSD regulations, it is in fact the modification of an existing source. The key to determining whether a proposed action constitutes the construction of a new source or the modification to an existing source can be found under the definition of "building, structure, facility, or installation." Under this definition, the extent of a source includes all of the pollutant-emitting activities that belong to the same industrial grouping (i.e., have the same first two digits in their SIC code), are located on one or more contiguous or adjacent properties, and are under common control. Therefore, if one constructs a

new process unit that is located adjacent to other units commonly owned and the units are part of the same "major group" (i.e., have the same two digit code), the new unit is a modification of the existing source and not construction of a new source.

Further, even if a facility has different SIC codes, but the new proposed or modified unit essentially supports the existing facility (e.g., a boiler at a chemical manufacturing plant), the units should be considered the same source for PSD purposes. The major function or "primary use" of the facility or emission source is the guiding rule to use in this type of determination.

It is also possible that a minor stationary source may require a PSD permit for certain major modifications. If the modification would increase emissions to such an extent that the increase alone would constitute a new major source, then a PSD permit is required. A PSD permit is not required, however, if the increase is only sufficient to make the minor source a major stationary source after the change. The newly created major stationary source will then be subject to PSD regulations for any subsequent major modification.

How Do I Apply for a PSD Permit?

Use the Louisiana Application for Approval of Emissions from Part 70 Sources form in order to apply for a PSD Permit.

The Air Permits Division strongly recommends that the applicant contact with the division in the early phases of the project. Some air quality analysis issues such as preconstruction monitoring (which may have to occur for up to one year in advance of the commencement of construction) and modeling protocols should be discussed prior to submittal of the application. Modeling protocols must be approved by the Office of Environmental Services prior to initiating the actual modeling runs.

PSD Applicability

PSD pollutants and their respective significance levels are noted in the following table.

Table 3

Pollutant	Significant Amount (in TPY)
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Particulate matter	25 (TSP)
	15 (PM_{10})
	10 ($PM_{2.5}$), 40 (SO_2 or NO_X)
Ozone	40 (VOC or NO_X)
Lead	0.6
Fluorides	3

Table 3	
Pollutant	**Significant Amount (in TPY)**
Sulfuric acid mist	7
Hydrogen sulfide (H_2S)	10
Total reduced sulfur (including H_2S)	10
Reduced sulfur compounds (including H_2S)	10
Municipal waste combustor organics[16]	0.0000035
Municipal waste combustor metals[17]	15
Municipal waste combustor acid gases[18]	40
Municipal solid waste landfills emissions[19]	50
GHGs and GHGs as CO_2e	0 and 75,000, respectively

Pollutants Regulated as Precursors

As with NNSR, both NO_X and VOC are regulated as precursors to ozone. SO_2 and NO_X are regulated as precursors to $PM_{2.5}$. Therefore, if a project triggers PSD review for SO_2 and/or NO_X, PSD review is also required for $PM_{2.5}$.

Condensable Particulate Matter

PM_{10} and $PM_{2.5}$ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{10} and $PM_{2.5}$ in PSD permits. Compliance with emissions limitations for PM_{10} and $PM_{2.5}$ issued prior to this date shall not be based on condensable particulate matter. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of PSD provisions.

Greenhouse Gas Emissions and CO_2e

Greenhouse gases (GHGs) is an air pollutant defined as the aggregate group of the following six compounds or classes of compounds: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF_6).

CO_2 equivalent emissions (CO_2e) equal the emitted amount of GHGs computed by multiplying the mass amount of emissions for each of the six GHGs by its associated global warming potential, published in Table A-1 to Subpart A of 40 CFR Part 98 – Global Warming Potentials, and summing the resultant value for each.

[16] Measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.
[17] Measured as particulate matter.
[18] Measured as sulfur dioxide and hydrogen chloride.
[19] Measured as nonmethane organic compounds.

Global warming potentials (GWPs) for the most common GHGs are listed below.

Compound	GWP
carbon dioxide	1
methane	21
nitrous oxide	310
sulfur hexafluoride	23,900

An applicant for a facility that emits hydrofluorocarbons and/or perfluorocarbons should refer to Table A-1, as a large number of such compounds are listed individually.

An example of how to calculate CO_2e emissions follows. Consider a source that has a potential to emit of 25,000 TPY carbon dioxide, 2000 TPY methane, and 50 TPY nitrous oxide. CO_2e emissions would be calculated as follows:

		GWP		
25,000 TPY CO_2	*	1	=	25,000 TPY CO_2e
2000 TPY CH_4	*	21	=	42,000 TPY CO_2e
50 TPY N_2O	*	310	=	15,500 TPY CO_2e
				82,500 TPY CO_2e

Use the following steps to determine if PSD applies to a proposed project.

Step 1 Determine if the source is or will be a "major stationary source."

A source is determined to be a major stationary source by its industrial category and its annual potential emissions. All stationary sources that emit, or have the potential to emit, 100 tons per year of any pollutant subject to PSD regulations (Table 3), except for greenhouse gases (GHGs), are major stationary sources if they fall into one of the following 26 categories:

1. Fossil fuel-fired steam electric plants in excess of 250 MM BTU/hr heat input;
2. Coal cleaning plants (with thermal dryers);
3. Kraft pulp mills;
4. Portland cement plants;
5. Primary zinc smelters;
6. Iron and steel mill plants;
7. Primary aluminum ore reduction plants;
8. Primary copper smelters;
9. Municipal incinerators capable of charging more than 50 tons of refuse/day;
10. Hydrofluoric, sulfuric and nitric acid plants;
11. Petroleum refineries;
12. Lime plants;

13. Phosphate rock processing plants;
14. Coke oven batteries;
15. Sulfur recovery plants;
16. Carbon black plants (furnace process);
17. Primary lead smelters;
18. Fuel conversion plants;
19. Sintering plants;
20. Secondary metal production plants;
21. Chemical process plants;
22. Fossil fuel boilers (or combinations thereof) totaling more than 250 MM BTU/hr heat input;
23. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
24. Taconite ore processing plants;
25. Glass fiber processing plants; and
26. Charcoal production plants.

In the calculation of total emissions from any of the listed 26 source categories, fugitive emissions must be included. Fugitive emissions include emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

If the source is not in a listed category, it must emit, or have the potential to emit, at least 250 tons per year of any regulated pollutant, except for GHGs. Here, fugitive emissions are excluded unless source was regulated (effective date of proposal) by NSPS or was regulated (effective date of promulgation) by NESHAP (Part 61) as of August 7, 1980. See Table A.2 (pp. A.12 - A.15) of EPA's draft October 1990 New Source Review Workshop Manual.

A source can also be a major stationary source based solely on its emissions of GHGs. As of July 1, 2011, any source in a listed category (see above) which emits, or has the potential to emit, 100 tpy or more of GHGs on a mass basis (i.e., no global warming potentials applied) **and** 100,000 tons per year or more of CO_2e is a major stationary source. Any source *not* in a listed category which emits, or has the potential to emit, 250 tpy or more of GHGs on a mass basis (i.e., no global warming potentials applied) **and** 100,000 tons per year or more of CO_2e is a major stationary source.

A source's potential to emit should be based on its maximum capacity to emit any air pollutant under its physical and operation design. Federally enforceable physical or operational limitations affecting a source's emissions (such as pollution control equipment or limitations on operating hours) may be considered in determining a source's potential to emit.

Do not include "secondary emissions" (i.e., emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the source or modification itself).

Step 2 Determine if there is a physical change or change in the method of operation.

The term "physical change or change in the method of operation" is left intentionally broad, but some changes are specifically excluded from consideration. Changes which are not considered physical changes or changes in the method of operation include:

- routine maintenance, repair, and replacement (RMRR). Replacement is generally limited to small maintenance items, not an entire emissions unit. See Section 2.3.9.7 for an additional material regarding RMRR;

- use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan in accordance with the Federal Power Act;

- use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act;

- use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

- use of an alternative fuel or raw material by a stationary source that:

  - the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition that was established after January 6, 1975, in accordance with 40 CFR 52.21 or under regulations approved in accordance with 40 CFR Part 51, Subpart I or 40 CFR 51.166; **or**

  - the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved in accordance with 40 CFR 51.166;

- an increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition that was established after January 6, 1975, in accordance with 40 CFR 52.21 or under regulations approved in accordance with 40 CFR Part 51, Subpart I or 40 CFR 51.166; and

- any change in ownership at a stationary source.

Step 3 Determine which emissions units at the stationary source will experience an increase in actual or allowable emissions as a result of the physical change or change in the method of operation (i.e., the affected emissions units).

Identify the emissions units that will affected by the proposed modification. An "emissions unit" is defined as "any part of a major stationary source which emits or would have the potential to emit any regulated pollutant, and includes an electric utility steam generating unit."

It is not necessary that the emissions unit itself be physically modified as a result of the contemplated project. If the emissions unit will experience an increase in actual emissions as a result of the project, it should be included in the PSD analysis. For example, if the addition of a new process unit to an existing facility will necessitate an increase in steam demand from an existing boiler, that boiler would be an affected emissions unit, even if the boiler's permit limits did not have to be modified.

Step 4 Determine "baseline actual emissions" for each affected emissions unit.

The procedures used to calculate baseline actual emissions for existing electric utility steam generating units, other existing emissions units, and new emissions units differ. Accordingly, each will be addressed separately.

Existing Electric Utility Steam Generating Units (EUSGUs)

Baseline actual emissions equal the average rate, in TPY, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the **five (5)**-year period immediately preceding when the owner or operator begins actual construction of the project. LDEQ shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

Baseline actual emissions shall:

- include fugitive emissions and authorized emissions associated with startups, shutdowns, and malfunctions;
- be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period; and
- when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated pollutant.

Other Existing Emissions Units

Baseline actual emissions equal the average rate, in TPY, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the **ten (10)**-year period immediately preceding *either* the date the owner or operator begins actual construction of the project *or* the date a complete

permit application is received by LDEQ, except that the 10-year period shall not include any period earlier than November 15, 1990.

Baseline actual emissions shall:

- include fugitive emissions and authorized emissions associated with startups, shutdowns, and malfunctions;
- be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;
- adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the source must currently comply, had such source been required to comply with such limitations during the consecutive 24-month period; and
- when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated pollutant.

New Emissions Units

A new emissions unit is any emissions unit that is, or will be, newly constructed and that has existed for less than two years from the date such emissions unit first operated.

Baseline actual emissions, for purposes of determining the emissions increase that will result from the initial construction and operation of such unit, shall equal zero, and thereafter, for all other purposes, shall equal the unit's potential to emit.

Replacement Units

A replacement unit, by definition, is an existing emissions unit. In order to qualify as a replacement unit, the emission unit must:

- be a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or completely take the place of an existing emissions unit;
- be identical to or functionally equivalent to the replaced emissions unit; and
- not alter the basic design parameters of the process unit.

The replaced emissions unit must be permanently removed from the facility, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

Step 5 Determine "projected actual emissions" (or "potential to emit") for each existing affected emissions unit, and "potential to emit" for each new emissions unit.

For existing emissions units, the applicant has the option to use projected actual emissions or potential to emit.

Projected actual emissions equal the maximum annual rate, in TPY, at which an existing emissions unit is projected to emit a regulated pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, *or* in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the source. In determining the *projected actual emissions* before beginning actual construction, the owner or operator of the source shall:

- consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved State Implementation Plan (SIP);

- include fugitive emissions to the extent quantifiable, and authorized emissions associated with startups, shutdowns, and malfunctions; and

- exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the "baseline actual emissions" and that are also unrelated to the particular project, including any increased utilization due to product demand growth [the demand growth exclusion].

For new sources, the applicant must use potential to emit.

"Potential to emit" is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

Step 6 Compare "baseline actual emissions" (Step 4) to "projected actual emissions" or "potential to emit" (Step 5).

Calculate the difference between projected actual emissions (or potential to emit, if selected) and baseline actual emissions for each **existing** emissions unit, and the difference between potential to emit and baseline actual emissions (normally zero) for each **new** emissions unit.

Sum only the increases associated with the proposed project. In this step, decreases are ignored, even if they are associated with the project. If the increase is equal to or greater than the appropriate significance level listed in Table 3 (e.g., 15 TPY for PM_{10}, 40 TPY for NO_X), a netting analysis must be performed.

If the increase is *less* than the appropriate significance level listed in Table 3, then the project does not trigger PSD.

Reasonable Possibility

If, in Step 5, the applicant elects to use potential to emit in lieu of projected actual emissions, reasonable possibility provisions are not applicable. However, if the applicant uses projected actual emissions, two additional comparisons must be made to determine if there is a "reasonable possibility" that the proposed project (now projected *not* to be a part of a major modification) may result in a significant emissions increase of a regulated NSR pollutant.

A "reasonable possibility" exists if:

1. increases from the project are 50% or more of the appropriate significance level for the regulated NSR pollutant; or

2. increases from the project, added to the amount of emissions excluded from the projected actual emissions estimate in Step 5 (the demand growth exclusion), sums to at least 50% of the appropriate significance level for the regulated NSR pollutant.

Pollutant	**Significant Amount (in TPY)**	**50% of the Significant Amount (in TPY)**
Carbon monoxide	100	50
Nitrogen oxides	40	20
Sulfur dioxide	40	20
Particulate matter	25 (TSP)	12.5 (TSP)
	15 (PM_{10})	7.5 (PM_{10})
	10 ($PM_{2.5}$), 40 (SO_2 or NO_X)	5 ($PM_{2.5}$), 20 (SO_2 or NO_X)
Ozone	40 (VOC or NO_X)	20 (VOC or NO_X)
Lead	0.6	0.3
Fluorides	3	1.5
Sulfuric acid mist	7	3.5

Pollutant	Significant Amount (in TPY)	50% of the Significant Amount (in TPY)
Hydrogen sulfide (H_2S)	10	5
Total reduced sulfur (including H_2S)	10	5
Reduced sulfur compounds (including H_2S)	10	5
Municipal waste combustor organics	0.0000035	0.00000175
Municipal waste combustor metals	15	7.5
Municipal waste combustor acid gases	40	20
Municipal solid waste landfills emissions	50	25
GHGs as CO_2e	75,000	37,500

If the answer to the first question is "**yes**," then the requirements of LAC 33:III.509.R.6 will apply.

Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

- a description of the project;
- the emissions units whose emissions of a regulated pollutant could be affected by the project; and
- a description of the applicability test used to determine that the project is not a major modification for any regulated pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded from the projected actual emissions estimate in Step 5 (the demand growth exclusion) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the above information to LDEQ.

Monitoring

The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by an affected emissions unit, and calculate and maintain a record of the annual emissions, in TPY on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, **or** for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of *or* potential to emit that regulated NSR pollutant.

Reporting

If the emissions unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to LDEQ within 60 days after the end of each year during

which the records described above must be generated setting out the unit's annual emissions during the calendar year that preceded submission of the report.

If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to LDEQ within 60 days after the end of the year if annual emissions, in TPY, from the project in question exceed the baseline actual emissions by a "significant" (as defined in LAC 33:III.504.K) amount, and if such emissions differ from the preconstruction projection. This report shall contain the following:

- the name, address, and telephone number of the major stationary source;
- the annual emissions; and
- any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

If the answer to the first question is "**no**," but the answer to the second question is "**yes**," then before beginning actual construction of the project, the owner or operator is required only to document and maintain a record of the following information:

- a description of the project;
- identification of the emissions units whose emissions of a regulated pollutant could be affected by the project; and
- a description of the applicability test used to determine that the project is not a major modification for any regulated pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded from the projected actual emissions estimate in Step 5 (the demand growth exclusion) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

Step 7 Determine the contemporaneous period.

The contemporaneous period stretches from the date five years before projected commencement of construction of the new project, or from the date of issuance of the last PSD permit **(pollutant-specific here)**, whichever is more recent, to the date when emissions from the new project is expected to begin. Commencement of construction begins when all the necessary preconstruction approvals and permits have been obtained, and the applicant either begins actual construction or enters into binding agreements or contractual obligations to begin construction.

Step 8 Determine which emissions increases and decreases during the contemporaneous period are creditable.

Review other physical changes or changes in the method of operation during the contemporaneous period to determine if they are "creditable."

Contemporaneous Increases

An increase in actual emissions is creditable only to the extent that the new level of allowable emissions exceeds the old level of actual emissions.

An increase in actual emissions is creditable only if neither LDEQ nor EPA has relied on it in issuing a permit for the source under PSD regulations that is in effect when the increase in actual emissions from the proposed change occurs.

An increase in actual emissions of PM_{10}, SO_2, or NO_X that occurs before the applicable minor source baseline date (August 7, 1977 for PM_{10} and SO_2; February 8, 1988 for NO_X) is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

An increase that results from a physical change at a major stationary source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

Contemporaneous Decreases

A decrease in actual emissions is creditable only to the extent that:

- the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of allowable emissions;

- it is enforceable as a practical matter at and after the time that actual construction of the particular change begins; and

- it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

A decrease in actual emissions of PM_{10}, SO_2, or NO_X that occurs before the applicable minor source baseline date (August 7, 1977 for PM_{10} and SO_2; February 8, 1988 for NO_X) is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

A decrease in actual emissions is creditable only if neither LDEQ nor EPA has relied on it in issuing a permit for the source under PSD regulations that is in effect when the increase in actual emissions from the proposed change occurs.

Additional Details to Consider

EPA has not extended the "actual-to-projected-actual" methodology to the computation of contemporaneous emissions changes for netting.

- Contemporaneous increases = post-change allowable emissions minus baseline actual emissions.

- Contemporaneous decreases = lower of allowable emissions or baseline actual emissions minus post-change allowable emissions.

The applicant may select any consecutive 24-month period during the 10-year period immediately preceding the contemporaneous change to determine baseline actual emissions (provided the emissions unit was an "existing" unit at the time of the contemporaneous change) and may select a different 24-month period for each emissions unit.

The applicant's ability to use the full 10 years for calculating any contemporaneous emissions change is contingent upon the availability of valid and sufficient source information for the selected 24-month period to calculate an average annual emissions rate in TPY. Also, the 24-month period cannot include any period of time prior to November 15, 1990.

Further, contemporaneous changes do **not** have to adhere to the restrictions in Clauses a.iii and b.iv in the definition of "baseline actual emissions" (requiring that when a project involves multiple emission units, only one consecutive 24-month period can be used to determine baseline actual emissions for all emissions units being changed). When evaluating emissions increases from multi-unit modifications, if more than one emissions unit was changed as part of a single project during the contemporaneous period, the applicant may select a separate consecutive 24-month period to represent each emissions unit that is part of the project.

The rules also allow a source to change baseline periods for a given project over time. For example, a single baseline selected at the time the project is proposed could be replaced with multiple baselines, each for a different emissions unit, after the project is constructed (e.g., if the project is now in the netting window of another project).

In any case, the calculated baseline actual emissions for each emissions unit must be reduced to account for any noncompliant or excess emissions and adjusted to reflect the most current emission limitations (including operational restrictions) applying to that unit. "Current" in the context of a contemporaneous emissions change refers to limitations on emissions and source operation that existed just prior to the date of the contemporaneous change.

Also, baseline actual emissions for EUSGUs are calculated differently. The "any consecutive 24-month period within the 5-year period immediately preceding actual construction" baseline method does not apply when calculating contemporaneous emissions changes for netting purposes. Instead, EUSGUs must use the procedures described in the definition of "actual emissions."

Reductions achieved by complying with Reasonably Available Control Technology (RACT) regulations (i.e., Chapters 21 & 22) cannot be used in netting (as EPA considers RACT and NSR part of the same pollutant program).

However, reductions achieved as a result of compliance with other regulatory programs (e.g., MACT) are generally creditable. Here, the federal rule contemplates that if an emission limitation is part of a MACT standard that EPA proposed or promulgated under 40 CFR 63, baseline actual emissions need only be adjusted if LDEQ has taken credit for such emissions reductions in an attainment demonstration or maintenance plan.

Step 9 Sum all contemporaneous and creditable increases and decreases in actual emissions with the increase associated with the proposed modification to determine if a significant net emissions increase will occur.

In calculating the "net emissions increase," source-wide creditable emissions decreases are subtracted from source-wide creditable emissions increases and added to the emissions change (including decreases) associated with the proposed modification. This is done for each PSD pollutant which triggered netting in Step 6.

After the net emissions increase has been determined, it is compared to the appropriate significance level listed in Table 3. If the net emissions increase for a certain pollutant is greater than its significant level, then the pollutant is subject to PSD review. For GHGs, both of the following conditions must be met: (1) the net emissions increase of GHGs calculated as the sum of the six GHGs on a mass basis (i.e., no global warming potentials applied) equals or exceeds 0 TPY; and (2) the net emissions increase of GHGs calculated as the sum of the six GHGs on a CO_2e basis (i.e., global warming potentials applied) equals or exceeds 75,000 TPY CO_2e.

If the creditable and contemporaneous decreases reduce the net emissions increase to a level below its significant amount, then PSD does not apply. The project is said to have "netted out" of PSD review for that pollutant.

PSD Requirements

PSD review entails the following analyses which are described in further detail below:

1. A determination of the Best Available Control Technology [LAC 33:III.509.J];

2. An analysis of the existing air quality and a determination of whether or not pre-construction or post-construction monitoring will be required [LAC 33:III.509.M];

3. An analysis of the source's impact on total air quality to ensure compliance with the NAAQS [LAC 33:III.509.D and K];

4. An analysis of the PSD increment consumption [LAC 33:III.509.C and K];

5. An analysis of the source related growth impacts [LAC 33:III.509.O];

6. An analysis of source related growth impacts on soils, vegetation, and visibility [LAC 33:III.509.O];

7. A Class I Area impact analysis [LAC 33:III.509.P]; and

8. An analysis of the impact of toxic compound emissions.

Each of these analyses is dicscussed in greater detail below.

1. Best Available Control Technology

Best Available Control Technology (BACT) must be applied to each new or modified emissions unit which emits the pollutant subject to PSD review. BACT is not required for an emissions unit if it is not physically modified as a result of the project, even if the unit has an increase in emissions.

BACT is defined as an emissions limitation (e.g., 3.5 ppmvd @ 15% O_2, not a control technology such as selective catalytic reduction (SCR) or low NO_X burners), including a visible emission standard, based on the maximum degree of reduction for each regulated pollutant that LDEQ, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

In no event shall application of BACT result in emissions of any pollutant that would exceed the emissions allowed by an applicable standard under NSPS, NESHAP, or any other state or federal air program. If LDEQ determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means that achieve equivalent results.

BACT is determined based on the top-down process. This approach involves determining the most stringent control technique available for a similar or identical source. If it can be shown that this level of control is infeasible based on technical, environmental, energy, and/or cost considerations, then it is rejected and the next most stringent level of control is determined and similarly evaluated. This process continues until a control level is arrived at which cannot be eliminated for any technical, environmental, or economic reason. A technically feasible control strategy is one that has been demonstrated to function efficiently on identical or similar processes.

To the extent possible, BACT limitations should be reported using RACT/BACT/LAER Clearinghouse (RBLC) standard emission units by process type code. See Appendix C.

Where the applicant proposes to eliminate the most stringent control alternative on the grounds that it is not economically achievable, EPA guidance provides that the record must

show that the option is not cost-effective. Average and incremental cost effectiveness are the two economic criteria that are considered. Average cost effectiveness is the total annualized costs of control divided by annual emission reductions, or the difference between the baseline emission rate and the controlled emission rate. Incremental cost effectiveness compares the costs and emissions performance level of a control option to those of the next most stringent option. The incremental cost effectiveness should be examined in combination with the total cost effectiveness in order to justify elimination of a control option. Section IV.D.2 (pp. B.31 - B.46) of EPA's draft October 1990 New Source Review Workshop Manual.

LDEQ must also evaluate whether the total cost per ton of control for the pollutant is within the range of costs being borne by similar sources also charged with controlling that pollutant. In most cases, a control option is determined to be economically achievable if its cost-effectiveness is within the range of costs being borne by other sources of the same type to control the pollutant. Therefore, as part of the BACT analysis, applicants should document that other permitting authorities have found, for the given industrial category, the cost effectiveness of the technology being eliminated to be excessive. Alternately, if data is available that shows the cost effectiveness of the technology *selected* by a permitting authority as BACT, that information should be provided as well.

2. Air Quality Analysis

Pre-Construction Monitoring (§509.M.1)

PSD applicants for a new major stationary source must perform an air quality analysis for all pollutants to be emitted in significant amounts; applicants for major modifications must perform an air quality analysis for all pollutants whose net emissions will increase by a significant amount. The significant amount for each pollutant is the same significant amount used to determine when a modification is subject to PSD review (Table 3).

For those pollutants that have a NAAQS, the air quality analysis must include continuous air quality monitoring data for at least one full year prior to submittal of the PSD application. A shorter period may be allowed if the LDEQ determines that a complete and adequate analysis can be performed with such data. In no case, however, can the period be shorter than four months. The applicant may use existing monitoring data with the approval of the LDEQ.

Where there is no applicable NAAQS, the applicant may be required to submit air quality monitoring data that LDEQ determines is necessary to assess the ambient air quality for that pollutant in any area that proposed emissions of that pollutant would affect.

Post-Construction Monitoring (§509.M.2)

The owner or operator may be required, at LDEQ's discretion, to continue to conduct ambient air quality monitoring as a condition of the PSD permit. Such post-construction monitoring will be conducted in a manner the LDEQ deems necessary to determine the effect emissions from the new major stationary source or major modification may have on the air quality in any area.

Exemptions (§509.I.3 and 5)

LDEQ may exempt a new major stationary source or major modification from the pre-construction monitoring requirement for a particular pollutant if the pollutant is not listed in the following table or the emissions increase of a listed pollutant would cause, in any area, air quality impacts less than the following amounts.

Pollutant	Ambient Concentration	Average Period
Carbon monoxide	575 $\mu g/m^3$	8-hour average
Nitrogen dioxide	14 $\mu g/m^3$	Annual average
Particulate matter (PM_{10})	10 $\mu g/m^3$	24-hour average
Particulate matter ($PM_{2.5}$)	4 $\mu g/m^3$	24-hour average
Sulfur dioxide	13 $\mu g/m^3$	24-hour average
Ozone	No *de minimis* air quality level is provided for ozone. However, any net increase of 100 tons per year or more of VOC or NO_X subject to PSD would be required to perform an ambient impact analysis including the gathering of ambient air quality data.	
Lead	0.1 $\mu g/m^3$	Calendar quarter
Fluorides	0.25 $\mu g/m^3$	24-hour average
Total reduced sulfur	10 $\mu g/m^3$	1-hour average
Hydrogen sulfide	0.2 $\mu g/m^3$	1-hour average
Reduced sulfur compounds	10 $\mu g/m^3$	1-hour average

The air quality analysis does not apply to a proposed major stationary source or major modification with respect to a particular pollutant if the allowable emissions of that pollutant would be temporary and not impact a Class I area or other area where an applicable increment is known to be violated.

All estimates of ambient air concentrations must be based on approved air quality models, databases, and other sources as specified and approved by the LDEQ prior to submission of the permit application. In addition to the required information, the LDEQ may request meteorological and topographical data necessary to completely assess the air quality impact of the project.

LDEQ's air quality modeling resources are available at http://www.deq.louisiana.gov/portal/DIVISIONS/AirPermitsEngineeringandPlanning.aspx. The applicant should contact the Air Permits Division at (225) 219-3417 for more information on air modeling procedures.

3. NAAQS Compliance

Before a PSD permit can be granted, the owner or operator must demonstrate that the proposed new major stationary source or major modification will not cause or contribute to a violation of ambient air quality ceilings for any area. A new major source or major modification will violate an ambient air quality ceiling if it will exceed either the primary or secondary NAAQS for any pollutant. This analysis must include secondary emissions per §509.K.

If screening modeling indicates that emissions of a particular pollutant have the potential to exceed its modeling significance levels (sometimes referred to as its level of significant impact or significant impact level, or SIL), then refined modeling to demonstrate compliance with the NAAQS, as well as a determination of increment consumption (see "4" below), are required.

Pollutant	Modeling Significance Level	Average Period
Particulate matter (PM_{10})	5 $\mu g/m^3$	24-hour average
Particulate matter ($PM_{2.5}$)	1.2 $\mu g/m^3$	24-hour average
	0.3 $\mu g/m^3$	Annual average
Sulfur dioxide	7.8 $\mu g/m^3$ [20]	1-hour average
	25 $\mu g/m^3$	3-hour average
	5 $\mu g/m^3$	24-hour average
	1 $\mu g/m^3$	Annual average
Nitrogen oxides	7.5 $\mu g/m^3$ [21]	1-hour average
	1 $\mu g/m^3$	Annual average
Carbon monoxide	2000 $\mu g/m^3$	1-hour average
	500 $\mu g/m^3$	8-hour average

4. PSD Increment Consumption

PSD increment is the maximum impact increase over the baseline concentration for any of the following criteria pollutants – particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), and nitrogen dioxide (NO_2). Although the PSD increment is NO_2 rather than all forms of nitrogen oxides, it typically includes all nitrogen oxides. Geographic areas are classified as being Class I, II, and III. All Louisiana areas are currently designated Class II, except for the Breton National Wildlife Refuge, which is designated Class I.

[20] Interim SIL
[21] Interim SIL

Pollutant	Class I Increment	Class II Increment	Average Period
Particulate matter (PM_{10})	8 $\mu g/m^3$	30 $\mu g/m^3$	24-hour average
	4 $\mu g/m^3$	17 $\mu g/m^3$	Annual average
Particulate matter ($PM_{2.5}$)	2 $\mu g/m^3$	9 $\mu g/m^3$	24-hour average
	1 $\mu g/m^3$	4 $\mu g/m^3$	Annual average
Sulfur dioxide	25 $\mu g/m^3$	512 $\mu g/m^3$	3-hour average
	5 $\mu g/m^3$	91 $\mu g/m^3$	24-hour average
	2 $\mu g/m^3$	20 $\mu g/m^3$	Annual average
Nitrogen dioxide	2.5 $\mu g/m^3$	25 $\mu g/m^3$	Annual average

No PSD permit will be granted to any project which would allow these PSD increments to be exceeded in an applicable baseline area.

The baseline concentration is determined separately for each pollutant and is equal to the ambient concentration level in that baseline area at the time of the applicable minor source baseline date. The baseline area is an area designated as attainment or unclassifiable in which the major source or modification would increase the ambient concentration of a pollutant greater or equal to 1 $\mu g/m^3$ (annual average). In determining the baseline concentration, actual emissions representative of all sources operating in the baseline area on the minor source baseline date are included. The minor source baseline date is independently set for each pollutant in each baseline area. The minor source baseline date is the earliest date after the applicable trigger date for which a complete PSD application is submitted in that baseline area. The trigger date for PM and SO_2 is August 7, 1977, and the trigger date for NO_X is February 8, 1988. Unless otherwise determined, Louisiana defaults to trigger date for the baseline dates.

Also included in the baseline concentration are allowable emissions for sources which commenced construction before the major source baseline date, but were not in operation by the minor source baseline date. The major source baseline date is permanently fixed for all areas in the state by PSD regulations. The major source baseline date is January 1, 1975, for PM and SO_2. The major source baseline date for NO_X is February 8, 1988.

Specifically excluded from calculation of the baseline concentration are all actual emissions from major sources that commenced construction after the major source baseline date and any actual emissions increases or decreases at a major source after the minor source baseline date. Those excluded from the calculation of the baseline concentration will necessarily expend some of the allowable PSD increments for the affected pollutant.

Exemptions (§509.I.3 and 4)

The analysis of PSD increment consumption does not apply to a proposed major stationary source or major modification with respect to a particular pollutant if the allowable emissions of that pollutant would be temporary and not impact a Class I area or other area where an applicable increment is known to be violated.

Also, the analysis of PSD increment consumption, as it relates to any maximum allowable increase for a **Class II** area, shall not apply to a modification of a major stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each a regulated NSR pollutant from the modification after the application of best available control technology would be less than 50 tons per year.

5. Source Related Growth Impacts

The analysis must include impacts to ambient air concentrations or increments resulting from commercial, residential, industrial, and other growth directly associated with the new source or modification.

If the air quality impact indicates the issuance of a PSD permit will consume at least 50% of any available annual increment or at least 80% of any short term increment, the owner or operator must also submit an analysis of any effects that the proposed project might have on the industrial and economic development of the area. If this additional analysis is deemed necessary, it must include the effects that alternative siting or reduction of other emissions may have on the industrial and economic development of the area.

Exemptions (§509.I.3)

The analysis of source related growth impacts does not apply to a proposed major stationary source or major modification with respect to a particular pollutant if the allowable emissions of that pollutant would be temporary and not impact a Class I area or other area where an applicable increment is known to be violated.

6. Soils, Vegetation, and Visibility

In addition to the effects on air quality, the owner/operator must provide an analysis of any impairment to visibility, soils, and/or vegetation that might occur as a result of the new source or modification. The analysis need not include impacts on vegetation having no commercial or recreational value.

Exemptions (§509.I.3)

The analysis of impairment to visibility, soils, and/or vegetation does not apply to a proposed major stationary source or major modification with respect to a particular pollutant if the allowable emissions of that pollutant would be temporary and not impact a Class I area or other area where an applicable increment is known to be violated.

7. Class I Areas

The applicant must demonstrate that the proposed project will have no adverse impact on a Class I area's Air Quality Related Values (AQRV) or Class I increments. Specifically, any new major stationary source or any net emissions increase associated with a major modification to an existing major stationary source within 10 km of a Class I area which may

have a 1 $\mu g/m^3$ or greater impact within the Class I area boundary is required to undergo PSD review.

If LDEQ receives a PSD permit application for a source that may affect a Class I area, it notifies the Federal Land Manager (FLM) charged with direct responsibility for managing these lands. LDEQ may direct the applicant to contact the FLM directly.

The meaning of the term "may affect" is interpreted by EPA policy to include all major sources or major modifications which propose to locate within 100 kilometers (km) of a Class I area. However, if a major source proposing to locate at a distance greater than 100 km is of such size that LDEQ or the FLM is concerned about potential impacts on a Class I area, LDEQ can ask the applicant to perform an analysis of the source's potential emissions impacts on the Class I area. This is because certain meteorological conditions, or the quantity or type of air emissions from large sources located further than 100 km, may cause adverse impacts. In order to determine whether a source located further than 100 km may affect a Class I area, LDEQ uses the Q/d approach described below.

The FLM has developed some internal screening criteria using a "Q/d" approach. Q/d refers to the ratio of the sum of annual emissions (in tons per year) of PM_{10}, SO_2, NO_X, and H_2SO_4 to the distance (in kilometers) from the nearest boundary of the Class I area.

$$Q/d = \frac{PM_{10\,(NEI)} + SO_{2\,(NEI)} + NO_{X\,(NEI)} + H_2SO_{4\,(NEI)}}{\text{Class I km}}$$

Where:

$PM_{10\,(NEI)}$	=	net emissions increase of PM_{10}
$SO_{2\,(NEI)}$	=	net emissions increase of SO_2
$NO_{X\,(NEI)}$	=	net emissions increase of NO_X
$H_2SO_{4\,(NEI)}$	=	net emissions increase of H_2SO_4
Class I km	=	distance to nearest Class I area (in kilometers)

Except that:

- If the net emissions increase of any pollutant is negative, enter "0"; and
- If the project did not trigger a netting analysis, use the project increase. In this case, the value will be less than the pollutant's significance level.

If $Q/d \geq 10$, the applicant should contact the Federal Land Manager as early in the process as possible. This may be done prior to submittal of an application to LDEQ. Once an application is submitted, LDEQ will formally notify the FLM in accordance with LAC 33:III.509.P.1.

The FLM is responsible for evaluating a source's projected impact on the AQRVs and recommending that LDEQ either approve or disapprove the source's permit application based on anticipated impacts. The FLM also may suggest changes or conditions on a permit. However, LDEQ makes the final decision on permit issuance. The FLM also advises reviewing agencies and permit applicants about other FLM concerns, identifies

AQRVs and assessment parameters for permit applicants, and makes ambient monitoring recommendations.

The address for the FLM for Breton National Wildlife Refuge is:

U.S. Fish and Wildlife Service
Air Quality Branch
7333 West Jefferson Avenue, Suite 375
Lakewood, Colorado 80235-2034

The address for the FLM for Caney Creek Wilderness Area is:

U.S. Department of Agriculture Forest Service
P.O. Box 1270
Hot Springs, Arkansas 71902

8. Toxic Compound Emissions

The generation or reduction of toxic air pollutants, including compounds not regulated under the Clean Air Act, are considered as part of the environmental impacts analysis. LDEQ shall consider the effects of a given control alternative on emissions of toxic air pollutants in its BACT determination. The ability of a given control alternative to control releases of toxic air pollutants must be evaluated and may, as appropriate, affect the BACT decision. Conversely, toxic air pollutants resulting from a given control technology should also be considered and may, as appropriate, also affect the BACT decision.

Environmental Assessment Statement

A copy of the Environmental Assessment Statement associated with the project (also known as answers to the "IT" questions) must be submitted to LDEQ. Per R.S. 30:2018(C), copies must also be forwarded to the local governmental authority and to the designated public library at no additional cost to the local governmental authority or the designated public library. The questions that must be answered as part of the Environmental Assessment Statement can be found in Section 25 of the Louisiana Application for Approval of Emissions from Part 70 Sources.

Public Participation

After the owner or operator has submitted the required information, the LDEQ will perform a completeness review within 60 days of receipt of the application and will alert the applicant of any deficiencies found in the application. The LDEQ will make a preliminary determination of PSD permit approval or denial and make available to the public all information relied upon to make such determination. Public notice of the LDEQ's intent will be published once in the official state journal and once in a local newspaper or journal circulated in the region affected. The public and EPA will be given a 30-day period to comment and/or request a public hearing on the issuance of the PSD permit. Note, however, that because most PSD actions are associated with Title V permits, the effective length of EPA's review period may be 45 days.

As described in LAC 33:III.531.B.2, LDEQ will also provide written notice to all affected states at least 60 days prior to the date on which commencement of construction is to be permitted. Affected states are those within 50 miles of the proposed source.

Exemptions

In addition to the exemptions already discussed, PSD requirements do not apply to a particular major stationary source or major modification if:

- the source is a nonprofit health or nonprofit educational institution;

- the source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, were considered in calculating the potential to emit of the stationary source or modification **and** such source does not belong to any of the 26 categories set forth in Step 1 of PSD Applicability Section or any other stationary source category that, as of August 7, 1980, was being regulated under Section 111 (NSPS) or 112 (NESHAP) of the Clean Air Act.

- the source or modification is a portable stationary source that has previously received a PSD permit if:

    - the source proposes to relocate and emissions of the source at the new location would be temporary;
    - the emissions from the source would not exceed its allowable emissions;
    - the emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and
    - reasonable notice is given to the administrative authority prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the administrative authority not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by LDEQ.

Note that there is no general exemption from PSD requirements for temporary sources

When and How Do I Renew a PSD Permit?

It is not necessary to renew a PSD permit. The conditions set forth in a PSD permit remain effective until revoked, modified, or superseded by more stringent requirements.

A Single Project Can Trigger Both NNSR and PSD

Because NSR is pollutant-specific, it is important to recognize that a permit application may be subject to both the NNSR and PSD programs. For example, consider a project in a parish that is in attainment with the NAAQS for all criteria pollutants except ozone. Both NO_X and VOC emissions are considered precursors to ozone formation. Therefore, a project resulting in a significant net emissions increase of both VOC (a nonattainment pollutant) and CO (an attainment pollutant)

would trigger NNSR for VOC and PSD for CO. Note that the contemporaneous periods under the NNSR and PSD programs differ.

2.3.9.3 NNSR, PSD, and NO_X Increases

NSR for NO_X presents a unique situation in an ozone nonattainment area. As previously mentioned, NO_X emissions contribute to ozone formation. As such, NO_X is a nonattainment pollutant. However, NO_X also has its own NAAQS with which the entire state is in compliance. Thus, it is also an attainment pollutant. Therefore, an increase in NO_X emissions is potentially subject to both NNSR and PSD requirements.

If both NNSR and PSD apply, LAER and the other provisions of LAC 33:III.504, including offsets, are applicable. A BACT analysis is not necessary (provided internal offsets are not applied as described in LAC 33:III.504.D.3), as LAER, by definition, is more stringent than BACT. However, all other aspects of the PSD program, including the air quality and additional impact analyses, and the obligation to obtain a PSD permit, would apply.

2.3.9.4 Commencement of Construction

The primary purpose of the NSR program is to require preconstruction review of all new major stationary sources and major modifications to existing major stationary sources. Thus, a source subject to NSR must obtain a NSR permit before actual construction begins.[22] Because the term "begin actual construction" under NSR and state regulations is defined broadly to include the initiation of physical on-site construction activities on an emissions unit, great care must be exercised to ensure that no work is performed at a site subject to NSR until both Title V Operating and PSD permits (if applicable) have been obtained. Activities that constitute "actual construction" include:

- the installation of building supports and foundations;
- laying of underground pipework;
- construction of permanent storage structures; and
- construction of other permanent structure supporting the new major source or major modification.

If any of these activities are initiated on a project that is subject to NSR prior to obtaining a NSR permit, the source will be in violation of NSR regulations.

Allowed activities include planning, ordering of equipment and material, site-clearing, grading, and on-site storage of equipment and materials. Further, construction of permanent structures not associated in any way with an emissions unit (e.g., stand-alone administrative buildings) may commence at any time.

[22] See LAC 33:III.504.D & 509.A.3.

If a NSR permit is granted, construction must commence within 18 months. Failure to commence construction within 18 months, discontinuation of construction for a period of 18 months or longer, or failure to complete construction within a reasonable period will invalidate the NSR permit. The LDEQ may extend the 18-month deadline upon a satisfactory showing that the extension would be justified, but in no circumstance can the LDEQ extend the 18-month deadline for phased construction projects. Construction of each independent phase of a phased project must begin within 18 months of the LAER/BACT determination for that phase.

2.3.9.5 Plantwide Applicability Limits (aka Actuals PALs)

A Plantwide Applicability Limit (PAL) is a voluntary option that may provide major stationary sources with the ability to manage facility-wide emissions without triggering major NSR. If a permittee keeps the emissions from its facility below a plant-wide actual emissions cap (i.e., an actuals PAL), then PAL provisions will allow the permittee to avoid major NSR permitting (or going through a netting review) when modifications to the facility or individual emissions units are enacted. In return for this flexibility, the permittee must monitor emissions from all emissions units under the PAL, as well as adhere to the necessary recordkeeping and reporting requirements.

The PAL shall impose an annual emission limitation in TPY that is enforceable as a practical matter for the entire source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the owner or operator must show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the owner or operator must show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

A number of points concerning PALs follow.

- PALs are pollutant specific – each PAL shall regulate emissions of only one pollutant.
- A PAL must apply to <u>all</u> sources of that pollutant at the major stationary source.
- Each PAL shall have an effective period of 10 years.
- Public notice is required to establish, renew, or increase a PAL.
- Reductions of a PAL pollutant which occur during the PAL effective period are **not** creditable as decreases for purposes of offsets unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- Any physical change in or change in the method of operation of a source that maintains its total source-wide emissions (in TPY) below the PAL level and complies with the PAL permit:

- is not a major modification for the PAL pollutant;
- does not have to be approved through §504 or §509; and
- is not subject to restrictions on relaxing enforceable limitations that a source used to avoid applicability of NNSR/PSD.

PAL Permit Application Requirements

Each application shall include:

- a list of all emissions units at the source designated as small, significant, or major based on their PTE. The owner or operator shall also indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

  - Small Emissions Unit—an emissions unit that emits or has the PTE the PAL pollutant in an amount less than its significant level (PSD) or major modification significant net increase threshold (NNSR).

  - Significant Emissions Unit—an emissions unit that emits or has the PTE a PAL pollutant in an amount that is equal to or greater than its significant level, but less than the amount that would qualify the unit as a major emissions unit.

  - Major Emissions Unit—any emissions unit that emits or has the PTE the PAL pollutant at a rate that would constitute a major source (e.g., ≥ 100 TPY in an attainment area, 50 TPY VOC in a serious ozone attainment area).

- calculations of the baseline actual emissions with supporting documentation. Baseline actual emissions are to include emissions associated not only with operation of the unit, but also **authorized** emissions associated with startup, shutdown, and malfunction.

- the calculation procedures that the source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month.

How PAL Levels are Determined

Except as noted below, the PAL level for a source shall be established as the sum of the "baseline actual emissions" of the PAL pollutant for each emissions unit at the source, plus an amount equal to its applicable significant level for the PAL pollutant. When establishing the PAL level for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level.

For newly constructed units, which do not include modifications to existing units, on which actual construction began after the 24-month period, in lieu of adding the baseline actual

emissions, the emissions must be added to the PAL level in an amount equal to the PTE of the units.

LDEQ shall specify a reduced PAL level (in TPY) in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that LDEQ is aware of prior to issuance of the PAL permit (e.g., if the permittee will be required to reduce emissions from industrial boilers by 50% from baseline emissions of 60 ppm NO_X to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit).

Contents of a PAL Permit

The PAL Permit includes the following:

- the PAL pollutant and the applicable source-wide emission limitation in TPY;
- the PAL effective period (i.e., permit effective date and the expiration date);
- specification that if the permittee applies to renew a PAL before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period, but shall remain in effect until a revised PAL permit is issued by LDEQ;
- a requirement that emission calculations for compliance purposes include emissions associated with startup, shutdown, and malfunction;
- a requirement that, once the PAL expires, the source is subject to the requirements of §504.J.9 or §509.AA.9 (discussing expiration of PALs);
- the calculation procedures the permittee shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month;
- a requirement that the permittee monitor all emissions units in accordance with the provisions under §504.J.12 or §509.AA.12;
- a requirement to retain the records required under §504.J.13 or §509.AA.13 on site. Such records may be retained in an electronic format; and
- a requirement to submit the reports required under §504.J.14 or §509.AA.14 by the required deadlines;

Reopening of a PAL Permit

LDEQ **shall** reopen the PAL permit to:

- correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

- reduce the PAL if the permittee creates creditable emissions reductions for use as NNSR offsets; and

- revise the PAL to reflect an increase in the PAL (see §504.J.11 or §509.AA.11).

LDEQ **may** reopen the PAL permit to:

- reduce the PAL to reflect newly applicable federal requirements (e.g., NSPS) with compliance dates after the PAL effective date;

- reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that LDEQ may impose on the source;

- reduce the PAL if LDEQ determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an AQRV that has been identified for a federal Class I area by a FLM and for which information is available to the general public.

Except for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall require public notice.

Expiration of a PAL

Any PAL that is not renewed shall expire at the end of the PAL effective period, and the following requirements shall apply.

- Each emissions unit, or each group of emissions units, that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures.

  - Within the time frame specified for PAL renewals (§504.J.10.b or §509.AA.10.b), the permittee shall submit a proposed allowable emission limitation for each emissions unit, or each group of emissions units, if such a distribution is more appropriate as decided by LDEQ, by distributing the PAL allowable emissions for the source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period (§504.J.10.e or §509.AA.10.e), such distribution shall be made as if the PAL had been adjusted.

  - LDEQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit or each group of emissions units.

- Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. LDEQ may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

- Until LDEQ issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

- Any physical change or change in the method of operation at the source will be subject to the NNSR/PSD requirements if such change meets the definition of "major modification."

- The permittee shall continue to comply with any state or federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period (except for limitations that had been established in accordance with §504.B.1 or §509.R.4, but were eliminated by the PAL in accordance with the provisions in §504.J.1.c.iii or §509AA.1.b.iii.

Renewal of a PAL

The following apply to renewal of a PAL:

- LDEQ shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment.

- Application Deadline. The permittee shall submit a timely application to LDEQ to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. If the permittee submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

- Application Requirements. The application to renew a PAL permit shall contain the following information:

  - a proposed PAL level;

  - the sum of the PTE of all emissions units under the PAL, with supporting documentation; and

  - any other information the permittee wishes the LDEQ to consider in determining the appropriate level for renewing the PAL.

- PAL Adjustment. In determining whether and how to adjust the PAL, LDEQ shall consider the following options:

  - If the emissions level calculated in accordance with the "How PAL Levels are Determined" section is equal to or greater than 80% of the PAL level, LDEQ may renew the PAL at the same level without further consideration.

  - LDEQ may set the PAL at a level that determined to be more representative of the source's baseline actual emissions or determined to be appropriate considering air

quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by LDEQ via written rationale.

- Notwithstanding the aforementioned provisions:

  - if the PTE of the source is less than the PAL, LDEQ shall adjust the PAL to a level no greater than the PTE of the source; and

  - LDEQ shall not approve a renewed PAL level higher than the current PAL unless the source has complied with §504.J.11 or §509.AA.11 (regarding increasing a PAL).

- If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if LDEQ has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or Title V permit renewal, whichever occurs first.

Increasing a PAL During the PAL Effective Period

A *PAL Major Modification* is any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

- LDEQ may increase a PAL emission limitation only if the source complies with the following provisions:

  - The permittee shall submit a complete application to request an increase in the PAL limit for a PAL major modification. The application shall identify the emissions units contributing to the increase in emissions so as to cause the source's emissions to equal or exceed its PAL.

  - As part of this application, the permittee shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units, exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

  - The permittee shall obtain a major NSR permit for all emissions units contributing to the increase in emissions, regardless of the magnitude of the emissions increase resulting from them (i.e., no significant levels apply). These emissions units shall comply with any emissions requirements resulting from the major NSR program

process (e.g., BACT/LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.

- The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

- LDEQ shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units *assuming application of BACT equivalent controls*, plus the sum of the baseline actual emissions of the small emissions units.

Monitoring Requirements for PALs

- Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

- The PAL monitoring system must be approved by LDEQ and employ one or more of the four general monitoring approaches discussed below unless an alternative monitoring approach that meets the above requirements has been approved by LDEQ.

- Failure to use a monitoring system that meets the mandated requirements renders the PAL invalid.

- Approved Monitoring Approaches

  - Mass Balance Calculations for Activities Using Coatings or Solvents

    - The owner or operator shall provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

    - Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

    - Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the highest value of the range shall be to calculate the PAL pollutant emissions unless LDEQ determines there is site-specific data or a site-specific monitoring program to support another content within the range.

- CEMS
    - CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and
    - CEMS must sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.
- CPMS or PEMS
    - The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit; and
    - Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by LDEQ, while the emissions unit is operating.
- Emission Factors
    - All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
    - The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
    - If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL permit issuance, unless LDEQ determines that testing is not required.

- The permittee must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data unless another method for determining emissions during such periods is specified in the PAL permit.
- Where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, LDEQ shall, at the time of permit issuance:
    - establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or

- determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.

- All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by LDEQ. Such testing must occur at least once every 5 years after issuance of the PAL.

Recordkeeping Requirements

The PAL permit shall require the permittee to retain a copy of the following records:

- all records necessary to determine compliance with any requirement of the PAL, including a determination of each emissions unit's 12-month rolling total emissions (for 5 years from the date of such record);

- a copy of the PAL permit application and any applications for revisions to the PAL (for the duration of the PAL effective period plus 5 years); and

- each annual certification of compliance in accordance with Title V and the data relied on in certifying the compliance (for the duration of the PAL effective period plus 5 years).

Reporting and Notification Requirements

Semiannual reports are required (due within 30 days of the end of each reporting period) and shall include:

- the identification of the owner or operator and the permit number;

- total annual emissions (TPY) based on a 12-month rolling total for each month in the reporting period;

- all data relied upon, including but not limited to, any QA or QC data, in calculating the monthly and annual PAL pollutant emissions;

- a list of any emissions units modified or added to the source during the preceding 6-month period;

- the number, duration, and cause of any deviations or monitoring malfunctions, other than the time associated with zero and span calibration checks, and any corrective action taken;

- a notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit; and

- a signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

Part 70 General Condition R (deviation) reports shall, in addition to the information normally required by such reports, include:

- the PAL requirement that experienced the deviation or that was exceeded; and

- emissions resulting from the deviation or the exceedance.

2.3.9.6 How Do LDEQ's NSR Rules Differ from the Federal NSR Rules (at 40 CFR 51.165 & 166)?

LDEQ's rules differ in 2 ways, which are discussed below.

Clean Coal Technology Demonstration Projects

The December 31, 2002, federal rules exclude certain "clean coal" projects from the definition of "major modification" by deeming them not to be "a physical change or change in the method of operation." Louisiana's PSD and NNSR rules omit the exclusions for temporary and permanent clean coal technology demonstration projects and for the reactivation of a very clean coal-fired electric utility steam generating units. Louisiana has only 4 coal-fired power plants, a handful of pulp and paper power boilers that burn coal with other fuels, and no known decommissioned coal units. Due to the magnitude and variety of emissions associated with such facilities and the relative infrequency at which they are modified, the department believes it would be best to maintain as much oversight as possible into matters associated with coal combustion.

Underestimation of Projected Actual Emissions

The federal rules contain no apparent consequences for underestimation of "projected actual emissions." LAC 33:III.504.D.11 and LAC 33:III.509.R.8 include additional requirements in the event "projected actual emissions" are underestimated.

> For a project originally determined not to result in a significant net emissions increase, if an owner or operator subsequently reevaluates projected actual emissions and determines that project has resulted or will now result in a significant net emissions increase, the owner or operator must either request that the administrative authority limit the potential to emit of the affected emissions units (including those used in netting) as appropriate via federally enforceable conditions such that a significant net emissions increase will no longer result, or submit a revised permit application within 180 days requesting that the original project be deemed a major modification.

2.3.9.7 Routine Maintenance, Repair, and Replacement

Since the inception of NSR, routine maintenance, repair, and replacement (RMRR) activities have not been considered to be a physical change or change in the method of operation. Until October 2003, EPA applied the RMRR exclusion through "a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work as well as other factors to arrive at a common sense finding."[23]

On October 27, 2003, EPA's Equipment Replacement Rule (ERP) was promulgated. It provided that projects involving replacement of equipment not exceeding 20% of the replacement value of the total unit were considered "routine maintenance" and exempt from NSR permitting.

However, on March 17, 2006, the D.C. Circuit Court of Appeals vacated EPA's ERP, concluding that the rule is contrary to the plain language of Section 111(a)(4) of the Clean Air Act, which states "[t]he term 'modification' means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source…" Stating that "read naturally, the word 'any' has an expansive meaning…and that courts must give effect to each word of a statute…," the Court concluded that "[b]ecause Congress used the word 'any,' EPA must apply NSR whenever a source conducts an emission-increasing activity that fits within one of the ordinary meanings of 'physical change.'" Frequently citing the decisions in *Alabama Power v. Costle* and *WEPCo v. Reilly* as further support for an expansive definition of "any," the Court also emphasized that de minimis exceptions to the NSR requirements for routine maintenance, repair, and replacement had always been allowed by EPA, but that the ERP allowed equipment replacements resulting in non-de minimis emission increases to avoid NSR. Rejecting EPA's argument that the ERP would lower overall emissions by increasing efficiency, the Court stated that "EPA may not avoid Congressional intent by asserting that its preferred approach would be better policy."

In light of this ruling, LDEQ will rely on the pre-ERP guidance published by EPA when assessing whether a given project is RMRR and advises permittees to do the same.

The preamble to the 1992 "WEPCO Rule" (57 FR 32314) and applicability determinations made thereafter describe EPA's current approach to assessing what activities constitute RMRR. To summarize these documents, to determine whether proposed work at a facility is routine, EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and the cost of the work, as well as other relevant factors to arrive at a common sense finding. None of these factors, in and of itself, is conclusive. Instead, EPA cautions, one should take into account how each of these factors might apply in a particular circumstance to arrive at a conclusion considering the project as a whole.

These factors are further expounded in EPA's Detroit Edison determination.

<u>Nature</u>

- Whether major components of a facility are being modified or replaced; specifically, whether the units are of considerable size, function, or importance to the operation of the facility, considering the type of industry involved;

[23] 67 FR 80292-93, December 31, 2002

- Whether the change requires pre-approval of a state commission in the case of utilities;
- Whether the source itself has characterized the change as non-routine in any of its own documents;
- Whether the change could be performed during full functioning of the facility or while it was in full working order; and
- Whether the materials, equipment, and resources necessary to carry out the planned activity are already on site.

Extent

- Whether an entire emissions unit will be replaced;
- Whether the change will take a significant time to perform;
- Whether the collection of activities, taken as a whole, constitutes a non-routine effort, notwithstanding that individual elements could be routine; and
- Whether the change requires the addition of parts to existing equipment.

Purpose

- Whether the purpose of the effort is to extend the useful life of the unit; similarly, whether the source proposes to replace a unit at the end of its useful life; and
- Whether the modification will keep the unit operating in its present condition, or whether it will allow enhanced operation (e.g., will it permit increased capacity, operating rate, utilization, or fuel adaptability).

Frequency

- Whether the change is performed frequently in a typical unit's life.

Cost

- Whether the change will be costly, both in absolute terms and relative to the cost of replacing the unit; and
- Whether a significant amount of the cost of the change is included in the source's capital expenses, or whether the change can be paid for out of the operating budget (i.e., whether the costs are reasonably reflective of the costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source).

An RMRR assessment should also "be based on an evaluation of whether that type of equipment has been repaired or replaced by sources within the relevant industrial category." For example, one would expect maintenance and replacement of equipment in caustic service to be more frequent than maintenance and replacement of similar equipment in other industrial categories.

2.3.10 Acid Rain Permit

The overall goal of the Acid Rain Program is to achieve significant environmental and public health benefits through reductions in emissions of sulfur dioxide (SO2) and nitrogen oxides (NOX), the primary causes of acid rain. Several features of the Acid Rain Program include a national cap on SO2 emissions from affected sources, monitoring provisions for SO2 and NOX, NOX emission limits for coal-fired boilers, and permitting obligations. See the "Acid Rain Standard Requirements" below for additional detail. For this purpose, LDEQ administers an Acid Rain Program through the issuance of Acid Rain Permits. The requirements resulting from this permit are incorporated into the facility's Part 70 Regular Operating Permit, as well as being included in a separate Acid Rain Permit.

When Do I Have to Apply for an Acid Rain Permit?

Acid Rain requirements apply to most fossil fuel-fired combustion devices (e.g., boilers) that serve a generator with a nameplate capacity greater than 25 MWe to produce electricity (i.e., power plants). Applicability provisions are established by 40 CFR 72.6.

All submissions regarding an Acid Rain permit must be signed by the Designated Representative as defined in 40 CFR 72.20. Applications for new units must be submitted in accordance with the deadlines in 40 CFR 72.30(b)(2). In many cases this is at least 24 months before the unit commences operation.

The application for this type of permit can be found on a website maintained by EPA. Please see the following LDEQ website for more information, including a link to the application form on the EPA website referenced above: http://www.deq.louisiana.gov/portal/tabid/2631/Default.aspx.

The acid rain permit application must include:

A complete Acid Rain permit application (including a compliance plan) under 40 CFR 72 in accordance with the deadlines specified in 40 CFR 72.30.

When and How Do I Modify an Acid Rain Permit?

Acid Rain permits are usually only modified to change compliance options and plans as detailed in 40 CFR 72.81. The addition of new units is considered a new application. Modifications can be submitted at any time, but the source is subject to the terms of the current permit while the revisions are pending.

When and How Do I Renew an Acid Rain Permit?

Per 40 CFR 72.72, the renewal of an Acid Rain Permit for an affected source shall be subject to all the requirements of this subpart pertaining to the issuance of permits.

The Acid Rain Permit renewal application must be submitted for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit. [40 CFR 72.30(c)]**What Kind of Public Participation Timeframe Can I Expect?**

A public participation timeframe of no less than 30 days is associated with this type of permit. An EPA comment period of no less than 30 days is also required. Generally, these time periods overlap such that the total period is 30 days. Additional information regarding public participation for Acid Rain permits is provided by 40 CFR 72.65.

2.3.11 Clean Air Interstate Rule (CAIR) Permit

EPA has determined that 28 States and the District of Columbia contribute significantly to nonattainment of the national ambient air quality standards (NAAQS) for fine particles ($PM_{2.5}$) and/or 8-hour ozone in downwind States. Sulfur dioxide is a precursor to $PM_{2.5}$ formation, and NOx is a precursor to both ozone and $PM_{2.5}$ formation. Reducing upwind precursor emissions will assist the downwind $PM_{2.5}$ and 8-hour ozone nonattainment areas in achieving the NAAQS. Moreover, attainment will be achieved in a more equitable, cost-effective manner than if each nonattainment area attempted to achieve attainment by implementing local emissions reductions alone.

The 23 States along with the District of Columbia that must reduce annual SO2 and NOx emissions for the purposes of the $PM_{2.5}$ NAAQS are: Alabama, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia and Wisconsin.

The 25 States along with the District of Columbia that must reduce NOx emissions for the purposes of the 8-hour ozone NAAQS are: Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia and Wisconsin.

The EPA has promulgated the CAIR Federal Implementation Plan (FIP) to ensure the upwind States reduce emissions of sulfur dioxide (SO2) and/or nitrogen oxides (NOx) by complying with CAIR. The FIP will remain in effect until subject states submit a CAIR State Implementation Plan (SIP) or "abbreviated SIP."

The Department has incorporated by reference the federal CAIR SO2 provisions. The Department opted to submit an abbreviated SIP for CAIR NOx and ozone; the Louisiana abbreviated SIP has been approved. The provisions of the FIP will remain in place under Louisiana's abbreviated SIP, except that the Department will issue CAIR permits and the CAIR budget allocations for CAIR facilities within the state. All matters related to CAIR, except for permitting and budget allocations should be addressed to EPA Region 6 and EPA's Clean Air Markets Division (CAMD).

When Do I Have to Apply for a CAIR Permit?

Existing sources applicable to CAIR should have completed a *Louisiana CAIR Permit Application* and submitted it to LDEQ by July 1, 2007. New CAIR sources should submit their CAIR permit application along with the application for the new source. The CAIR permit identifies each CAIR unit at a CAIR source and contains the standard requirements of the CAIR program. A copy of the CAIR Certificate of Representation must be attached to any CAIR Permit Application submitted to LDEQ. The CAIR Permit will become part of a CAIR source's Title V permit and will be renewed at the same time as the Title V.

When and How Do I Modify a CAIR Permit?

A CAIR Permit must be modified whenever a point source that is applicable to CAIR will be located at, or removed from a facility. If a CAIR unit will be retired (removed from service completely), the guidance in the Federal Implementation Plan (FIP) should be followed in conjunction with submittal for modification of the CAIR Permit.

In order to apply for a modification, complete the *Louisiana CAIR Permit Application* form according to the guidance in Section 4.0 *How To Apply For a Permit*.

When and How Do I Renew a CAIR Permit?

CAIR permits will be renewed according to Title V regulations.

What Kind of Public Participation Timeframe Can I Expect?

A public participation timeframe will be established for this type of permit in accordance with EPA guidance.

Is There Any Additional Guidance?

Additional guidance can be found on the LDEQ website at the following web address: http://www.deq.louisiana.gov/portal/tabid/2541/Default.aspx.

In accordance with EPA's Transport Rule proposed on August 2, 2010, the Clean Air Interstate Rule will sunset at the completion of all 2011 control activities. This means that all CAIR trading programs will not continue past 2011, including CAIR permitting programs. Please see the proposed Transport Rule at the following web address for more details: http://www.gpo.gov/fdsys/pkg/FR-2010-08-02/pdf/2010-17007.pdf.

2.3.12 Reserved

2.3.13 Permit Modifications

In the event that a facility needs to be altered in a manner consistent with the definition of Modification stated in the Commonly Used Terms section above, a permit modification must be obtained. Any application requesting a modification must be submitted prior to making the proposed change at the source. The change must not be made prior to approval by LDEQ.

The dates during which a permit is effective are based on the issuance date of an initial or renewal permit. They are not based on the issuance of modifications. The issuance of any type of modification will have no effect on the effective period of any type of permit, except that LAC 33:III.507.E.2 specifies that reopenings or revisions which require DEQ and EPA review as well as affected state and public notice of an entire permit shall establish the start of a new five-year permit duration, except in the case of acid rain permits.

If a permit modification is incorporated into a permit renewal, the effective dates for the issued permit will reflect the full effective period of the permit. This is due to the fact that the permit was a renewal, not due to the fact that the permit was also a modification.

2.3.13.1 Minor Modification

Any facility can apply for a Minor Modification to its State Permit or Part 70 Operating Permit if the change will qualify as a Minor Modification. The main advantage of applying for a Minor Modification is the fact that this procedure does not require a public participation timeframe in most cases.

In general, Minor Modifications are granted for changes at facilities operating under State Permits. However, Part 70 sources may be granted a Minor Modification if the changes will be considered State-Only and do not require a public participation timeframe.

A modification request for a Part 70 source that meets all of the following criteria may also be considered a Minor Modification [LAC 33:III.525.A]:

1. The modification would not violate any federally applicable requirement or standard or any applicable provisions of LAC 33:III, Air Quality Regulations.

2. The modification would not constitute a Title I Modification (defined in LAC 33:III.502).

3. The modification would not involve significant changes to existing monitoring, reporting, or recordkeeping requirements. This determination is made on a case-by-case basis.

4. The modification would not seek to establish or alter emission limits which incorporate a case-by-case determination of MACT under Section 112(g) or 112(j) of the Clean Air Act or an alternative emissions limit under Section 112(i)(5) of the Clean Air Act or an equivalency determination of RACT.

5. The modification would not seek to establish or change a permit term or condition for which there is no underlying federally applicable requirement and that the owner or operator has assumed solely to avoid a federally applicable requirement. An example of

this concept would be when a facility decides to limit heat input to a boiler to avoid applicability of 40 CFR 60, Subpart Db. The establishment of this type of limitation will not be considered a minor modification.

6. The modification would not seek to establish or exceed an enforceable emissions cap in order to establish minor source status or to avoid classification as a Title I modification. An example of this concept would be when a facility decides to establish an emissions cap in order to allow the facility to be considered a minor source of HAP. The establishment of this type of emissions cap is not considered a Minor Modification. Once an emissions cap of this nature is established and the facility seeks to exceed this emissions cap and establish a new one at a higher limit, that change will also not be considered a Minor Modification.

7. The modification is not otherwise determined by LDEQ to be a significant modification.

A Minor Modification may also be granted to a Part 70 source that, as a result of the modification, is no longer a Part 70 source, provided that all of the above conditions are met.

A modification may also be considered a Minor Modification if it is used to incorporate the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such procedures are explicitly provided for in the State Implementation Plan (SIP) or in federally applicable requirements.

In regards to the payment of application fees, the fee associated with a Minor Modification may not always be appropriate. LAC 33:III.Chapter 2 defines Major Modification and Minor Modification differently from the manner in which it is used above. Please read Section 4.3.2 *How Do I Calculate the Fee?* for more information.

How Should I Submit My Application?

An application for a Minor Modification should include the following:

- The elements listed in LAC 33:III.517;
- A listing of any new applicable requirements that will apply as a result of the change;
- Certification by the responsible official;
- A request that minor modification procedures be used;
- For Part 70 sources, the owner or operator's suggested draft permit and completed forms for LDEQ to use to notify affected states; and
- For Part 70 sources, certification by a professional engineer registered in the State of Louisiana.

The applicant must submit a copy of the application both to LDEQ and the EPA concurrently.

What Kind of Public Participation Timeframe Can I Expect?

In general, there is no public participation timeframe associated with a Minor Modification. However, if the facility is also a major source of TAP, a public participation timeframe of no less than 30 days can be required if any of the following are true:

- Emissions of any TAP will increase above its Minimum Emission Rate (MER). [LAC 33:III.5107.D.1.a]

- The modification will allow any new point source to emit any TAP in an amount above its MER. [LAC 33:III.5107.D.1.b]

If sufficient interest is generated, a public hearing may also be required.

2.3.13.2 Significant Modification

A modification request that meets any of the following criteria will be considered a Significant Modification [LAC 33:III.527.A]:

- The change constitutes a Title I modification, as defined in LAC 33:III.502;

- The change constitutes a significant change in existing monitoring terms and conditions;

- The change is a relaxation of reporting or recordkeeping permit terms and conditions; or

- The change does not qualify as an administrative amendment or a Minor Modification.

In regards to the payment of application fees, the fee associated with a Major Modification may not always be appropriate. Please read Section 4.3.2 *How Do I Calculate the Fee?* for more information.

How Should I Submit My Application?

An application for a Significant Modification should include the following:

- The elements listed in LAC 33:III.517;

- A listing of any new applicable requirements that will apply as a result of the change;

- Certification by the responsible official; and

- For Part 70 sources, certification by a professional engineer registered in the State of Louisiana.

The applicant must submit a copy of the application both to LDEQ and the EPA concurrently.

What Kind of Public Participation Timeframe Can I Expect?

A public participation timeframe of no less than 30 days is associated with a significant modification. Any states within 50 miles of the proposed source will also be notified. An EPA comment period of no less than 45 days is also required. Generally, these time periods overlap such that the total period is 45 days. If adverse comments are received, EPA is entitled to another 45-day review period, which would commence upon receipt of the final proposed permit and LDEQ's Public Comments Response Summary.

If sufficient interest is generated, a public hearing may also be required.

3.0 Factors to Consider Before Completing an Application

There are a number of factors to consider when completing an application as described in this section. These factors may require an applicant to give more detail than usual or to fill out some of the application forms in a manner that is different than the one described in this section. Two of the factors to consider are Dispersion Modeling and Operational Flexibility.

3.1 What Is Dispersion Modeling and When Is It Required?

Dispersion modeling is a technique devised to evaluate the impact of atmospheric releases at various distances from the source. Dispersion modeling is required when applying for a Prevention of Significant Deterioration (PSD) or for the Louisiana Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.Chapter 51]. If applying for a PSD permit, this modeling must be submitted with the PSD permit application. If it is not, then the application will not be considered technically complete.

LDEQ may also require dispersion modeling be performed to ensure compliance with the National Ambient Air Quality Standards (NAAQS) or the Louisiana Toxic Air Pollutant Ambient Air Standards, if necessary. This is at the sole discretion of LDEQ and determined on a case-by-case basis. If dispersion modeling is deemed necessary, LDEQ will notify the applicant that dispersion modeling must be performed. In each instance, the facility evaluates the off-site impact of the emissions to ensure that it does not cause an exceedance of established state or federal ambient air standards. In some cases, this may require a facility to include the emissions from neighboring facilities to evaluate the combined effect of the emissions. If so, PSD Reports and other EIS information is provided upon request to assist industry with the preparation of permits and dispersion modeling input. The data must be reviewed by the user and will require additional information and verification to be determined complete and acceptable for each different usage. Public Records should be reviewed for permits and Emission Inventory Questionnaires that may not be captured in the EIS data base.

A variety of computer models have been developed to assist in these evaluations. These models take into account the source parameters (release height, rate, etc.) and meteorological conditions to simulate the impact at various receptors which are located relative to distance and direction from the source. Only those regulatory models which have been approved by the EPA or the LDEQ should be used in this analysis. It should be noted that the need and extent of dispersion modeling depends on several factors and in some instances may not be deemed necessary.

Several Louisiana and U.S. EPA documents are available to assist in conducting and evaluating an air quality analysis utilizing air dispersion models. These documents are updated frequently and the applicant should ensure that the most recent document is being used. The following is a list of some of the key documents.

- Louisiana LDEQ Air Modeling Guidance (Louisiana Air Quality Modeling Procedure, Revised Protocol). This document may be obtained by downloading it from the LDEQ web site on the Internet. The Modeling Procedure is found on the LDEQ web site by following this link:

http://www.deq.louisiana.gov/portal/Portals/0/AirQualityAssessment/Engineering/Modeling/Modeling%20Procedures%200806.pdf.

The electronic file is a document in Adobe Acrobat format.

- U.S. EPA Air Quality Modeling Guidance and Software. The references listed below are available from SCRAM (EPA's Support Center for Regulatory Air Models) located at the EPA web site. The Internet/Web address for SCRAM is http://www.epa.gov/scram001

    - EPA's Guideline on Air Quality Models (40 CFR Part 51, Appendix W). Download from the SCRAM web site. The document is located in the "Modeling Guidance" area.

    - EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model, AERMOD. This is the EPA and LDEQ-approved air dispersion model. It can be downloaded from the SCRAM web site ("Models" area).

Other EPA air quality models, accompanying user's guides, technical reference manuals, modeling updates/news bulletins, and meteorological data are also available at the SCRAM web site.

When modeling for compliance with Louisiana Toxic Air Pollutant Ambient Air Standards, LDEQ allows the use of the Industrial Source Complex Short Term model (ISCST3). This model should not be used for any other purpose.

Due to the complexity of dispersion modeling and the continuing development of new models and techniques, all facilities conducting an analysis are strongly encouraged to consult with the Office of Environmental Services prior to initiating the modeling exercise to ensure that appropriate models, meteorological data, and procedures are used. An approved modeling protocol is required for any modeling used in support of a permit application.

If a third party will be submitting modeling results on behalf of the applicant, a letter signed by the applicant must accompany the submittal of any modeling protocols or modeling results. This letter must state that the third party is authorized to submit on behalf of the applicant and that LDEQ may work with this third party in order to prepare any modeling protocols or modeling results.

For any questions regarding Dispersion Modeling, please contact the Office of Environmental Services at (225) 219-3181.

3.2 How Can I Provide For Operational Flexibility?

Under LAC 33.III.507.G, the LDEQ allows four different types of operational flexibility in a permit. The four types of operational flexibility allowed to be included in permits are:

- changes that contravene a permit term;

- terms allowing for emissions trading under a cap;
- alternative emissions limits under the State Implementation Plan (SIP), and
- alternative operating scenarios.

Operational flexibility allows a facility to make changes to their process(es) without a permit revision provided that a change is not a Title I modification. It should be noted that although the change may not trigger a revision to the Part 70 section of the permit, it could trigger a permit revision under the State's permitting requirements. The intent of operational flexibility is to allow a facility to make changes quickly (i.e., to respond to market demands, to eliminate a safety hazard, and to make operational changes) without administrative burdens.

In addition, there are certain activities which are not required to be permitted, but need to be identified in the permit application. Such activities are discussed under the Insignificant Activities and General Permit Condition XVII Activities sections of Section 1.2.2 *Pollutant Emitting Sources.*

3.2.1 Changes that Contravene a Permit Term

This operational flexibility, provided for in LAC 33:III.507.G.2, would allow a permitted facility to contravene an expressed federally enforceable permit term or condition without revising the existing federally enforceable terms or conditions. For example, this operational flexibility provision may allow the owner/operator to change the service of the tank using a 7-day prior notice. (Note that this would not be required if the permit carried both services in its existing emission limitations.) The change cannot:

- violate any applicable requirements;
- result in an exceedance of emissions allowable under the permit;
- change any testing, monitoring, recordkeeping, reporting, or compliance; or certification requirements of the existing permit; or
- constitute a Title I Modification.

One example would be a permit in which the federally enforceable portion specifies a particular VOC service for an existing storage tank subject to NSPS Subpart Kb. A facility needs to change the service to another VOC material, but does not require additional controls under NSPS Subpart Kb. Changes that contravene a permit term are not required to be in the permit application.

3.2.2 Emissions Caps

Emissions caps are primarily used to establish an upper limit, or cap, on the emissions of one or more sources. An emissions cap can be useful in many different situations. These situations mainly fall into three categories, each of which will be explained below.

The first type of emissions cap sets an artificial limit on the potential to emit for one or more sources. This is generally useful to avoid the applicability of various emissions-based regulations when the source(s) in question have the potential to emit pollutants in amounts in excess of the applicability limits of the regulations in question. In establishing this cap, the applicant will accept appropriate operational limitations in order to verify that the actual emissions are equal to or below the levels stated in the Emissions Cap. These operational limits may restrict parameters such as throughput, number of units operating simultaneously, or firing rate. The calculations for an Emissions Cap must be represented as though the chosen operational limit were the maximum operating rate of the equipment in question. If this type of Emissions Cap is used to avoid applicability of a Federal Regulation, the permit must undergo a public participation timeframe.

For example, a facility that conducts painting operations wishes to avoid Title V applicability. In order to accomplish this, the facility sets a facility-wide limitation on VOC and HAP emissions that is below the major source threshold. The facility may choose to limit the number of gallons of paint that will be used in order to accomplish this.

The second type of Emissions Cap, also referred to as a "bubble," sets an overall limit on the emissions of two (2) or more emissions units to allow for a different mix of controls from that mandated by the regulation. A Bubble differs from other Emissions Caps in that a facility is aggregating sources to demonstrate that the emission reductions achieved from one or more sources will more than offset the reductions required through implementation of mandated pollution controls. See the definition of Bubble Concept in LAC 33:III.111.

For example, a facility has a group of five storage tanks each requiring controls by LAC 33:III.2103 regulations. Rather than upgrading the controls on all five tanks, the facility could opt to place more stringent controls on four of the five tanks and avoid the cost of controls on the fifth tank. Thus, by "bubbling" these tanks together, the facility shows that the reductions from four tanks exceed reductions that would be achieved by regulatory controls on all five tanks.

The third type of Emissions Cap is used to support operational flexibility. This type of Emissions Cap is most useful for facilities with emission rates from individual emissions sources that may vary greatly within a year; however, these facilities are unable to exceed a certain level of total emissions due to some inherent limitation. In general, this type of Emissions Cap does not require a public participation timeframe since it is not used to avoid applicability of a Federal Regulation and usually does not limit the potential to emit of any pollutant.

This type of Emissions Cap is best explained by example. Suppose a facility has a number of storage tanks. Total throughput cannot excess a given total because facility production rate is inherently limited by the physical specification of its process equipment. The facility may choose to establish an Emission Cap over the storage tanks in order to avoid having individual storage limitations placed on each tank. Each tank can store product as needed, so long as the total emissions from all such tanks are below the limitations set by the Emissions Cap. This would also avoid the need to "overpermitting" emissions to gain operational flexibility.

In all cases, sufficient specific conditions will have to be added in order to ensure that compliance with the Emissions Cap and its limitations are easily verifiable. Emission Caps can only be obtained through a permit. Neither a Variance nor an Exemption can establish an Emissions Cap.

In all cases, any Emissions Cap that limits the potential to emit for any pollutant must undergo a public participation timeframe.

Emissions Caps cannot have the effect of relieving the source from complying with existing requirements that apply to the point sources, such as BACT, LAER, NSPS or SIP limits. These limits continue to apply at the point source level and must be reflected in the permit. However, points subject to such limits may still be included in caps and "over control" or limited use of the point below the applicable standard may generate more flexibility for other points in the cap.

Once an Emissions Cap has been established, the treatment of capped sources in determining PSD or NNSR applicability must be reviewed case-by-case. In some cases, the potential to emit of the individual source will still be relevant without regard to the cap. In other cases (e.g., where all equipment under the cap are affected equipment) the cap limit may be considered the potential to emit for purposes of calculating actual to potential emission increases.

When applying for an Emissions Cap, the permittee must request the cap or bubble and propose specific conditions that are adequate to ensure that the emissions trades are enforceable, verifiable, and quantifiable under the cap in the permit application. Once the cap or bubble and emissions trading provisions are incorporated into the permit, the facility may execute emission trades with a seven (7) day notice to the LDEQ.

For a group of emissions sources subject to an emissions cap, one "CAP EIQ" should be submitted for sources subject to the cap. This "CAP EIQ" must show the average lb/hr and TPY emissions for all sources encompassed by the emissions cap. In general, an individual EIQ sheet should also be submitted for each point source included in the CAP. The EIQ sheet for each point source included in the CAP should show the maximum lb/hr for each pollutant that will be attributed to the source, but should show no other emissions.

3.2.3 Alternative Emission Limits Under the SIP

If the State Implementation Plan (SIP) is modified to allow a determination of an alternative emission limit equivalent to that contained in the SIP, the owner or operator may request such an alternative emission limit be specified in the permit. This request is provided for in LAC 33:III.507.G.4. For example, an alternative emission limit might be granted if the control required under a Chapter 21 provision is not economically justified for the emission reduction. The permittee must provide the information in the permit application to demonstrate that the alternative emission limit is accountable, enforceable, and based on replicable procedures. In addition, the proposed permit terms and conditions to satisfy these requirements must be included.

If the modified Louisiana SIP provides for emission trading without a permit revision, a source may trade emissions within the permitted facility where the permit does not already provide for such emissions trading. This operational flexibility option would allow a source which had not anticipated trading emissions within the facility to take advantage of emission trading provisions in the SIP after a seven (7) day prior notice. The permittee is then required within 180 days of implementing the trade to submit a permit application which demonstrates that the alternative

emission limit is accountable, enforceable, and based on replicable procedures. Proposed permit terms and conditions to satisfy these requirements are also required in the permit application.

3.2.4 Alternative Operating Scenarios

An owner/operator of a Part 70 source may operate under any operating scenario which is incorporated in the applicable permit as provided for in LAC 33:III.507.G.5. Permitted alternative scenarios allow an owner or operator to make changes to their process without notification to the LDEQ. The owner or operator is required to record in a log at the facility when a new permitted scenario is initiated. In addition, the owner or operator will need to ensure that the unit is in compliance with all applicable permitted emission rates.

Any reasonable operating scenario may be identified in the permit application. An example of a potential alternative operating scenario is a process unit which is capable of manufacturing two products, each requiring a different process equipment configuration. Each configuration may have different raw materials and/or vents releasing emissions. Keep in mind that any increases in emissions due to new alternative operating scenarios would potentially be subject to New Source Review and any other applicable requirement(s) during the permit application review.

3.3 Custody Transfer

Determining whether or not custody transfer (a.k.a. lease custody transfer) has taken place is not always a straightforward task. EPA has stated that the "custody transfer exemption can vary from facility to facility based on site specific factors" and that "there is no set point for every facility where this exemption applies."[24]

As such, the point of custody transfer will necessarily be a case-by-case decision. This discussion is intended to assist permit applicants in determining the applicability of 40 CFR 60 Subparts K, Ka, or Kb[25] and the appropriateness of an exemption claimed under LAC 33:III.2103.G.2 or 3.[26]

In the preamble to Subpart Ka, EPA states the custody transfer exemption "applies to storage between the time that the petroleum liquid is removed from the ground and the time that custody of the petroleum liquid is transferred from the well or producing operations to the transportation system."

In the actual rule texts, Subparts K, Ka, & Kb define "custody transfer" as "the transfer of produced petroleum and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation."

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[24] Applicability Determination Index (ADI) Control Number 0200064, available at http://cfpub.epa.gov/adi.

[25] See 40 CFR 60.110(b), 60.110a(b), & 60.110b(d)(4).

[26] Regarding §2103.G.2 & 3, "lease custody transfer" is not defined in either §111 or §2103; therefore, the definition of "custody transfer" found in Subparts K, Ka, or Kb and associated applicability determinations should be employed here.

When Does Custody Transfer Occur?

To restate the definition more plainly, custody transfer occurs at the first point after the liquids are "processed and/or treated" in the production operations (SICC 1311) and are transferred from a storage tank (or other mechanism) to a pipeline or any other form of transportation (i.e., truck, barge, etc.). Notice that it is the location of processing and/or treatment operations, in relation to the transfer point into a transportation system, which is the deciding factor.

Processing and/or Treating

As previously stated, produced liquids must be processed and/or treated in order to satisfy the definition of custody transfer. It's clear that "processing and/or treating" does not have to be a significant operation such as fractionation. Processing can include:

- physical separation (removal of excess water);
- sulfur and/or carbon dioxide removal; or
- other chemical treatment.[27]

More often than not, it will be removal of excess water that constitutes the "processing" event. The transfer point is, however, always after all processing and treating occurs in the production operations. Production operations comprise all activities in the preparation of oil and gas up to the point of shipment from the producing property.

Ownership

The act of purchasing a product does not factor into the equation. In one applicability determination, EPA states that Subparts Ka and Kb would not apply to the tanks in question as long as they solely receive purchased oil that is not treated or processed at the lease locations when it is loaded from the lease tanks onto trucks.[28] This also suggests that the initial gravity separation of the produced natural gas and crude oil/produced water streams (in a phase separator) does not constitute "processing."

Conversely, in another determination, EPA concluded that temporary storage of crude oil at pump stations along a pipeline was after custody transfer, even though change of ownership did not occur between the pipeline and the tanks.[29]

Vessels Storing Condensate at Compressor Stations

The definition of "custody transfer" speaks to the transfer of produced petroleum and/or condensate. Condensate is defined as "hydrocarbon liquid separated from natural gas that

[27] ADI Control Numbers 0200064 & 0000083.
[28] ADI Control Number 0000083.
[29] ADI Control Number NR45.

condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions [68°F, 29.92 in Hg]."[30]

By definition, condensate does not exist prior to separation from the natural gas stream. Therefore, vessels located at compressor stations used to store "condensate" are prior to custody transfer.

Other Definitions of Custody Transfer

"Custody transfer" is also defined in 40 CFR 63 Subparts HH (§63.761) & HHH (§63.1271). While these definitions are very similar to that established by NSPS, they should only be applied when determining applicability of HH & HHH. Here, a natural gas processing plant is specifically identified as a point of custody transfer.

Summary

Custody transfer occurs at the first point "processed and/or treated" liquids are transferred from a storage tank to any form of transportation. It is the location of processing and treatment operations, in relation to the tanks, which is the deciding factor.

"Processing and/or treating" does not have to be a significant operation; the simple act of removing excess water constitutes processing.

A change in the ownership of produced petroleum and/or condensate does not affect the point of custody transfer.

Vessels located at compressor stations used to store "condensate" formed in the upstream pipeline are prior to custody transfer.

Other definitions of "custody transfer" exist, but those found in NSPS should be used when determining applicability of §2103.

3.4 Delegation of Authority to Implement NSPS and NESHAP Standards (40 CFR 60, 61, & 63)

The U.S. Environmental Protection Agency (EPA) has delegated LDEQ the authority to implement and enforce certain New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) promulgated by EPA at 40 CFR 60, 61, and 63, as amended through July 1, 2008. This delegation applies to both Part 70 and non-Part 70 sources. See 40 CFR 60.4(b)(T) & (e)(2), 61.04(b)(T) & (c)(6)(ii), and 63.99(a)(18). The delegation of authority does not extend to sources located in Indian Country.

[30] The definitions in 40 CFR 60 Subparts K, Ka, Kb and 40 CFR 63 Subpart HH are essentially identical.

What does this mean?

With respect to delegated NSPS and NESHAPs, LDEQ is the primary point of contact and has the primary responsibility to implement and enforce the federal standards. All notifications, reports, and other communications required by 40 CFR 60, 61, and 63 should be submitted directly to the LDEQ. Sources do not need to copy EPA. EPA Region 6 has waived the requirement that notifications and reports for delegated standards be submitted to EPA in addition to LDEQ pursuant to 40 CFR 63.9(a)(4)(ii) and 63.10(a)(4)(ii).

See the chart in Appendix B to determine where within the Air Permits Division certain types of information should be sent.

If the applicable regulation is not addressed in the chart, all correspondence should be submitted to the following address unless otherwise specified below.

LDEQ
Office of Environmental Services
Air Permits Division
P.O. Box 4313
Baton Rouge, La. 70821-4313

Where should I direct my request for an Alternative Test Method or Monitoring Plan?

If you are requesting to use an alternative test method or monitoring procedure pursuant to 40 CFR 60.13(i), 40 CFR 61.13(h) or 61.14(g), or 40 CFR 63.7(f) or 63.8(f) and LDEQ has delegation for the applicable subpart, the request should be directed to:

LDEQ
Office of Environmental Services
P.O. Box 4313
Baton Rouge, La. 70821-4314

Note that LDEQ has the authority to approve only minor and intermediate changes to test methods and monitoring procedures established by 40 CFR 61 & 63. The definitions of minor, intermediate, and major alternatives to test methods and monitoring can be found at the following web address:
http://www.deq.louisiana.gov/portal/tabid/2496/Default.aspx

Also, keep in mind that LDEQ must obtain concurrence from EPA on any matter involving the interpretation of Section 112 of the CAA or 40 CFR Part 63 to the extent that implementation, administration, or enforcement of these sections have not been covered by EPA determinations or guidance.

To find the guidance that LDEQ uses to evaluate Alternative Monitoring Plans, go to the following web address: http://www.deq.louisiana.gov/portal/Portals/0/permits/air/appdet.pdf

Authorities not delegated to LDEQ

LDEQ does not have the authority to implement and enforce all federal regulations. Subparts for which LDEQ does not have delegation include:

- Under 40 CFR 60:
  Subpart AAA – Standards of Performance for New Residential Wood Heaters

- Under 40 CFR 61:
  - Subpart B – National Emission Standards for Radon Emissions from Underground Uranium Mines
  - Subpart H – National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities
  - Subpart I – National Emission Standards for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H
  - Subpart K – National Emission Standards for Radionuclide Emissions from Elemental Phosphorus Plants
  - Subpart Q – National Emission Standards for Radon Emissions from Department of Energy Facilities
  - Subpart R – National Emission Standards for Radon Emissions from Phosphogypsum Stacks
  - Subpart T – National Emission Standards for Radon Emissions from the Disposal of Uranium Mill Tailings
  - Subpart W – National Emission Standards for Radon Emissions from Operating Mill Tailings

In addition to the above subparts, there are specific portions of the federal regulations for which LDEQ does not have delegation. These include:

- Under 40 CFR 61:
  - 61.04(b) – Addresses of State and Local Implementing Agencies;
  - 61.12(d)(1) – Compliance with Standards and Maintenance Requirements, Alternate Means of Emission Limitation
  - 61.13(h)(1)(ii) – Major Change to an Emissions Test
  - 61.14(g)(1)(ii) – Major Modifications to Monitoring Requirements
  - 61.16 – Availability of Information Procedures
  - 61.53(c)(4) – List of Approved Design, Maintenance, and Housekeeping Practices for Mercury Chlor-Alkali Plants

- Under 40 CFR 63:
  - 63.6(g) – Approval of Alternative Non-Opacity Emission Standards
  - 63.6(h)(9) – Approval of Alternative Opacity Standards
  - 63.7(e)(2)(ii) & (f) – Approval of Major Alternatives to Test Methods
  - 63.8(f) – Approval of Major Alternatives to Monitoring
  - 63.10(f) – Approval of Major Alternatives to Recordkeeping and Reporting

Also, certain authorities identified within specific subparts cannot be delegated (e.g., 40 CFR 60.750(b), 63.106(b)).

I'm subject to a subpart/provision for which LDEQ does not have delegation. What should I do?

All notifications, reports, and other communications required by 40 CFR 60, 61, and 63 should be submitted to:

U.S. EPA Region 6
Director; Air, Pesticides, and Toxics Division
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

LDEQ should be copied on all correspondence.

With respect to Alternative Test Methods or Monitoring Plans, requests should be directed to the Air Enforcement Section (Mail Code 6ENAA) at EPA Region 6. If LDEQ has incorporated the pertinent subpart by reference (at either LAC 33:III.3003, 5116, 5122, or 5311), approval of both EPA and LDEQ is required.

3.5 Permit Shield

A permit shield provides an "enforcement shield" which protects the facility from enforcement action for violations of applicable federal requirements. This is intended to protect the facility from liability for violations if the permit does not accurately reflect an applicable federal requirement. The source will be "shielded" against enforcement actions for allegedly violating the Clean Air Act if requirements for compliance are explicitly addressed by the permit. See LAC 33:III.507.I and 40 CFR 70.6(f) for more details.

When is a Permit Shield appropriate?

Only very specific determinations by the LDEQ will qualify for a shield. A permit shield is limited strictly to:

1) Non-applicability determinations of standards and requirements under:

   - 40 CFR 60 (NSPS);
   - 40 CFR 61 & 63 (NESHAP/MACT);
   - Prevention of Significant Deterioration (PSD); and
   - Nonattainment New Source Review (NNSR).

2) Interpretations regarding frequency of and procedures for monitoring, recordkeeping, and reporting provisions of federally applicable requirements.

3) Interpretations regarding appropriate means of compliance when more that one federal requirement applies to the same emissions unit at a source.

Note: Permit Shields do not shield against any enforcement determinations, compliance determinations, violation of applicable requirements, or liability for any activity that is incurred prior to or at the time of the permit issuance.

What should be included in a request for a permit shield?

An applicant that wishes to incorporate a permit shield must request one in the permit application. This request for a permit shield must be very specific. The types of requests that will formulate an acceptable permit shield request are encompassed by Section 9 of the Louisiana Application for Approval of Emissions from Part 70 Sources. Any permit shield request that can not be described in this section of the permit application cannot constitute a valid permit shield request.

The permit shield request should propose the terms and conditions to be followed for compliance with each of the identified standards. In addition, a source may seek a determination that certain provisions and/or standards are not applicable. If a source seeks a determination that a regulation does not apply or that the given emissions source is exempt, the application should explain why the source is not subject to that regulation (e.g., by demonstrating how the process does not conform to a specific definition).

What else do I need to know?

A permit shield cannot be granted without prior public review and comment procedures. The shield will be limited to the conditions that have completed the full public comment and review by affected states and the EPA. As such, there will be no shield for minor modifications or administrative amendments that are not subject to public review.

A permit shield does not apply to Acid Rain requirements.

The source is not shielded from enforcement of newly applicable provisions adopted during the term of the permit. Therefore, if compliance requirements for the source are modified, a permit revision will become necessary.

LDEQ may revoke or revise a permit shield at any time under LAC 33:III.529. Also, LDEQ has "full discretion in determining whether to grant or deny any permit shield request or any portion thereof" [LAC 33:III.507.I.2.a].

Although the LDEQ's decision to grant or deny a permit shield is a situation-specific case by case determination, a request for a permit shield will be given additional consideration under the following circumstances:

1. Leak Detection and Repair (LDAR) programs have been consolidated pursuant to the Louisiana Consolidated Fugitive Emission Program.

2. Applicability and/or compliance determinations are based on memoranda issued by EPA such as those on available on EPA's Applicability Determination Index (ADI) website. Note here that some ADI determinations are relatively straightforward and do not necessitate a permit shield.

3. EPA has provided conflicting guidance on a topic (e.g., ADI 0000078 & 9700105 disagree as to whether or not a gas stream discharged directly from a reactor process to a fuel gas system constitutes a "vent stream" under 40 CFR 60 Subpart RRR).

4. Multiple federal standards apply to the same piece of equipment, and the regulations do not contain overlap provisions (e.g., as in 40 CFR 63.110(b)-(f)), particularly if testing and/or monitoring provisions differ.

A permit that does not expressly state that a permit shield exists must be presumed not to provide such a shield.

When is a Permit Shield Not Necessary?

It is not necessary to establish a permit shield for straightforward applicability determinations similar to those below. Such information will appear in Section XI of a Title V permit – Explanation for Exemption Status of Non-applicability of a Source.

Some examples of instances when a permit shield is not necessary are as follows:

EQT 001 is not subject to the requirements of 40 CFR 60 Subpart Dc because the boiler was constructed before June 9, 1989, and has a design heat input capacity greater than 100 MM Btu/hr [40 CFR 60.40c].

EQT 002 is not subject to the requirements of 40 CFR 60 Subpart Kb because the capacity of the tank is less than 75 cubic meters [40 CFR 60.110b(a)].

3.6 Laboratory Accreditation

Various types of environmental testing are commonly required by LDEQ to establish site-specific emissions profiles and demonstrate compliance with emissions limitations. In many situations, some form of environmental testing may be required prior to issuance of an air permit or otherwise addressed in the final permit. Emission tests, including stack tests and gas analyses, performed in support of emission estimates must be done by a laboratory that is accredited by LDEQ for the pertinent test method(s). **This applies to <u>ALL</u> emission testing, without exception.** This means that accreditation is required for test methods that have wet chemistry as part of the standard as well as test methods that do not have wet chemistry as part of the standard. Any laboratory other than one owned and operated by the company seeking the permit that performs analyses or tests and provides chemical analyses, analytical results, or other test data to the department must be accredited by LDEQ for the pertinent test method(s). The department will not accept laboratory data generated by laboratories that have not received accreditation.

A modified stack testing method can be used if it is pre-approved by the Office of Environmental Services and can only be used for that specific site testing. A testing company can also obtain state accreditation by LELAP for a non-standard method.

If the applicant is interested in contracting an LDEQ accredited laboratory to perform any necessary gas analysis or emission testing, a list of all the LDEQ accredited laboratories can be found at the LDEQ web site: http://www.deq.louisiana.gov.

3.7 Phased Permitting

Some permit modifications may result in different operating scenarios that may hinge on whether or not a certain piece of equipment has been constructed. Typically, when a permit applicant requests that a permitted source be removed from the permit, the applicant is ready to remove the source immediately. However, this is not always the case. In these situations, it may be necessary to incorporate phases into the final permit, rather than obtain multiple permit modifications over a short time frame.

This concept is best explained through an example. In this example, the facility has two boilers named Boiler 1 and Boiler 2. The facility wishes to build a new boiler, Boiler 3, and demolish Boiler 2. However, the facility wishes to continue to operate Boiler 2 until Boiler 3 has been constructed and is operational. It is determined that if the facility operates all three boilers simultaneously, the facility will be subject to the Prevention of Significant Deterioration (PSD) program and will have to install Best Available Control Technology (BACT) controls. The facility wishes to avoid PSD applicability. In this situation, a permit that incorporates phases would be beneficial to the facility.

The facility could propose that Phase I be defined as the time period beginning upon the issuance of the permit and ending when Boiler 3 has been constructed and is operational. Phase II could be defined as the time beginning when Boiler 3 has been constructed and is operational, and extending into the future from that point. The conditions that apply to Boiler 1 and Boiler 2 would apply during Phase I and the conditions that apply to Boiler 1 and Boiler 3 would apply during Phase II.

The advantage of incorporating phases into a permit for this example facility would be that the facility would remove the need for an additional permit modification. Without the phases incorporated into the permit, the facility would have to modify the permit once to add Boiler 3 to the permit and then modify the permit again once the facility was ready to shut down Boiler 2 so that the facility does not have the potential to emit air contaminants above PSD applicability thresholds.

In order to incorporate phases into a permit application, submit a separate Emissions Inventory Questionnaire (EIQ) sheet and supporting emissions calculations for each of the phases under which each source will operate. Using the above example, Boiler 1 would require only one EIQ since it will operate in the same manner regardless of the phase. Boilers 2 and 3 would each have two EIQ sheets. One EIQ for each boiler would represent Phase I emissions, and another

EIQ for each boiler would represent Phase II emissions. This would result in a grand total of 5 EIQ sheets, with supporting calculations for each.

If regulatory applicability will be affected by changes made between phases, a separate regulatory applicability analysis should be submitted for each phase, for each affected unit. If a source would be made subject to a federal regulation as a result of a modification, the regulatory analysis for Phase II would show applicability of the federal regulation while the regulatory analysis for Phase I would not.

Phased permitting can be combined with flexibility caps, emissions caps, alternate operational scenarios, etc. If the applicant chooses to use a scenario in conjunction with these options, it is important that the applicant describe the proposed regulatory scheme very well to avoid confusion.

3.8 Internal Combustion Engine Guidance

If an internal combustion engine is considered to be stationary, then it must be represented in an air permit. Since a stationary engine will be subject to 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, or 40 CFR 63 Subpart ZZZZ, each stationary engine must be incorporated into the air permit as a permitted source and not as an insignificant activity in accordance with LAC 33:III.501.B.5.

If an internal combustion engine is considered to be a nonroad engine, then it should not be represented in an air permit. It is not a permitted source, not an insignificant activity in accordance with LAC 33:III.501.B.5, and not a Louisiana General Condition XVII activity as shown in LAC 33:III.537.

How does one determine if an engine is stationary or nonroad? The defninition of Nonroad Engine can be found in 40 CFR 1068.30. This definition is reproduced below:

> *Nonroad engine* means:
> (1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine:
> (i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or
> (ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or
> (iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.
> (2) An internal combustion engine is not a nonroad engine if:
> (i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition, or is subject to standards promulgated under section 202 of the Act (42 U.S.C. 7521); or

(ii) The engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act (42 U.S.C. 7411); or
(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph (2)(iii) does not apply to an engine after the engine is removed from the location.

Many of the provisions of this definition are straightforward and easy to understand. However, the final paragraph, Section (2)(iii), of the definition needs some explanation. For an engine to be considered a nonroad engine under Section (2)(iii), the engine must remain at a single location for less than 12 consecutive months or less. The definition indicates that a location is "any single site at a building, structure, facility, or installation." This means that the entire industrial plant is not considered to be a "location." A location is meant to be a building, structure, facility, or installation located within the entire industrial plant.

If a single engine is regularly moved every few months within the entire industrial plant, that engine would likely be considered to be a nonroad engine. However, if that engine is used to take the place of another engine, and the total time that both engines remained at the location is 12 consecutive months or greater, then the engine would be considered to be stationary engines and would be subject to air permitting requirements. This fact is important to note if applying for an Emergency Engine Regulatory Permit (See Section 2.3.6 for more details regarding Regulatory Permits). This type of Regualtory Permit allows for the installation of stationary and temporary engines. Normally, a temporary engine would be considered to be a nonroad engine and exempt from permitting. However, if the temporary engine were used to take the place of a stationary engine, it may be necessary to obtain a Regulatory Permit for the temporary engine if total time that both engines remained at the location is 12 consecutive months or greater.

For those engines that are located on barges or other marine vessels, these engines should not be represented in air permits at all. These engines are not subject to any state air permitting requirements. These engines would either be classified as nonroad engines or as marine engines depending on their use and/or method of installation. Both engine types are regulated by federal regulations that have not been delegated to LDEQ.

For those engines associated with land-based portable sources, they should not be represented in air permits if the engine is not expected to be located at the operational site (i.e., job site) for more than 12 months. If the engine may remain at the operational site for more than 12 months, then the engine should be represented in the air permit just like any other stationary source. The permittee can expect for additional recordkeeping conditions to be placed into the air permit to

document the information necessary to determine whether the engine is a nonroad engine or a stationary engine.

Determination of stationary status of an engine can be unclear and depends on the circumstances of each situation. If you have any questions about a specific engine, please contact the Air Permits Division at (225) 219-3181.

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4.0 How to Apply for a Permit

This section describes the proper manner in which to apply for any type of permit issued by the Air Permits Division of LDEQ. Please see Section 2.0 *What Do I Need to Apply For?* in order to determine the type of permitting action required to commence the activity in question.

Applications are usually submitted for one of the following reasons:

- to obtain a permit for a new facility or a modification of an existing facility;
- to reconcile emissions limitations established by a permit when new emissions factors or test data suggest the original basis for the limitations to no longer be representative; or
- to obtain a permit for an existing facility that is operating without a permit, but will be subject to permitting requirements. This condition may exist because:
    - the facility was in existence prior to June 19, 1969, a condition known as being "grandfathered"; or
    - the facility was previously specifically exempted because of its small size.

LDEQ's Small Business and Small Community Assistance Program (SBSCAP) is available to assist qualifying facilities and communities in preparing their permit applications. The SBSCAP personnel are well-versed in the permit application procedures and will be happy to aid qualifying facilities in their permit application efforts. Full details, including the criteria necessary to qualify for SBSCAP assistance, can be found on the web at http://www.deq.louisiana.gov.

The Louisiana Application for Approval of Emissions of Air Pollutants from Part 70 Sources and the Louisiana Application for Approval of Emissions of Air Pollutants from Minor Sources forms are designed to facilitate transmittal of the data needed by the Air Permits Division to assess the impact of air emissions from a proposed facility or modification and to correctly apply applicable laws and regulations. Authority to ask for this information is contained in the Louisiana Administrative Code, Title 33, Part III, specifically LAC 33:III.517.D. To avoid unnecessary delays, an application for construction of a facility or modification should be submitted as far in advance as possible. Exact processing times cannot be given and vary with the complexity of the application and the workload of the Air Permits Division. Be aware that either a permit or authorization to construct must be obtained before construction can commence.

The application forms are intended to apply to a single geographical location of a plant or facility. Facilities in geographically dispersed locations should be treated separately for the purpose of determining when to submit an application. In this case, a separate application must be submitted for each facility operating location. Pursuant to LAC 33:III.501.C.9, when a single site includes more than one process, a single permit may be issued to include all processes at the site. Conversely, multiple permits may be issued each of which may address one or more processes at the site.

4.1 Commonly Used Terms

Activity Number: This number identifies a specific permitting action for each Agency Interest Number (see definition below). It is largely used to refer to the permitting action within LDEQ during processing. However, this number can be useful to refer to permitting actions that are not assigned permit numbers, such as exemptions, variances, letters, etc. This number is shown on the first page of each permitting action issued by LDEQ. For permitting actions, it begins with the letters PER and is then followed by an eight (8) digit number.

Agency Interest Number: Also known as the AI number, the Agency Interest Number is a unique identifier assigned to each facility. Existing facilities in the state have AI numbers assigned to them. When contacting LDEQ about a facility, it is extremely useful to mention this number, since all of the data LDEQ holds on a facility is organized by AI number. Having this number handy will ensure faster service.

Administratively Continued: Administratively Continued status shields Part 70 sources during the interim period between timely submittal of a complete application and permit issuance. This status is provided for in LAC 33:III.507.E.3. In short, it protects the source from enforcement action that would arise from not having a permit during the time the permit application is being processed. This situation would arise when an applicant's current permit expires during the time that the applicant's permit renewal application is being processed.

There are several important points to note about the administratively continued status:

- To be eligible for this status, a source must make a timely submission of the application. See the guidance under the specific type of permit for which application is made to determine what constitutes a timely submittal.
- This status only applies if the application is timely and complete.
- This status applies to the initial Title V permit and to renewals.
- Neither the completeness determination nor the administratively continued status alleviates the permit applicant from the need to provide further information which the permitting authority determines necessary for processing the permit application. If a permit applicant does not submit required information on or before a written deadline, the administratively continued status may be lost. [LAC 33:III.507.B.2]

This status is codified in Part 70 at 70.7(b), and is described in the preamble to the final rule on page 32275 of the July 21, 1992, Federal Register.

Louisiana Toxic Air Pollutant Ambient Air Standards: These standards set atmospheric concentration limits on certain pollutants that are recognized by the State of Louisiana to be detrimental to the general health in concentrations that exceed the listed standards. These standards can be found in LAC 33:III.5112, Table 51.2.

NAAQS: This is an acronym for National Ambient Air Quality Standards. These standards set atmospheric concentration limits on criteria pollutants. No source is allowed, under any circumstances, to emit any of the following pollutants in a manner that will cause a violation of these standards.

Table 4: National Ambient Air Quality Standards

	Primary Standards		Secondary Standards	
Pollutant	**Level**	**Averaging Time**	**Level**	**Averaging Time**
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour	None	
	35 ppm (40 mg/m^3)	1-hour		
Lead	0.15 $\mu g/m^3$	Rolling 3-Month Average	Same as Primary	
Nitrogen Dioxide	53 ppb	Annual (Arithmetic Average)	Same as Primary	
	100 ppb	1-hour	None	
Particulate Matter (PM_{10})	150 $\mu g/m^3$	24-hour	Same as Primary	
Particulate Matter ($PM_{2.5}$)	15.0 $\mu g/m^3$	Annual (Arithmetic Average)	Same as Primary	
	35 $\mu g/m^3$	24-hour	Same as Primary	
Ozone	0.075 ppm (2008 std)	8-hour	Same as Primary	
	0.08 ppm (1997 std)	8-hour	Same as Primary	
	0.12 ppm	1-hour	Same as Primary	
Sulfur Dioxide	0.03 ppm	Annual (Arithmetic Average)	0.5 ppm	3-hour
	0.14 ppm	24-hour		
	75 ppb	1-hour	None	

Permit Number: A unique permit number is assigned to each permit issued. This number identifies the location of the facility and the type of permit that has been issued. Only permits are issued permit numbers. No other permitting action is issued a permit number.

Responsible Official: A person who fulfills any of the following criteria [LAC 33:III.502]:

For a corporation:

- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function
- Any other person who performs similar policy or decision-making functions for the corporation

- A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit. This person must also meet one of the following qualifications:
    - The manufacturing, production, or operating facilities for which this person is responsible must employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars).

    - The delegation of authority to such representatives is approved by LDEQ prior to submittal of any certification by such person.

For a partnership or sole proprietorship:
A general partner or the proprietor, respectively. If a general partner is a corporation, see the criteria above that apply to a corporation.

For a municipality, state, federal, or other public agency:
A principal executive officer or ranking elected official. For the purposes of this definition, a principal executive officer of a federal agency includes the chief executive officer having a responsibility for the overall operations of a principal geographic unit of the agency; or

For all affected (Acid Rain) sources:
- The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or 40 CFR Parts 72 and 75 are concerned will be considered to be a Responsible Official for matters pertaining to these regulations. See the definition of "designated representative" under 40 CFR 72.2 to determine who can be considered a designated representative.

- The designated representative for any other purposes under 40 CFR Part 70 or LAC 33:III.507. See the definition of "designated representative" under 40 CFR 72.2 to determine who can be considered a designated representative.

Substantial Modification: Any modification that results in a significant increase in the amount of any regulated air pollutant or results in the significant emission of any air pollutant not previously emitted (from LAC 33:I.Chapter 15). It should be noted that this is NOT the same as a Significant Modification.

TEMPO: An acronym for Tools for Environmental Management and Protection Organizations. This is the main computer database program used by LDEQ to store data and generate permits on all facilities and units.

4.2 How to Complete an Air Permit Application

The Louisiana Application for Approval of Emissions from Part 70 Sources should be used to apply for a Part 70 (Title V) and/or a Prevention of Significant Deterioration (PSD)/Nonattainment New Source Review (NNSR) permit. The Louisiana Application for Approval of Emissions from Minor Sources should be used to apply for a State Permit. The Louisiana Application for Approval of Miscellaneous Permitting Actions should be used to apply

for an Exemption, Exemption to Test, Variance, Letter of Response/Letter of No Objection, Administrative Amendment, Permit Rescission, Application Withdrawal, Change of Tank Service, Relocation of a Portable Facility, or an Authorization to Construct and Operate (ATC). Follow the guidance provided in the accompanying instructions to properly complete the appropriate application. Be sure to fill in all blanks and fields according to the guidance. Also, be sure to review Section 5.0 *How Can I Speed The Processing Of My Application?* for more information on how the proper completion of the permit application can accelerate its processing time.

For any application pertaining to a new facility which will be a major source or to a substantial permit modification, the applicant must publish a notice, provided by LDEQ, of the Administrative Completeness determination in a major local newspaper of general circulation. The applicant must also submit proof of this notice to LDEQ. The notice and the submittal of the proof of the notice must be completed within thirty (30) days of receipt of a letter from LDEQ stating that the application is considered Administratively Complete. See section 6.2 *Administrative Completeness* for more details.

All of the above referenced forms can be found on the LDEQ website: http://www.deq.louisiana.gov.

4.2.1 Acceptable Answers

If certain questions are not applicable, indicate "none" or "not applicable" (N/A). Terms such as "not significant," "nil," "trace," etc., are not appropriate; use of a notation indicating less than a certain quantity (such as "<0.01") is preferred. See the How Emissions Should Be Reported section for more details on how this pertains to the reporting of emissions. The use of 100% control efficiency is not acceptable for emission generating sources.

4.2.2 Additional Submittals

In addition to completing the appropriate application in the manner described in the application's accompanying instructions, some additional submittals may be required in order to submit a full and complete application. These additional submittals are Emission Calculations/Determinations, Plot Plan, Site Map, Process Flow Diagram, Air Dispersion Modeling, and a Compliance Assurance Monitoring (CAM) Plan. Air Dispersion Modeling and a CAM Plan are not required in every case. See Section 3.1 *What is Dispersion Modeling and When Is It Required?* for more details on Air Dispersion Modeling and Section 1.2.5 *Regulations* for more details on CAM Plans.

4.2.3 Instructions for Emission Calculations/Determinations

Emissions calculations and any other supporting information that forms the basis for the emissions estimate(s) must be submitted with the application. These calculations should be as detailed and thorough as possible to promote speedy review. Detailed emissions calculations must be provided to support the emissions estimates as stated for all permitted sources, including General Condition XVII Activities (GCXVII) and Insignificant Activities that appear in LAC 33:III.501.B.5.A and D. At a minimum, the calculations must show which formulas, emission

factors, stack test data, etc, were used in order to arrive at the emissions estimates. The origin of the numbers used in the calculation or the origin of the result of the calculations must be clear. These calculations should be provided in such a manner that a person who is not familiar with the specific functions of the process can easily and readily follow them. Fugitive emission estimates should be treated in similar fashion. See the Emission Estimation Methods section earlier in this manual for further details.

Fugitive Emission Options

There are two options for permitting fugitive emissions in a permit application. The first option is to utilize the fugitive emission component inventory and published emission factors or correlation curves to generate a proposed allowable emission rate.

An alternative option is to accept an enforceable permit condition which limits the total fugitive emission component inventory for the area(s) being permitted. Allowable emission rates are based on the historical average emission rate experienced. These rates are provided in the permit application to serve as the range of expected emissions. Compliance with fugitive emissions is stewarded by the facility limiting its component inventory. If additional components are required in the future, the facility will need to submit a permit modification to increase its allowable inventory of components and the associated emission.

4.2.4 Plot Plans

Plot plans are required in order to show the location of the emissions sources in relation to property boundaries. It should contain a descriptive title block, distance scale, and North direction. Plot plans used in permit applications are usually derived from engineering drawings of the operating units. Not all permitting actions covered in the Louisiana Application for Approval of Miscellaneous Permitting Actions require this item. When using this form, consult the instructions to determine when it is required.

4.2.5 Site Maps

Site maps are required in order to show general plant features, site boundaries, and the location of the site in relation to nearby highways, residential areas, or towns. They should also contain a descriptive title block, distance scale, and North direction. The maps should show the names of the surrounding highways and towns. Site maps used in permit applications can be derived from U.S. Geological Survey (USGS) maps. These maps are available in local libraries or may be purchased from map suppliers. They are also available directly from the USGS. Please see the Section 5.0 *How Can I Speed the Processing of My Application?* to determine how a properly prepared map can contribute to faster processing of the application. Not all permitting actions covered in the Louisiana Application for Approval of Miscellaneous Permitting Actions require this item. When using this form, consult the instructions to determine when it is required.

4.2.6 Process Flow Diagrams (PFDs)

A Process Flow Diagram (PFD) is required in order to show how the process(es) within a given facility or unit work(s). Each piece of equipment should be clearly and plainly labeled on this

PFD, as well as any insignificant activities. Sources must be labeled with the source identification numbers provided in the application. It should be plain to see exactly what flows into each piece of equipment, what pieces of equipment supply this flow, and where this flow goes after exiting each piece of equipment. If a source to be permitted is not represented in this PFD, then the PFD does not contain sufficient detail. It is important to ensure that the PFD supplied with the application is current and is consistent with the application.

The PFD should show exactly how a piece of equipment vents to the atmosphere. For example, if the piece of equipment is a boiler, the PFD should show how many stacks the boiler has. If the vapor space of a storage tank vents to a flare, the routing path should be shown. Please see Section 5.0 *How Can I Speed the Processing of My Application?* to determine how a properly prepared PFD can contribute to faster processing of the application. Not all permitting actions covered in the Louisiana Application for Approval of Miscellaneous Permitting Actions require this item. When using this form, consult the instructions to determine when it is required.

4.3 What Should I Submit?

Submit the original and two copies of the application and application transmittal form to the attention of the Assistant Secretary of the Office of Environmental Services, Air Permits Division at the following address:

Louisiana Department of Environmental Quality
Office of Environmental Services
Air Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313

Send a copy of the application to EPA Region VI at the address listed below if the application is for a Part 70 permit or a PSD/NNSR permit. Keep a date stamped copy for your records.

EPA Address

Chief, Air Permits Section (6PD-R)
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

If applying for an initial Part 70 Operating Permit and/or a Prevention of Significant Deterioration (PSD) or NNSR permit, a copy of the Environmental Assessment Statement (also known as answers to the "IT" questions) must be submitted to LDEQ, the local governmental authority, and the designated public library. These copies must be submitted to the local governmental authority and designated public library at no additional cost to the local governmental authority or the designated public library.

4.3.1 Electronic Submittal

LDEQ is in the process of developing electronic methods of submitting applications for the various permitting actions that are issued by the Air Permits Division. More information will be entered here as it becomes available.

4.3.2 How Do I Calculate the Fee?

LAC 33:III.207 states that each application for which a fee is prescribed must be accompanied by a remittance in the full amount of the fee. No application will be approved or processed prior to payment of the full amount specified. LAC 33:III.211.B.13 states that LDEQ shall determine the type of fee based on the work load created by the permit application. The fee schedule can be found in LAC 33:III.223. Applications for unit-specific permits should include the proper fees for the unit of concern only.

Attached to each application for a permitting action should be a remittance for the full fee amount required by the regulations. If paying by check, the check must be made out to "Louisiana Department of Environmental Quality." If paying an application fee using an Electronic Fund Transfer (EFT), complete the relevant "Remarks" field provided by your financial institution. These remarks should, at a minimum, state the Agency Interest Number(s) and the name of the facility(ies) or process unit(s) (for process unit-specific permits) to which the EFT should apply.

LDEQ strongly encourages applicants **NOT** to use EFT for newly constructed facilities or for facilities that do not have an Agency Interest Number assigned to them. If the applicant must use an EFT for such a facility, please contact LDEQ prior to submittal of the EFT for guidance.

For the purposes of fee calculation, all references to capacity or rated capacity will be understood to refer to the maximum permitted capacity of the unit(s) in question.

For modifications only:
If only a portion of the facility is being modified, then application fees must only be paid for that portion. This can only happen when **both** of the following two conditions are true:

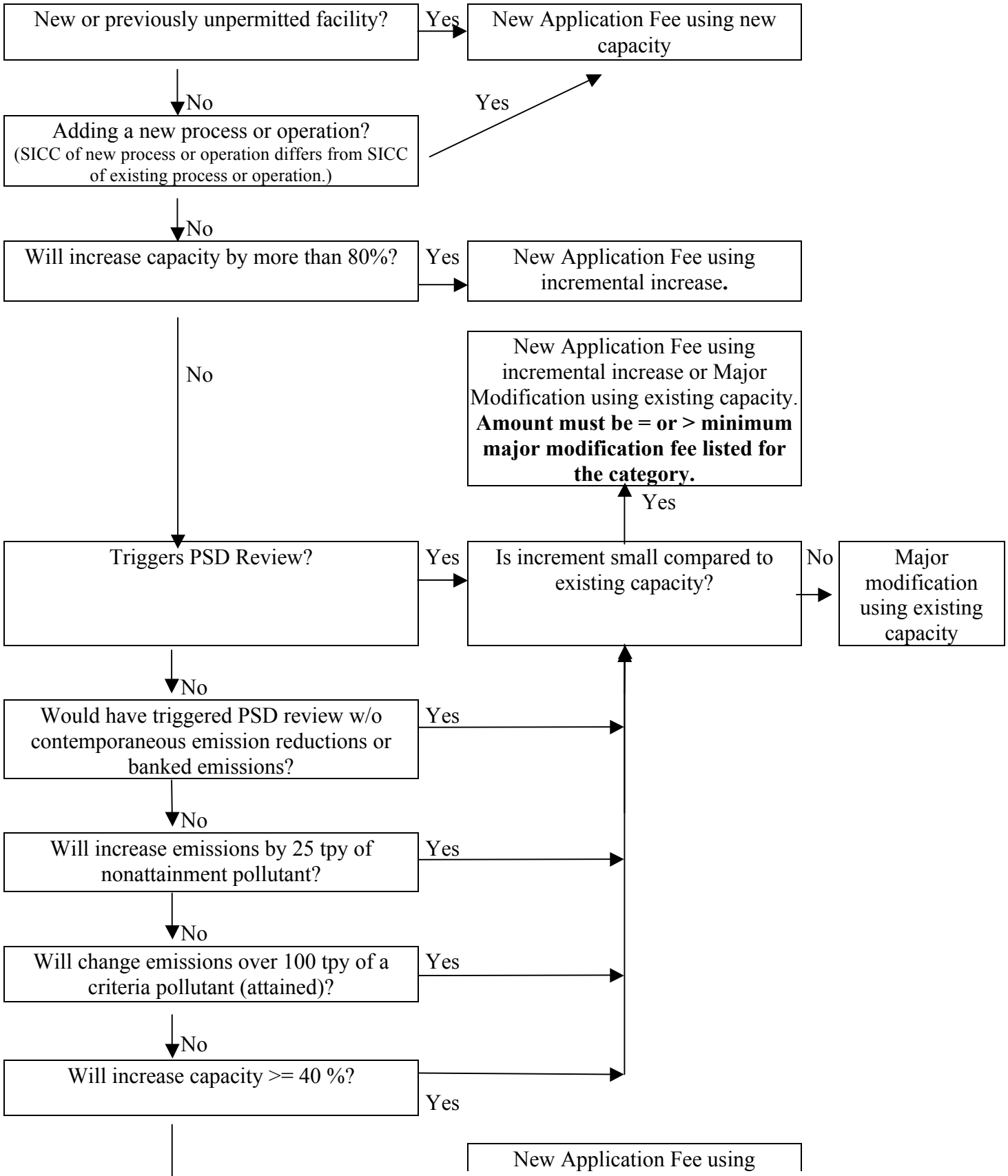
- The modified portion of the facility is entirely described by its own SICC [LAC 33:III.211.B.6]; and

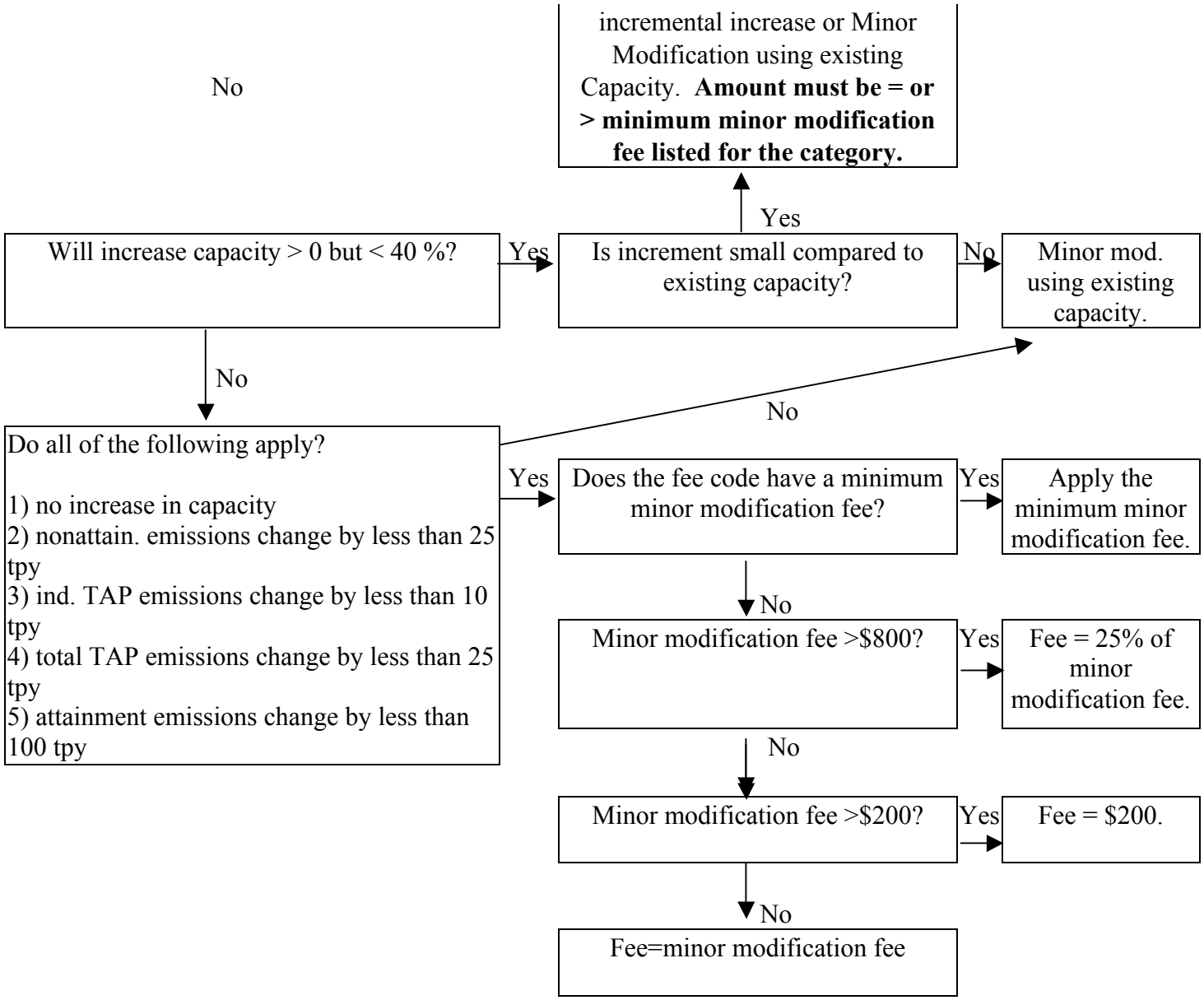
- The entire facility does not fall under a single fee category [LAC 33:III.211.B.3].

This only applies to application fees and does not apply to annual maintenance fees.

Use the current fee schedule to check the correct fee for the activity.

1. Utilize the decision tree below for each fee code to determine the appropriate minor, major or new application fee amount to apply.
2. After the fee amounts are determined include the NSPS, Air Toxics, and/or PSD surcharges, if they apply.


New or previously unpermitted facility?
Yes
New Application Fee using new capacity
No
Adding a new process or operation?
(SICC of new process or operation differs from SICC of existing process or operation.)
Yes
No
Will increase capacity by more than 80%?
Yes
New Application Fee using incremental increase.
No
New Application Fee using incremental increase or Major Modification using existing capacity. Amount must be = or > minimum major modification fee listed for the category.
Yes
Triggers PSD Review?
Yes
Is increment small compared to existing capacity?
No
Major modification using existing capacity
No
Would have triggered PSD review w/o contemporaneous emission reductions or banked emissions?
Yes
No
Will increase emissions by 25 tpy of nonattainment pollutant?
Yes
No
Will change emissions over 100 tpy of a criteria pollutant (attained)?
Yes
No
Will increase capacity >= 40 %?
Yes
New Application Fee using



Example 1: Permit modification for a facility in an attainment parish, which includes the following units with the following changes:

Unit 1: Commercial hazardous waste incinerator - capacity of 63 MM BTU/hr, no change in capacity and no increases in emissions.

Fee code=1532. The fee code has a minimum, so charge that value ($4789.00).

Unit 2: Toluene diamine manufacturing - increasing capacity from 80 MM lbs/yr to 150 MM lbs/yr and requires a PSD permit.

SICC=2865 and fee code 0610 applies. Increase in capacity is greater than 80% so the new application fee should be applied. Multiply the new application fee times the new

capacity and NOT on the incremental increase ($37.80*150 MM lbs/yr = $5,670.00). Then apply the PSD surcharge ($5,670.00*1.5=$ 8,505.00). However, this calculated amount is less than the minimum of $9,340.00 for this fee code, so the PSD surcharge should be applied to the minimum amount instead ($9,340.00*1.5 = $14,010.00).

Unit 3: PVC manufacturing - increasing capacity from 10 MM lbs/yr to 11 MM lbs/yr, resulting in an increase in VOC emissions of 45 tpy. However, contemporaneous netting prevented a PSD review.

SICC=2821 and fee code 0560 applies. The netting out of PSD triggers the major modification fee review. However the increment increase is 10% (small). Therefore, two options exist:

1) apply the new application fee to the incremental increase
2) apply the major modification fee to the existing capacity.

New application fee application: $94.55*1 MM lb/yr=$94.55
Major modification fee application: $56.73*10 MM lb/yr=$567.30
Major modification minimum=$5,603.00, since both are less than the minimum, apply the minimum ($5,603.00).

Total fee = $4,789.00 + $14,010.00 + $5,603.00=$10.167.25

Example 2: Initial Title V permit for a paper mill with a capacity of 2000 tons per day. There is a 5% increase in capacity, which is equivalent to 100 tons per day. SICC=2621 thus fee code 0340 applies. Per LAC 33:III.211.B.13.c, when the capacity increase is less than 40%, the minor modification fee can be used. Since the capacity increase is small compared to the existing capacity, the applicant has the option of basing the fee on the new application fee or the minor modification fee. The applicant can choose the smaller fee as long as it is larger than the minimum minor modification fee. New application fee is (100 tons per day)*($28.35) = $2835.00. Minor modification fee is (2000 tons per day)*($5.65) = $11,300.00. The smaller fee is $2835.00; however, the fee cannot be smaller than the minimum minor modification fee for fee code 0340, which is $3,891.00. Therefore, the applicant owes $3,891.00.

Example 3: Initial Title V permit for a sugar mill with a capacity of 2000 lb/hr. The application includes emission points that were previously omitted from the last state permit. There is no increase in capacity. SICC=2062 thus fee code 0130 applies. Since there is no increase in capacity and small changes in nonattainment, attainment, and TAP emissions then apply the minor modification fee minimum of $1,866.00.

Example 4: Title V modification permit for an oil and gas production facility. Existing capacity of the facility is 20,000 MM ft^3/day. There is a 5% increase in capacity. Emissions of VOC are greater than 100 tons per year, but less than 250 tons per year. SICC = 1311 thus fee code 0041 applies. Per LAC 33:III.211.B.13.c, when the capacity increase is less than 40%, the minor modification fee can be used. Since the capacity increase is small compared to the existing capacity, the applicant has the option of basing the fee on the new application fee or the minor modification fee. New application fee is $756.00. Minor modification fee is $151.00. Applicant owes $151.00.

Example 5: Minor source permit modification for a gas transmission facility located in an attainment parish. The facility has 3,000 horsepower of existing compression capacity. The facility seeks to add a 500 hp compressor for a grand total of 3,500 hp. SICC = 4922, therefore fee code 1470 applies. The modification will increase capacity by less than 40% and does not meet the other qualifications of a major modification. Thus, minor modification fee applies. Minor modification fee is $52.96/100hp. $52.96 * (3,500 hp/100 hp) = $1,853.60. As there is no minimum modification fee for this fee code, the calculated fee is the minimum minor modification fee. Since this facility seeks to increase capacity, LAC 33:III.211.B.13.d does not apply. Applicant owes $1,853.60.

Example 6: Existing natural gas-fired power generation facility submits permit application in order to reconcile emissions limits. SIC = 4911, therefore fee code 1420 applies. There is no change in capacity. The PM_{10} emissions limits will increase by greater than 100 tpy as a result. Per LAC 33:III.211.B.13.b.iv, major modification fee applies. Since the capacity increase is small compared to the existing capacity, the applicant has the option of basing the fee on the new application fee or the major modification fee. Fee cannot be less than minimum major modification fee. Applicant chooses to base fee on new application fee and incremental capacity increase. $26.39 * 0 MW = $0. Fee cannot be less than minimum major modification fee. Applicant owes minimum major modification fee of $3736.00.

4.3.3 Signature Authority

Any application form, report, or compliance certification must be signed and certified by the Responsible Official or his designee. The certification must state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the application are true, accurate, and complete [LAC 33:III.517.B.1]. Any application form, report, or compliance certification that is not signed and certified by the Responsible Official or his designee will not be accepted or processed. This includes any additional information that an applicant submits in support of an application, report, or compliance certification.

Please see the definition of Responsible Official in Section 2.3.1 *Commonly Used Terms* for more information.

Any permit application or additional information submittal for a Part 70 source must be signed and certified by a Professional Engineer who is licensed in the State of Louisiana in accordance with the Louisiana Professional Engineers and Land Surveyors Act. The certification must state that the engineering calculations, drawings, and design are true and accurate to the best of the Professional Engineer's knowledge.

4.3.4 Demonstration of Compliance Required

All new or modified emission points must demonstrate compliance with all applicable state and federal air quality regulations (e.g., NSPS, PSD, and NESHAP). A statement of the compliance status, commitment to timely compliance with new requirements, and a schedule for compliance certifications is required.

5.0 How Can I Speed the Processing of My Application?

5.1 Background

A common concern among applicants is the length of time it takes LDEQ to process and reach a final decision once an application is submitted. This timeframe is dependant on a number of factors such as complexity of the application, the workload of the Air Permits Division, the workload of the individual permit writer to whom the application is assigned, and any required public participation timeframes. These factors are out of the control of applicants.

However, an applicant can control the quality and thoroughness of the application. Lack of information in a permit application is a factor that greatly delays the processing of a permit application. When the application does not supply sufficient information, the permit writer must contact the applicant to obtain the information required. Then the permit writer must wait for the required information to be submitted. Sometimes this process can take quite some time. The best way to keep this delay to a minimum is to supply as much information as possible in an application.

The following pages describe pieces of information that permit writers most often have to request. If applicants will provide the information on the following pages in their applications, it is very possible that their applications can be processed in a more expeditious manner.

5.2 Regulatory Analysis

The applicant can speed the processing of an application by providing the following information in the initial submittal of an application:

Provide a detailed regulatory analysis. The format for this information is in Table 2 of the Air Permit Application. Many applicants seem to copy the regulatory applicability from their previously issued permit. While that regulatory analysis should be correct, applicable regulations may have changed since the issuance of the previous permit or new regulations may have been promulgated since the issuance of the previous permit. Many regulations also have a number of compliance methods from which the applicant can choose. Also, more detail is now provided in permits than in the past. It is now necessary to specify exactly how a permittee will comply with the applicable regulations. The permit writers are familiar with various ways in which a permittee can comply, but they likely do not know the method by which permittee would like to comply unless it is specified in the application. This is especially true for sources subject to Maximum Achievable Control Technology (MACT). It is beneficial to specify exactly which MACT applies to each source and to specify exactly what this MACT requires the facility to do.

The following are some specific steps that should be taken in order to properly prepare a regulatory analysis:

- Fill in all blanks in the application.

- Specify all of the regulations applicable to each point source and all of the regulations applicable to the facility as a whole.

- Specify exactly how the facility will comply with each and every applicable regulation.

- If the applicant believes that the source is exempt from a specific regulation, the reasoning behind this should be explained. The applicant should also include the regulatory citation that provides for this exemption.

- Search each regulation for compliance methods and if the regulations allow, choose a compliance method.

- Specify the regulatory citation that requires the source to be subject to the regulation in question.

- Specify all MACT requirements with which each point source or facility as a whole must comply. It is not sufficient to provide a general citation of the applicable regulation. This only communicates to the permit writer that the source is subject to MACT. The permit writer must know what the facility must do in order to comply with MACT.

- If the source is a new or newly-identified source of Toxic Air Pollutants (TAP) located at a major source of TAP, and the source emits a Class I or Class II TAP for which facility-wide emissions exceed its MER, the facility must perform a MACT analysis for the emission point.

- Provide not only the construction date of all pieces of equipment, but also the initial startup date of the facility to be permitted. Where appropriate, it is preferred that this information is provided in the appropriate blank on the Emission Inventory Questionnaire (EIQ) forms. Many regulations depend on this information to determine applicability.

- In the event the permit application represents a unit that is a portion of a larger facility, the TAP emissions for the entire facility should be provided.

- If EPA has approved an alternate limitation, monitoring scheme, etc., then the permittee should submit the EPA letter(s) that allow for this.

- A new regulatory analysis must be performed for each application submitted. Regulations change frequently and different requirements may be applicable to a given source.

- A good rule of thumb is that if the application references something that was submitted to EPA or LDEQ in order to comply with a regulation, then proof of that submittal should be included in the permit application. This includes, but is not limited to, stack test results, initial notifications, BACT box determinations, etc. This does NOT include quarterly or yearly reports or other such periodic submittals. A simple reference to an EDMS Document Identification Number would suffice here.

5.3 Process Information

The applicant can speed the processing of an application by providing the following information in the initial submittal of an application:

Provide detailed information on the process(es) in question, including operating parameters of the pieces of equipment in the process(es). Some of this information is supplied on the process flow diagram (PFD) and some is generally supplied on the EIQ forms.

The PFD should include enough detail that the permit writer can decipher where each piece of equipment is located in relation to all other pieces of equipment. Each regulated piece of equipment should be clearly and plainly labeled on this PFD. This applies to equipment that emits any pollutant as well as equipment that does not emit any pollutant. In some cases, certain pieces of equipment are regulated even though they do not directly emit a pollutant. If there are any questions regarding the level of detail needed, the applicant may contact the Air Permits Division for case-by-case guidance.

Where appropriate, the operating parameters should be supplied on the EIQ forms. Be sure to fill in all appropriate blanks on these forms. For control devices and for pieces of equipment that are controlled by control devices, the control efficiencies should be supplied. It is important to supply the operating parameters for all pieces of equipment so that appropriate permit conditions can be established. If some of this data is missing, it could lead to a limit being placed on a given piece of equipment that is not necessary. A good rule of thumb is that if this operating parameter was required to estimate the emissions for this source, then LDEQ needs to know that operating parameter. This information may include temperature, pressure, vapor pressure, flow rate, volume, heat input, production rate, control device removal efficiency, and/or control device operating parameters.

5.4 Emissions Calculations

The applicant can speed the processing of an application by providing the following information in the initial submittal of an application:

Provide detailed emissions calculations to support the emissions estimates provided for all permitted sources, including General Condition XVII Activities (GCXVII) and Insignificant Activities that appear in LAC 33:III.501.B.5.A and D. The calculations should be sufficiently detailed so that there is no uncertainty regarding the origin of the numbers used in the calculation or the origin of the result of the calculations. If an equation is used from any scientific literature, the origin of the formula should be cited and a copy of the page on which the formula appears and is explained should be provided. For each formula used, at least one example calculation should be shown in which the numbers used are inserted into the formula and the result of the calculation is shown.

The origin of all numbers used in all formulae should be plain. This includes the origin of any emission factors used. If the formula uses any standard coefficients, the origin of the coefficients should be cited in the same manner as the relevant formula. All of the variables used should be

clearly labeled. All conversion factors should be labeled with the proper units. If the method by which the emissions were calculated involves the use of more than one formula, then all of the formulae that are necessary to arrive at a given emission estimate should be shown in a step-by-step format.

The following are some specific examples of how to properly prepare emissions calculations:

- Fill in all blanks in the application.
- The origin of any formula used to calculate an emission factor should be cited.
- If emission factors are derived from standard literature, the applicant should verify that the most current emission factors are used. It would be helpful to submit a copy of the page on which this emission factor appears.
- If emission factors are derived from performance testing, a copy of the pertinent portion of the results of the performance test with the pertinent data prominently highlighted should be submitted.
- The origin of any numbers, coefficients, conversion factors, and/or emission factors used in the calculations should be cited.
- All numbers should be labeled with the proper units. If a number has no units, it should be shown that the number is dimensionless.
- A complete, step-by-step example calculation path – from beginning to end – should be provided to show how an emission estimate is obtained. If it is necessary to use more than one formula to obtain the final emission estimate, then all of the formulae used should be shown in the example calculation path.
- These calculations are viewed by the general public and, to the extent practical, they should be straightforward enough for anyone who is not an environmental professional to understand. The permit writer assigned to the permit application must also clearly understand the calculations.
- TAP should be speciated according to the guidance found in Section 1.2.3 *Emissions Estimation Methods.*

5.5 Expedited Permit Program

LDEQ has initiated an Expedited Permit Program, in accordance with LAC 33:I.Chapter 18, to address the needs of the regulated community to quickly receive a permitting action in order to continue operations in a competitive manner. Under this program, the various LDEQ staff will primarily spend overtime hours to complete the work necessary to issue a permit by the deadline requested by the applicant. When the applicant completes the *Request for Expedited Permit Processing* form, which can be found at the internet link below, the applicant will request a date by which they wish for the final permit descision to be made. If this date is unrealistic or

impossible, the applicant may be contacted to determine an acceptable date that considers all aspects of the permitting process. The applicant may also designate the maximum amount that they are willing to pay in order to expedite the permitting action. In the event that enough overtime is billed such that this maximum amount is exceeded, the permit will no longer be processed as an expedited permit unless the applicant chooses to increase this maximum.

After the permit is issued, the appropriate entity will be billed for the amount necessary to reimburse LDEQ for overtime pay. Failure to reimburse LDEQ for this amount may result in a revocation of the permitting action for which application was made [LAC 33:I.1807.C].

For more details, please see the department's website:
http://www.deq.louisiana.gov/portal/tabid/2622/Default.aspx.

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6.0 What Happens To My Application After It Is Submitted?

6.1 Background

Once LDEQ receives an application for a new facility, initial permit, renewal, or significant modification, it undergoes an Administrative Completeness review. The Permit Application Administrative Review Group (PAAR) receives the mail and performs the review for administrative completeness. This review is intended to verify that the document contains the proper components.

Other permitting action types (exemptions, variances, etc.) are routed to the Air Permits Supervisor for assignment to a Permit Writer. They skip the Administrative Completeness review.

6.2 Administrative Completeness

What level of detail is needed to have an Administratively Complete permit application?

In general, all permit applications require the information specified in LAC 33:III.517.D. Minor permit modifications require additional information as specified in LAC 33:III.525.B. Other requirements not required for determination of completeness, such as confidential information, are addressed elsewhere in this guidance document.

Once a permit application is received, the LDEQ has specific periods of time to issue a notification of completeness determination to the owner/operator. If the determination is not issued within the specified time frame, the application will be deemed complete. Per LAC 33:III.519, LDEQ has 60 days to issue a notification of completeness determination for applications related to new facilities, initial permits, renewals, and significant modifications. Administrative amendment requests for permit applications do not require a completeness review.

LDEQ will review the application to ensure that it contains all required information. If any required information is lacking, the application is not deemed to be complete. Comments and deficiencies will be noted in writing to the applicant. The applicant, pursuant to LAC 33:III.519.A.2., will have no more than 30 days (unless a different time table is specified by the LDEQ) to respond to deficiencies in applications for new facilities or significant modifications.

For any application pertaining to a new major source or to a substantial modification, the applicant has thirty (30) days to complete the following steps:

1. The applicant must submit to a major local newspaper of general circulation a notice of the completeness determination. The text of this notice will be provided by LDEQ.
2. The applicant must obtain proof of its publication and provide this proof to LDEQ.

Why is an Administratively Complete permit application important?

LDEQ is required by LAC 33:I.Chapter 15 to issue a notice of a completeness determination for each Substantial Modification and each new source (see the definition of Substantial Modification in Section 4.1 *Commonly Used Terms* for more details).

Submittal of a complete application is important for two reasons:

1. It starts the clock on the application review period. Per La R.S. 30:2022(B)(2), a final decision on certain applications must be made within 300 days of receipt of a permit application, except where additional time is required for the applicant to revise or supplement technical information or deficiencies.

2. An application, submitted on time, will allow for the permit for the source to be "administratively continued" (after the expiration date of the facility's permit).

Therefore, if the application is found to lack the necessary level of detail, the 300 day time period mentioned above may be "stopped" in order to allow the applicant to address this.

Regulations promulgated under 40 CFR 70.5(a)(2) specify a 60 day period for determining completeness. If a completeness determination has not been made within this time, the permit application is deemed complete. If after deeming a permit application complete, LDEQ later finds that it requires additional information to complete the review, LDEQ must notify the applicant of the information needed and provide a reasonable time for response. The permit applicant must then supply the requested information within the specified time to maintain the administratively continued status.

If no deficiencies are found or the outstanding deficiencies are corrected, the application is routed to the appropriate Air Permits Supervisor. The supervisor assigns a Permit Writer to the application.

6.3 Technical Completeness

What level of detail is needed to have a Technically Complete permit application?

Technical completeness encompasses a detailed review of the emissions calculation, regulatory analysis, and any supporting materials provided by the applicant such as performance test results, data provided by the manufacturer of the equipment, a process flow diagram prepared according to the above guidance, etc. There is no limit to the amount or types of additional supporting information that can be provided.

The Permit Writer's technical review is intended to verify that the emissions estimations and regulatory analyses performed in the permit application represent an accurate and complete picture of the status of the facility. During the detailed permit application review process, the Permit Writer is trying to address two main questions. The first question is: Does the information provided in the permit application accurately reflect the process(es), control equipment, and operating conditions in such a manner such that one could reasonably expect to achieve

compliance with applicable regulations and requirements? The second question is: What permit conditions and limitations should be included to assure compliance with applicable regulations and requirements? In answering the second question, the permit writer begins to draft permit conditions that will become the basis of the final operating permit. A well-developed permit application will provide all the essential information to answer the two questions. The application may even include proposed permit requirements.

In the event of any technical deficiencies or any need for additional information, the permit writer will notify the facility or their designated representative that additional information is needed. This notice may occur any time during the technical review and will specify a reasonable time for response. Generally, thirty (30) days is allowed. The applicant must respond within the time specified and provide all requested information required to complete the technical review. For Part 70 sources, failure to respond may result in the application being returned and loss of the currently effective permit's administratively continued status. The applicant may request additional time to respond; however, approval of this request is at the sole discretion of LDEQ.

Once the permit writer has completed the review of the application and assembled a draft permit, the draft permit will be routed to the following:

- Environmental Technology Division for NAAQS/AAS review and dispersion modeling
- Technical Advisor(s), for any areas of special concern such as PSD or NNSR issues
- The appropriate Air Permits Supervisor
- The appropriate Air Permits Manager
- The Assistant Secretary for approval for public notice (if required) or for a final decision (if public notice is not required or has been satisfied along with all other requirements)
- The Public Participation Group (PPG) of the Environmental Assistance Division (if public notice is required)

6.4 Additional Information Submittals

Many times, it becomes necessary to clarify, update, or completely replace information that was submitted in an application for LDEQ approval. This can be done through an Additional Information submittal. Authority to ask for additional information as stated below is provided for in LAC 33:III.517.

All Additional Information must be submitted in hard copy and must be signed and certified by the Responsible Official (see the definition of Responsible Official Section 4.0 *How to Apply for a Permit*). For Additional Information that is submitted for a Part 70 source, the Additional Information must also be signed and certified by a Professional Engineer licensed in the State of Louisiana (if the additional information affects the engineering calculations, drawings, or design). Please see Section 4.3.3 *Signature Authority* for more information.

Any time that the submittal of Additional Information will result in a change of the information as originally presented in an application currently under review, the form(s) on which it appears must be submitted again, showing the updated information.

Though not required, it is highly recommended that the applicant list the Agency Interest Number and Activity Number of the permit application on all additional information submittals, if known. Both of these numbers appear on any correspondence sent from the Air Permits Division. If the applicant does not know these numbers, they are encouraged to contact their permit writer or the Air Permits Division at (225) 219-3181. Referencing these numbers will speed the processing of the additional information submittals and ensure that they arrive on the desk of the appropriate permit writer as quickly as possible.

There is no fee associated with submitting Additional Information and there is no limit to the number of Additional Information submittals that can be made. However, if the number becomes large, LDEQ may request that a new application be submitted that will replace all Additional Information submittals and pending permit applications associated with the permit being sought.

6.5 Application Review Status

Once an application has been deemed to be administratively complete, the permit applicant can electronically determine the review status of the permit application from the LDEQ web site. This review status tool will show the applicant when the permit writer has received the permit application, when technical review has been completed, when the draft permit has been forwarded for internal review, and other useful data. This information can be accessed from the LDEQ web site at www.deq.louisiana.gov.

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7.0 Once I Have Received My Permit, What Else Do I Need To Know?

7.1 Background

An air quality permit is effective upon issuance, which occurs once the appropriate official at LDEQ signs the permit, unless another date is specified in the permit. Once the permit has been issued, there may be a number of issues of which the permittee may need to be aware. These issues include:

- General Conditions that are included in each permit that is issued by LDEQ
- Miscellaneous Permitting Actions
- Emission Reduction Credit (ERC) Banking

7.2 General Conditions

General Conditions appear in each permit issued by LDEQ. They establish requirements that apply to each permittee. The permittee must comply with these conditions as well as the Specific Conditions (i.e., Specific Requirements) that appear in the issued permit. The General Conditions are not customizable for each individual permittee.

Each permittee is strongly encouraged to become familiar with the General Conditions within any effective permits that it holds.

The Part 70 General Conditions section of a Part 70 permit lists additional applicable rule requirements that the permittee must adhere to, as with any other permit condition. These requirements in general are common to all Part 70 facilities. The general conditions include provisions such as annual fee payment, permit renewal and expiration, transfer of ownership or operation, property rights, submission of documents, inspection and entry procedures, reopen for cause, and severability. These conditions are federally enforceable and, therefore, must be included in the compliance certification.

Part 70 General Condition V is based on 40 CFR 64.7(c). The permittee should exclude time periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments) from the calculated percentage. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

An example: The month of May has 31 days, or 744 hours. If monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments) equated to 48 hours, then the 90% standard should be evaluated against 696 hours.

7.3 Miscellaneous Permitting Actions

Below is a list of various actions for which a permittee can apply to clarify or satisfy permit conditions. These actions are most appropriately applied for once a permittee has been issued a permit.

7.3.1 Letters

Description of Action

Occasionally an applicant may require clarification on a given topic or otherwise seek concurrence that an activity does not require formal authorization. These are generally called Letters of Response and Letters of No Objection.

Document(s) to Submit

An application for a Letter should include:

- Louisiana Application for Approval of Misc. Permitting Actions
- Detailed calculations of emissions, if applicable
- Descriptions of the process and operating conditions as they relate to the Letter's subject matter
- Thorough description of the matter of concern
- Supporting documentation, which may include but not be limited to:
    - MSDS sheets
    - Performance test data, fuel analysis, etc., as necessary
    - References to standard engineering properties and practices

Fee to be Submitted

No fee is required for a Letter of Response or a Letter of No Objection.

Explanatory Notes

The applicant can submit a Letter of Response Request requesting the department to respond with a return letter.

When the applicant submits a Letter of No Objection Request, the department will send a letter either concurring that the action to be taken by the applicant can occur without further action by the department, or provide instructions for what the applicant needs to submit in order to address the requested action.

7.3.2 Authorization to Construct and Operate

Description of Action

For projects that will result in a positive human health or environmental benefit, LDEQ may issue an Authorization to Construct/Approval to Operate (ATC) to an owner/operator so that they may perform the necessary construction. It is also possible to obtain an ATC if the project will result in a reduction of emissions.

For emission reduction projects, the LDEQ must, within thirty days of receipt of an emission reduction notification, either grant authorization to construct or notify the owner or operator of its determination that the project does not provide a positive human health or environmental benefit. In general, authorizations to construct and operate are granted for the addition or replacement of control equipment.

Document(s) to Submit

The Authorization to Construct application should include:

- Louisiana Application for Approval of Misc. Permitting Actions
- Detailed calculations of emissions rates, including temperature of emissions
- Map showing location of project
- Identity of emissions sources involved in the change
- Thorough description of the proposed project
- Detailed explanation of the environmental benefit, human health benefit, or emission reduction
- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1
- Supporting documentation, which may include but not be limited to:
    - MSDS sheets
    - Performance test data, fuel analysis, etc., as necessary
    - References to standard engineering properties and practices

Regulation Reference

If the ATC request will result in an emission reduction, LAC 33:III.511 should be cited.

> *LAC 33:III.511 –*
> *The owner or operator of any source permitted under this Chapter shall submit a notification to the permitting authority prior to the initiation of any*

project which will result in emission reductions. The notification shall include a description of the proposed action, a location map, a description of the composition of air contaminants involved, the rate and temperature of the emissions, the identity of the sources involved and the change in emissions. The permitting authority may request additional information related to the reduction project. The permitting authority shall grant authorization to construct where consistent with LAC 33:III.501.C.3. Emission reduction projects at a Part 70 source may be processed as a state-only change provided the requirements of LAC 33:III.507.F are met. Any appropriate permit revision reflecting the emission reduction shall be made no later than 180 days after commencement of operation and in accordance with the procedures of this Chapter.

If the action does not qualify under LAC 33:III.511 because there is not a reduction in air emissions, it may still qualify for an ATC under LAC 33:III.501.C.3 (e.g., elimination of a water discharge results in minor air emissions).

LAC 33:III.501.C.3 –
Notwithstanding Subsection C.2 of this Section, prior to issuance or revision of a permit, the permitting authority may issue authorization to construct to an owner or operator in appropriate circumstances where there is a positive human health or environmental benefit, provided such an authorization is not precluded by any federally applicable requirement or by 40 CFR Part 70.

Fee to be Submitted

Attached to the application must be a check made out to "Louisiana Department of Environmental Quality." The fee amount is in accordance with §223, Fee No. 2010.

Explanatory Notes

- An ATC can be obtained for small emissions increases if the project will result in a positive human health or environmental benefit. The proper citation for this type of project is LAC 33:III.501.C.3.

- An ATC must not be precluded by any federally applicable requirement or by 40 CFR Part 70.

- Any appropriate permit revision reflecting the emission reduction must be made no later than 180 days after commencement of operation.

- Emission reduction projects at a Part 70 source may be processed as a state-only change provided the requirements of LAC 33:III.507.F are met.

7.3.3 Name, Owner or Operator Change Request

Description of Action

This action can be used for the following situations:

- The name of the facility is changed
- The name of the owner has changed
- The name of the operator has changed (necessary if the permit was issued to the operator)
- Ownership of the facility has changed.
- The operator of the facility has changed (necessary if the permit was issued to the operator)

In the case of an owner/operator change, in accordance with LAC 33:I.1701, the department evaluates the information about a new owner with respect to the following:

- An applicant must have no history of environmental violation(s) that demonstrates to the department unwillingness or inability to achieve and maintain compliance with the permit for facility in question.
- An applicant must owe no outstanding fees or final penalties to the department.

The administrative authority may conduct an evaluation of the applicant related to the management of any facilities or activities subject to regulation under any applicable air, water, solid waste, hazardous waste, radiation control, or other environmental programs administered by the various states of the United States or by the federal government. If, pursuant to this evaluation, the administrative authority determines that the applicant has demonstrated an unwillingness or inability to achieve and maintain compliance with the permit for which application is being made, LDEQ may deny any application to transfer the permit.

Document(s) to Submit

The LDEQ website has an electronic form and set of instructions for submittal to the department, which can be found here: http://www.deq.louisiana.gov/portal/Portals/0/assistance/NOC-1%20FORM%20Jan%2025,%202006.pdf.

This document lists all of the documentation that must be submitted for a Name, Owner, or Operator Change Request.

Regulation Reference

LAC 33:I.Chapter 19

Fee to be Submitted

Attached to the application must be a check made out to "Louisiana Department of Environmental Quality." The fee amount is in accordance with §223, Fee No. 2000.

Explanatory Notes

- If the current owner sells or intends to sell a facility, it is best **NOT** to request that the permit be rescinded. A submittal of a Change of Ownership form is the appropriate method by which to address the sale of a facility to a different owner.
- If only the responsible official needs to be changed, then this can be accomplished by sending a letter stating the change to LDEQ. The official form and the application fee are not necessary.
- If a portion of the facility is being sold, the current owner should advise the new owner that a Change of Ownership form must be submitted within 45 days after the effective date of the transfer.

7.3.4 Permit Rescission Request

Description of Action

A Permit Rescission Request is used to terminate an air permit for a facility that has closed down or is no longer subject to air permitting requirements. This action is appropriate if all of the emission sources covered by a specific permit have ceased operation. If the permit is rescinded before all sources have ceased operation, then the facility will be operating without a permit and the matter will be referred to the Enforcement Division.

Document(s) to Submit

A Permit Rescission request should include:

- Louisiana Application for Approval of Miscellaneous Permitting Actions.

- A responsible official should submit a letter requesting the rescission (termination) of an operating permit to the Department. The letter should describe if the rescission request is for a portion of an existing facility covered by a separate permit or for the entire facility. All operations of the affected sources must have ceased prior to the request for a permit rescission or the letter must state a definitive date when operations will cease.

Regulation Reference

N/A

Fee to be Submitted

No fee is required for a Permit Rescission.

Explanatory Notes

- If the entire facility has ceased operations, then the operating permit can be rescinded.
- If a portion of the facility has a separate operating permit, then that permit can be rescinded without affecting any other permits at the facility.
- If a portion of the facility is combined with other sources that will continue to operate, then the applicant should submit a permit modification to remove the equipment for the operating permit.
- If a portion of a facility is being sold and has a separate permit, then the transfer of the operating permit should be handled by the Change of Ownership form submittal.

7.3.5 Application Withdrawal Request

Description of Action

In the event a permit or permit modification application has been submitted for a project, but for whatever reason, the applicant decides not to proceed with the activity before the permit or permit modification has been issued, the applicant can submit an Application Withdrawal Request.

Document(s) to Submit

An Application Withdrawal request should include:

- Louisiana Application for Approval of Miscellaneous Permitting Actions and:
- A letter requesting that the application be withdrawn. The letter should also contain a short explanation of why the project for which the application was submitted is no longer needed.

Regulation Reference

N/A

Fee to be Submitted

No fee is required for an Application Withdrawal Request.

Explanatory Notes

In accordance with LAC 33:III.211.B.8, no refund of the permit application fee will be given if review of the application is essentially complete. If review has been initiated but not completed, a refund of up to 50% of the application fee may be given. The exact refund amount will be decided on a case-by-case basis.

7.3.6 Case by Case Insignificant Activities

Description of Action

This action is appropriate when the facility already has a permit, but needs to add an Insignificant Activity to the already permitted Insignificant Activities List. A full list of these activities can be found in LAC 33:III.501.B.5 in the Insignificant Activities List table. See the Insignificant Activities section of the Pollution Emitting Sources chapter for more information on insignificant activities.

Upon submittal of this request, the owner or operator may construct, install, and operate the proposed Insignificant Activity. The owner or operator agrees to attach the notification to its most recent air permit. The owner or operator must include the activity as an insignificant activity at the next permit renewal or permit modification, as appropriate. The Case-by-case Insignificant Activity designation will not protect a facility from an enforcement action by the Department if all of the criteria set forth in LAC 33:III.501.B.5 or in any other applicable regulation are not satisfied. In such case, the Department reserves the right to bring an enforcement action for potential noncompliance.

For the activity to be added in this manner, the following four statements must be true:

- The emissions unit emits and has the potential to emit no more than five (5) tons per year of any regulated pollutant (attach calculations). Aggregate emissions from similar activities represented as insignificant cannot exceed 5 tons per year for any pollutant on an annual basis. "Aggregate emissions" shall mean the total emissions from a particular insignificant activity of group of similar insignificant activities (e.g., A.1, A.2, etc.) within a permit per year.

- The emissions unit emits and has the potential to emit less than the minimum emission rate listed in Table 51.1, LAC 33:III.Chapter 51, for each Louisiana air toxic pollutant. Aggregate emissions from similar activities represented as insignificant cannot exceed 5 tons or a Minimum Emission Rate (MER) as stated in LAC 33:III.Chapter 51 on an annual basis. For example, a facility plans to de-gas six (6) benzene tanks this year. Each degassing event results in 50 pounds of benzene emissions. These emissions, if not permitted, cannot be covered under LAC 33:III.501.B.5.D because the MER for benzene is 260 lb/yr.

- The emissions unit emits and has the potential to emit less than the de minimis rate established pursuant to section 112(g) of the federal Clean Air Act for each hazardous air pollutant; and

- No new federally enforceable permit conditions are necessary to ensure compliance with any applicable requirement (i.e., no enforceable limits that are taken to stay below the five ton per year threshold).

Examples of scenarios that qualify for the Case-by-Case Insignificant Activity designation include, but are not limited to, the following:

- Facility has scheduled maintenance which results in emissions from tanks or the bypass of a control device. Emissions resulting from these activities were inadvertently not included in the permit or not contemplated at the time of permitting.

- Facility has unscheduled maintenance on its primary control device and a secondary control device, a temporary flare, is not permitted, except for pilot flame emissions. The secondary control device must meet all applicable regulatory requirements.

- Addition of new emission points with insignificant emissions. Facility intends to use a new additive to make polypropylene. The project will require the addition of three new emission points with insignificant particulate emissions. All criteria set forth in LAC 33:III.501.B.5 B Table D will be satisfied.

- Facility intends to store a dilute acid solution in a tank for cleaning operations. The tank typically emits less than 50 pounds of HCl emissions per year.

If a facility exceeds a minimum emission rate ("MER") listed in LAC 33:III.5112 – Table 51.1 for a particular toxic air pollutant on a site-wide basis, the form is still available as long as the proposed activity does not exceed an MER. If the proposed activity exceeds an MER, the form cannot be used. In addition, if the particular activity does not exceed an MER by itself, but the activity causes the facility to exceed an MER on a site-wide basis, the form cannot be used. In this situation, certain permit requirements under LAC 33:III.Chapter 51 will be triggered.

Document(s) to Submit

A Case-by-case Insignificant Activity notification should include:

- LDEQ's Case by Case Insignificant Activity Form, available on the department's web site at http://www.deq.louisiana.gov/portal/Portals/0/permits/air/CaseByCaseForm.doc;

- Detailed calculations of emissions;

- Descriptions of the process and operating conditions as they relate to the request;

- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1;

- All relevant operating parameters. For example, if the activity to be considered is a tank, supply the volume of the tank. If the activity is a boiler, supply the heat input. If the activity is an engine, supply the horsepower rating.

Regulation Reference

LAC 33:III.501.B.5. Insignificant Activities List, Table "D" – Exemptions Based on Emissions Levels with Prior Approval Granted by the Permitting Authority

> The owner or operator of any source may apply for an exemption from the permitting requirements of this Chapter for any emissions unit provided each of the following criteria are met. Activities or emissions units exempt as insignificant based on these criteria shall be included in the permit at the next renewal.
>
> a. the emissions unit emits and has the potential to emit no more than five tons per year of any criteria or toxic air pollutant;
>
> b. the emissions unit emits and has the potential to emit less than the minimum emission rate listed in Table 51.1, LAC 33:III.Chapter 51, for each Louisiana toxic air pollutant;
>
> c. the emissions unit emits and has the potential to emit less than the de minimis rate established pursuant to section 112(g) of the federal Clean Air Act for each hazardous air pollutant; and
>
> d. no enforceable permit conditions are necessary to ensure compliance with any applicable requirement.

Fee to be Submitted

Attached to the application must be a check made out to "Louisiana Department of Environmental Quality." The fee amount is in accordance with §223, Fee No. 2010.

Explanatory Notes

- By submitting this notification, the owner or operator agrees to attach the notification to its most recent air permit.

- A separate form must be submitted for each individual activity to be approved in this manner. It is not acceptable to use one form to approve unrelated Insignificant Activities.

- The owner or operator further agrees to include the activity as an insignificant activity at the next permit renewal or permit modification, as appropriate.

- If the activity is recognized by LDEQ to be insignificant, then no notification will be received by the permittee.

- EPA has allowed the potential to emit for emergency generators to be calculated based on 500 hours per year of operation.

- If the activity is not recognized by LDEQ to be insignificant, the permittee will be contacted to determine the appropriate course of action.

- This form can be used for both temporary and permanent activities, provided all criteria set forth in LAC 33:III.501.B.5 are satisfied.

- **The Responsible Official must sign and certify the notification form that is submitted.**

7.3.7 Change of Tank Service Submittal

Description of Action

A Change of Tank Service is a specific type of Exemption that is used to indicate when the material stored in a tank is changed. See the explanation presented in Section 2.2.1 *Exemptions* to determine if a Change of Tank Service is appropriate. This action is only necessary if the current permit does not specifically provide for such changes to be made.

Additionally, this request must meet the following two conditions:

- The request must not violate the limits set by any emissions cap; and

- The change must not cause the facility to become a major source as defined in LAC 33:III.502.

Documents to Submit

A Change of Tank Service application should include:

- Louisiana Application for Approval of Miscellaneous Permitting Actions

- Detailed calculations of emissions

- Descriptions of the process and operating conditions that could affect the emissions

- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1

- Supporting documentation, which may include but not be limited to, MSDS sheets

Regulation Reference

For non-major sources:

LAC 33:III.501.B.4 – Exemptions Granted by the Permitting Authority

a. The owner or operator of any source which is not a major source may apply for an exemption from the permitting requirements of this Chapter provided each of the following criteria are met:

i. the source emits and has the potential to emit no more than five tons per year of any criteria or toxic air pollutant;
ii. the source emits and has the potential to emit less than the minimum emission rate listed in Table 51.1, LAC 33:III.Chapter 51, for each Louisiana toxic air pollutant;
iii. no enforceable permit conditions are necessary to ensure compliance with any applicable requirement; and
iv. no public notice is required for any permitting or other activity at the source.

b. Any source to which an exemption is granted under this Paragraph shall be operated in accordance with any terms stated in the exemption and upon which the decision to grant the exemption was based. Failure to operate the source in accordance with the terms of the exemption may terminate such exemption and shall constitute a violation of the general duty to operate under a permit established pursuant to Subsection C of this Section.

For major sources:

LAC 33:III.501.B.5.D – Exemptions Based on Emissions Levels with Prior Approval Granted by the Permitting Authority

The owner or operator of any source may apply for an exemption from the permitting requirements of this Chapter for any emissions unit provided each of the following criteria are met. Activities or emissions units exempt as insignificant based on these criteria shall be included in the permit at the next renewal.

a. the emissions unit emits and has the potential to emit no more than five tons per year of any criteria or toxic air pollutant;
b. the emissions unit emits and has the potential to emit less than the minimum emission rate listed in Table 51.1, LAC 33:III.Chapter 51, for each Louisiana toxic air pollutant;
c. the emissions unit emits and has the potential to emit less than the de minimis rate established pursuant to section 112(g) of the federal Clean Air Act for each hazardous air pollutant; and
d. no enforceable permit conditions are necessary to ensure compliance with any applicable requirement.

Fee to be Submitted

Attached to the application must be a check made out to "Louisiana Department of Environmental Quality." The fee amount is in accordance with §223, Fee No. 2010.

7.3.8 Administrative Amendment Requests

Description of Action

An Administrative Amendment may be obtained to revise a permit for changes which would not violate any applicable requirement or standard, provided the change accomplishes one of the following:

- corrects typographical errors or errors in transcribing the proposed permit to the final version of the permit
- updates or corrects identifying information at the source
- allows for a change in ownership at the source, in accordance with forms and guidance provided by the permitting authority and pursuant to LAC 33:III.517.G
- identifies terms and conditions which have already undergone public notice as MACT for the facility as a federal MACT emission limit, pursuant to sections 112(g) (Modifications) or 112(j) (Equivalent Emission Limitation by Permit) of the Clean Air Act, provided adequate opportunity is given for EPA and affected state review and provided compliance provisions consistent with LAC 33:III.507.H.1 are included in the permit
- incorporates changes to render preconstruction permit terms and conditions consistent with emissions data and operating parameters as determined by start-up testing results, provided such changes are determined to meet the criteria of LAC 33:III.523
- incorporates state-only changes to terms and conditions which are not federally enforceable under 40 CFR Part 70 and which the permitting authority determines to be similar in nature to the changes listed above

LDEQ must approve or deny the proposed Administrative Amendment within 60 days of the request. Public notice, EPA review, and affected state reviews are not required for administrative amendments.

Documents to Submit

An Administrative Amendment application should include:

- Louisiana Application for Approval of Misc. Permitting Actions
- Detailed calculations of emissions, if applicable
- Thorough description of the proposed amendments
- Fee required by Fee Code 2010 as stated in LAC 33:III.223.Table 1

- Supporting documentation, which may include but not be limited to:

    - MSDS sheets
    - Performance test data, fuel analysis, etc., as necessary
    - References to standard engineering properties and practices

Regulation Reference

LAC 33:III.521 and 523.A detail the regulations relevant to Administrative Amendments.

Fee to be Submitted

If the Administrative Amendment is initiated by the permittee, the fee amount is in accordance with §223, Fee No. 2010. Attached to the application must be a check made out to "Louisiana Department of Environmental Quality." If it is initiated by LDEQ, then there is no fee.

Explanatory Notes

Administrative Amendments can be initiated by LDEQ if LDEQ discovers an error in the issued permit and if the error was committed by LDEQ.

7.3.9 Relocation of a Portable Facility

Description of Action

This request is used to notify LDEQ of the intention to relocate a portable source of emissions. This type of source is not normally understood to coexist with a larger facility at a geographically fixed location.

Documents to Submit

An application for a Relocation of a Portable Facility should include:

- Louisiana Application for Approval of Miscellaneous Permitting Actions;

- A statement regarding the place to which the portable source will be relocated;

- Supporting documents to prove compliance with the zoning criteria at the new location [required per LAC 33:III.513.C];

- A statement indicating the continued use of all pollution abatement devices and measures; and

- A statement indicating the continued use of fuel of the same sulfur content or less than that referenced in the approved permit

Regulation Reference

LAC 33:III.513.C

Fee to be Submitted

Attached to the application must be a check made out to "Louisiana Department of Environmental Quality." The fee amount is in accordance with §223, Fee No. 2010.

7.3.10 Emission Reduction Credit (ERC) Banking

LAC 33:III.Chapter 6 establishes the sole means of enabling stationary sources to identify and preserve or acquire emission reductions for Nonattainment New Source Review (NNSR) offsets.

Applicability

Major stationary sources are subject to Chapter 6 for the purpose of utilizing emission reductions as offsets in accordance with LAC 33:III.504. Minor stationary sources located in nonattainment areas may submit ERC bank applications for purposes of banking. Except as noted below, sources located in EPA-designated attainment areas may not participate in the emissions banking program. Any stationary point source (including fugitive emissions) at an affected facility is eligible to participate.

Sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge may participate in the emissions banking program for purposes of securing offsets where required by LAC 33:III.504.M.

Creating Emission Reduction Credits (ERC)

An ERC is an emission reduction approved by the department in accordance with the requirements of Chapter 6 that is surplus, enforceable, permanent, and quantifiable. Methods of reducing emissions to receive credit include, but are not limited to, the following:

- installation of add-on control equipment;
- change in processes;
- change in process inputs, formulations, products or product mix, or raw materials (an actual emission reduction resulting from more effective operation and maintenance of abatement and process equipment if the applicant accepts a permit provision specifying a lower level of emissions);
- shutdown of emission units or stationary sources;
- production curtailments; and

- reductions in operating hours.

ERC Bank Application and Submittal Deadlines

The ERC bank application can be downloaded at http://www.deq.louisiana.gov/portal/tabid/2275/Default.aspx. With regard to VOC reductions, speciation of toxic air pollutants regulated in LAC 33:III.Chapter 51 is required.

All applications for banking emission reductions must be submitted by March 31 following the year in which the reductions occurred. Failure to apply for ERC by March 31 will invalidate the emission reductions as offsets. If a parish is designated as nonattainment by the EPA after January 1, 2012, applications for banking ERCs in such parish must be submitted by March 31 of the year following the effective date of the EPA designation.

Applications for banking emission reductions that are to be made as part of a project that includes an increase in emissions for which the reduction will serve to offset the increase may be submitted as part of the permit application for the proposed increase. Such reductions will be reviewed for applicability as ERC concurrently with the review of the permit application.

Analysis of Validity

Emissions reductions can be recognized as ERC only if they are determined to be surplus, permanent, quantifiable, and enforceable, as defined in LAC 33.III.605. Each criterion is addressed below.

<u>Surplus</u>

Emission reductions must be voluntarily created (i.e., not required by any state or federal law or regulation and in excess of reductions used to demonstrate attainment of national ambient air quality standards) at the time a permit application that relies upon the reductions as offsets is deemed administratively complete.

The following procedures shall be used in calculating the quantity of surplus air emission reductions (see §607.C & D).

1. Calculate actual emissions during the baseline period. In general, the baseline period shall be a two-year period that precedes the date of the emission change and that is representative of normal major stationary source operation. A different time period shall be allowed upon a determination by the department that it is more representative of normal major stationary source operation.

2. Calculate adjusted allowable emissions. Allowable emissions shall be adjusted to account for all new or revised federal or state regulations adopted that will require, or would have required, all or a portion of the emission reductions that comprise the ERC application or ERC (in the case of a partial use of a previously approved ERC) at the time a permit application that relies upon the reductions as offsets is deemed administratively complete.

3. Quantify baseline emissions. Baseline emissions shall be the lower of actual emissions or adjusted allowable emissions.

4. Determine allowable emissions after the reductions occurred.

5. Calculate the surplus emission reduction by subtracting the allowable emissions after the reduction occurred from the baseline emissions.

6. Finally, adjust for netting (§607.D). Emission reductions used in a netting analysis (i.e., the contemporaneous decreases in determining the "net emissions increase" as defined in LAC 33:III.504 or 509, as appropriate) that prevented the increase from being considered "significant" are not eligible for use as offsets. The quantity of emission reductions utilized to "net out" shall not be considered creditable.

Permanent

As applied to emission reductions, the method of achieving the reduced level of emissions must be fixed or ongoing (e.g., installation of permanent control equipment or elimination of emission units).

Quantifiable

In reference to emission reductions, the amount, rate, and characteristics of the emission reduction must be able to be estimated through a reliable method. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, process parameters, production inputs, modeling, or other reasonable measurement practices. The same method of calculating emissions should generally be used to quantify emission levels both before and after the reduction.

Enforceable

As applied to emission reductions, means of making emission limits enforceable include source-specific SIP revisions, limitations contained in permits issued in accordance with LAC 33:III.Chapter 5, and EPA-issued or department-issued administrative orders or enforcement instruments such as compliance orders or settlement agreements.

Review and Approval of ERC

The department's review and approval of an application for ERC shall generally be conducted when a request is submitted to use the reductions as offsets. The review shall be conducted in accordance with LAC 33.III.607 (see the section entitled "Analysis of Validity").

Upon making a preliminary decision to approve any ERC, the department shall provide public notice of its decision. A period of 30 days after the date of publication will be allowed for public comment. The notice of preliminary approval may be incorporated with a notice of preliminary approval of an air permit for which the ERC will be used as offsets. If the notice of preliminary

approval is not associated with an air permit, the department's preliminary decision relates only to the banking of the emission reductions and not to the use of the ERC.

ERC Certificates

Upon conclusion of the 30-day comment period, the department shall render a decision as to whether the department approves or disapproves the application. If the department decides to approve the ERC, the department shall issue an ERC certificate to the owner.

Upon issuance of a permit that relies upon the use of approved ERC as offsets, the department shall be responsible for recalculating the ERC balance for that entity and for providing that entity with an adjusted ERC certificate. In the case of a partial use of an ERC from an emission reduction project, the department shall issue a new certificate reflecting the available credits remaining. The remaining ERC shall be reviewed again in accordance with LAC 33:III.607 at the time a request is received to use the remaining portion.

Anytime after the original ERC application is submitted, the applicant may request the recalculation of the ERCs for the purpose of using alternative baseline emissions, an alternative baseline period, or availability of more accurate emissions data (i.e., performance test data, etc.). The review and approval of this recalculation request shall follow the same procedure as described above.

Life of ERC

Emission reductions may be creditable for use as offsets for up to 10 years from the date of the actual emission reduction to the atmosphere. An ERC is considered to be used for this purpose upon issuance of a permit that relies upon the ERC as offsets.

Transfer of ERC

An ERC certificate may be transferred in whole or in part. The role of the department in the transfer of an ERC certificate shall be limited to providing information to the public, documenting ERC transfers, and registering ERC certificates. The department shall be notified by letter within 30 days of any transfer of an ERC to another party. This correspondence should indicate the new owner, the previous owner, the amount of ERC transferred, and the date of transfer. The department shall then issue a certificate indicating the new owner. In the case of a partial transfer, the department shall issue a new certificate to the new owner, as well as a revised certificate to the current owner, reflecting the available credits to each owner.

Recordkeeping and Reporting Requirements

Recordkeeping requirements are established in §613.A.

An annual report summarizing all records required by §613.A shall be submitted to the department by March 31 of each year.

This report shall be submitted to the Office of Environmental Services, Air Permits Division, in a format specified by the department (see "LAC 33:III.613.B Annual Report Forms" at http://www.deq.louisiana.gov/portal/tabid/2275/Default.aspx). A certifying statement signed by the owner or operator must also accompany each annual report to attest that the information is true and accurate.

Ozone Season NO_x ERC vs. Non-Ozone Season NO_x ERC

Louisiana promulgated LAC 33:III.Chapter 22, a NO_X Reasonably Available Control Technology (RACT) rule, on March 20, 2002, effective May 1, 2005. Chapter 22 required sources to reduce NO_X emissions during the 5-month ozone season, May 1 through September 30, inclusively. Due to the 5-month applicability of Chapter 22, the allowable emission limitation for an emissions unit could potentially have two values, one for the 5-month ozone season, and another for the 7-month non-ozone season.

To illustrate the point, consider the following example. A facility installs low NO_X burners on a 100 MM Btu/hr gas-fired boiler to comply with the 0.10 lb/MM Btu factor established by §2201.D.1. The new burners are able to limit emissions to 0.08 lb/MM Btu, and the owner or operator is willing to accept this factor as the basis for the boiler's permit limit. The boiler's permit limit prior to the project was 150.00 tons per year (TPY) of NO_X.

Actual emissions during the ozone season are presumed to be 153/365 of annual emissions unless more specific data is available (i.e., because there are 153 days in the ozone season). Conversely, actual emissions outside of the ozone season are presumed to be 212/365 of annual emissions unless more specific data is available. In this example, average actual emissions over the 2000 and 2001 ozone seasons totaled 50.30 tons, whereas average actual emissions for the remainder of the baseline period totaled 69.70 tons.

	NO_X	**O_3 NO_X**	**Non-O_3 NO_X**
Permitted emissions before reduction:	150.00 [31]	-	-
Actual emissions during baseline period (§607.C.2):	120.00	50.30 [32]	69.70 [33]
Adjusted allowable emissions (§607.C.3):		18.36 [34]	-
Baseline emissions (§607.C.4):		18.36	69.70
Allowable emissions after reduction (§607.C.5):		14.69 [35]	20.35 [36]
Surplus emission reduction (§607.C.6):		3.67	49.35
Adjustments for netting (§607.D):		-	-
ERC:		**3.67**	**49.35**

[31] Permits issued after May 1, 2005, may establish separate ozone season and non-ozone season NO_X limits for an emissions unit subject to Chapter 22.

[32] 120.00 * 153/365

[33] 120.00 * 212/365

[34] 100 MM Btu/hr * 0.10 lb/MM Btu * 24 hr/day * 153 days/O_3 season / 2000 lb/ton

[35] 100 MM Btu/hr * 0.08 lb/MM Btu * 24 hr/day * 153 days/O_3 season / 2000 lb/ton

[36] 100 MM Btu/hr * 0.08 lb/MM Btu * 24 hr/day * 212 days/non-O_3 season / 2000 lb/ton

With respect to offsets under §504, the portion of the "net emissions increase" attributed to the ozone season must be offset by emission reductions that occurred during the ozone season (O_3 NO_X ERC). The remainder of the "net emissions increase" (i.e., attributed to the non-ozone season) may be offset by emission reductions that occurred during the ozone season or by emission reductions that occurred outside of the ozone season (non-O_3 NO_X ERC). This approach was outlined in a May 3, 2002, letter from LDEQ to EPA Region 6.

Selected passages from 67 FR 48090 – 48094, published July 23, 2002, proposing approval of revisions to LAC 33:III.504, follow.

> The State has recently revised the NO_X control regulation in Chapter 22. This NO_X Reasonably Available Control Technology (RACT) rule requires stationary sources to comply with a more strict emission limitation during the State's five month ozone season. Typically a stationary source reduces emissions below the baseline to generate surplus emission reduction credits. Due to the revised NO_X rule, the allowable emission limitation for a stationary source could potentially have two values, one for the five month ozone season and another for the seven month non-ozone season.
>
> Thus, the baseline emissions for the stationary source, which are used to determine surplus emission reduction credits for offset permitting purposes, could have two different values. In order to accurately determine the surplus emission reduction credits (ERCs) to be used in the nonattainment NSR permitting, the baseline emissions and surplus ERCs must be determined for the two time periods. The NO_X ERCs for any annual time period will consist of the ERCs for the five month ozone season and the ERCs from the seven month non-ozone season. Offset requirements for new sources derive from Section 173(a)(1)(A) of the Act, which concerns "total" emissions and does not address the use of emission offsets for nonattainment permitting over periods of less than one year. Therefore, the NOx ERCs to be used in all nonattainment NSR permitting under Chapter 5 must be determined by adding the ERCs from the ozone season and the non-ozone season.
>
> With respect to all offsets under Chapter 5 and all ERCs under Chapter 6, the total NO_X emission increases during the ozone season must be offset by NO_X ERCs from the ozone season. Non-ozone season NO_X increases may be met by either ozone or non-ozone NO_X ERCs. The annual NO_X increase must be offset by the total combination of ozone and non-ozone season surplus NO_X emission reduction credits.

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8.0 Appendices