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ENVIRONMENTAL QUALITY

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Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 1. General Provisions

§101. Authority

A. By virtue of R.S. 30:2011 the Air Quality program within the Department of Environmental Quality was established with the intent and purpose of maintaining the purity of the air resources of the state of Louisiana consistent with the protection of the health and physical property of the people, maximum employment and the full industrial development of the state. R.S. 30:2011 sets forth the powers of this administrative authority and by R.S. 30:2019 authorizes the promulgation by this administrative authority of rules and regulations consistent with said intent and purpose in the manner and in accordance with the provisions of R.S. 30:2001 et seq., which was enacted by the legislature as the law of this state by Act 449 of 1979.

B. The administrative authority has been authorized by the Louisiana Department of Environmental Quality to provide and administer these regulations under R.S. 30:2011 and in accordance with the provisions of R.S. 30:2001 et seq., of Title 30 enacted by the state legislature as the law of this state by Act 449 of 1979 and amended by Act 97 of 1983.

C. Matter Incorporated by Reference. Incorporated by reference in these regulations is all matter of material that is not specifically set forth herein. These materials are hereby made a part of these regulations. Unless the reference indicates otherwise, materials subject to change are incorporated only as they are in effect on the date of promulgation of the regulation.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2444 (November 2000).

§103. Scope and Severability

A. Scope. These regulations and air quality standards and emission limitations apply to any source of emissions existing partially or wholly within the state of Louisiana.

B. Severability. If any provision of any of the sections of the regulations of the administrative authority or the application of that provision to any person, situation or circumstance is for any reason adjudged invalid, the adjudication does not affect any other provision of the sections of the regulations or the application of the adjudicated provision to any other person, situation or circumstance. The administrative authority declares that it would have adopted the valid portions and applications of the regulations without the invalid part, and to this end the provisions of the regulations are declared to be severable.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§107. Investigations—Authority

Pursuant to the provisions of R.S. 30:2011, the administrative authority shall make such investigations as are necessary and proper to carry out the purposes of the Louisiana Environmental Quality Act and in connection therewith.

A. Private Conference Method. In the event that compliance is achieved as a result of private conference, conciliation or persuasion, a notice, in writing, to that effect shall be sent by the administrative authority to the owner or operator of such claimed violating source. In the event that the administrative authority determines after said private conference that no violation exists the administrative authority shall send a notice in writing to that effect to said owner or operator of said claimed violating source within 30 days.

B. Complaints to be Sent by Registered Mail. All such complaints and notices called for by R.S. 30:2025 shall be sent by certified or registered mail addressed to the person who represented the alleged violator in said private conference; or, if the alleged violator is a corporation, addressed to its registered agent for service of process.

C. Investigations to be Made Only for Written Complaints. Any investigations made by the administrative authority pursuant to R.S. 30:2025(A) upon receipt of information concerning an alleged violation shall be made only upon receipt by the administrative authority of written complaint of a violation of the Louisiana Environmental Quality Act or any of these rules and regulations.

D. If Investigation Reveals No Violation. In the event that any investigation reveals that no violation of the Louisiana Environmental Quality Act or of these rules and regulations is found to exist, the administrative authority shall advise the complaining person and the person complained against of this fact.

E. Confidentiality of Information. Provisions for confidential information may be found in LAC 33:I.Chapter 5.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy,

Air Quality Division, LR 13:741 (December 1987), amended by the Office of the Secretary, LR 22:343 (May 1996).

§109. Compliance Schedules

A. Owners and/or operators of a source or sources of emissions in the state of Louisiana shall on request of the administrative authority submit within 90 days a compliance schedule showing how the source or sources will be brought into compliance with state air quality standards and regulations and federal primary and secondary ambient air quality standards.

B. Necessary Changes for Approval. Owners and/or operators shall make any necessary changes in the schedule submitted to obtain an approval of such schedule by the administrative authority within 90 days of submission of the schedule.

C. Annual Report Requirements. Any compliance schedule extending over 18 or more months from the date of its adoption shall provide for annual reports indicating increments of progress towards compliance with administrative authority regulations and standards.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§111. Definitions

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

Act—Act Number 449 of 1979, Louisiana Environmental Quality Act. Used to denote Chapter 11, Title 30, Section 2001 et seq. including amendments.

Administrative Authority—the secretary of the Department of Environmental Quality or his designee or the appropriate assistant secretary or his designee.

*Administrative Authority**—this term refers to both the *administrator* and the *administrative authority*. Any alternative or equivalent test methods, waivers, monitoring methods, testing and monitoring procedures, customized or correction factors, and alternatives to any design, equipment, work practices or operational standards must be approved by both the administrator of the U.S. Environmental Protection Agency and the *administrative authority* before it becomes effective.

Administrator—the *administrator*, or authorized representative, of the Environmental Protection Agency.

Aerosol—a suspension of fine solid or liquid particles in the air.

Affected Facility—(with reference to stationary source), any apparatus to which a standard is applicable.

Afterburner—a secondary burner which is used to oxidize and combust air contaminants to a less damaging form.

Air Contaminants—particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any combination thereof produced by process other than natural.

Air Pollution—the addition of air contaminants to the atmosphere.

Alternative Method (for other than NSPS and LESHAP)—any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the administrative authority's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

Ambient Air—the outdoor air or atmosphere which surrounds the earth.

Application for Approval of Emissions—an application submitted to the Department of Environmental Quality by any person requesting a certificate of approval (permit) for any change in emissions into the ambient atmosphere.

ASME—American Society of Mechanical Engineers.

ASTM—American Society for Testing Materials.

Asphalt—a dark brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.

Atmosphere—the whole mass of air above the territorial limits of the state of Louisiana.

Attainment Areas—areas of the state that are not listed as nonattainment areas by the U.S. Environmental Protection Agency.

Automobile—a passenger car or passenger car derivative capable of seating not more than 12 passengers.

Automobile and Light-Duty Truck Assembly Plant—a facility, excluding customizers, body shops, and other repainters, where automobile and/or light-duty truck bodies, frames, and parts are assembled for eventual inclusion into a finished product ready for sale to vehicle dealers, but excluding the following operations:

a. wheel coatings;

b. anti-rust coatings;

c. trunk coatings;

d. interior coatings;

e. flexible coatings;

f. sealers; and

g. plastic parts coatings.

Bubble Concept—an alternative emission plan whereby a facility with multiple sources of a given pollutant may achieve a required total emission by a different mix of controls from that mandated by regulation. Some sources may be assigned more restrictive limits, while others would meet less restrictive ones, provided the resulting total

emissions are equivalent. Such a concept may permit a more expeditious compliance plan.

Bulk Plant—a facility having a daily throughput of 20,000 gallons (76,000 liters) or less of gasoline.

Bulk Terminal—a facility having a daily throughput of more than 20,000 gallons (76,000 liters) of gasoline.

Carbon Monoxide (CO)—colorless, odorless gas which is an oxide of carbon.

Class II Finish—a finish which complies with the requirements of NBS Voluntary Product Standard PS 59-73.

Coating—a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to:

a. paints;

b. varnishes;

c. sealants;

d. adhesives;

c. thinners;

d. diluents;

e. inks;

f. maskants; and

g. temporary protective coatings.

Combustion Unit—any boiler plant, furnace, incinerator, or flare, or any other item of equipment designed or used for the combustion of fuel or waste material.

Commenced—an owner or operator has undertaken a continuous program of construction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Component—(relating to fugitive emission control) a piece of equipment, including, but not limited to pumps, valves, compressors, and pressure relief valves which has the potential to leak organic compounds.

Condensate—hydrocarbon liquid separated from natural gas which condenses due to changes in temperature and/or pressure and remains liquid at standard conditions.

Construction—fabrication, erection, or installation of an affected facility.

Continuous Monitoring System—the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Control Equipment—any device or contrivance, operating procedure or abatement scheme used to prevent or reduce air pollution.

Cross-Recovery—the practice of combining the spent liquors from a soda-based semi-chemical pulping process, such as NSSC with a kraft mill black liquor prior to burning in a recovery furnace. Less than 7 percent semi-chemical liquor, on a quarterly basis, based on equivalent air-dry pulp production, will not be classified as *cross-recovery*.

Cutback Paving Asphalt—asphalt cement which has been liquified by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function. Products made for this use are designated SC (Slow Cure), MC (Medium Cure) and RC (Rapid Cure) liquid asphalt and are manufactured to meet ASTM specifications D–2026–72, D–2027–72 and D–2028–72 or similar paving asphalt specifications.

Department—the Department of Environmental Quality.

DEQ—the Department of Environmental Quality.

Distance from Source to Property Line—the horizontal distance measured in feet from the centerline of a source to adjacent land or water that is not owned or controlled by the person emitting air contaminants from the source.

Downwind Level—the concentration of air contaminants in the atmosphere as measured at any downwind point beyond the downwind boundary of a property, at which point the level of air contaminants is affected by any emission or emissions from the property.

Dry Cleaning Facility—a facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning and drying by tumbling in the air stream. The facility includes but is not limited to any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves used in this service.

Dwelling—a building or other shelter in which people live.

Effluent Water Separator—any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

Emission—a release of air contaminants into the outdoor atmosphere.

Emission Inventory—a tabulation of data detailing the types, amounts, quantities, and sources of emissions.

Emulsified Asphalt—an emulsion of asphalt cement and water which contains a small amount of an emulsifying agent; a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion, and minute globules of asphalt form the discontinuous phase.

Equivalent Method (for other than NSPS and LESHAP)—any method of sampling and analyzing for an air

pollutant which has been demonstrated to the administrative authority's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Exceedance—a value or measurement greater than the level of a standard.

Final Repair—the surface coatings applied to correct top coat imperfections.

Flexographic Printing—the application of words, designs and pictures to a substrate by means of a roll printing technique in which both the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

Flue—any duct, passage, stack, chimney, conduit, or opening arranged to conduct air contaminants into the open air.

Fossil Fuel—natural gas, petroleum, coal and any form of solid, liquid, or gaseous fuel derived from such materials.

Fossil Fuel-Fired Steam Generating Unit—a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

Fuel Burning Equipment—any stationary contrivance used in the process of burning fuel or combustible material for the primary purpose of producing heat or power by indirect heat transfer.

Fugitive Dust—solid, airborne, particulate matter emitted from any source other than through a stack.

Garbage—all putrescible waste matter except sewage and recognizable industrial by-products. It includes putrescible vegetable matter, animal offal, and animal carcasses.

Gasoline—a petroleum distillate having a Reid vapor pressure of 27.6 kPa (4 pounds) or greater.

Gas/Vapor Service—a component is in *gas/vapor service* if it contains a process fluid that is in the gaseous state at operating conditions.

Good Performance Level—an operating level reached when no more than 2 percent of the valves in VOC service at a facility are leaking at a rate of 10,000 parts per million by volume (ppmv) or greater as determined by Reference Method 21 "Determination of Volatile Organic Compound Leaks" in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003.

Graphic Arts (Printing)—the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage.

Hardboard—a panel manufactured primarily from inter-felted lignocellulosic fibers which are consolidated under heat and pressure in a hot-press.

Hardwood Plywood—plywood whose surface layer is a veneer of hardwood.

Heat Input—the aggregate of heat content of all fuels whose products of combustion pass through a stack or stacks.

Heat Sensitive Material—materials which cannot be exposed to temperatures greater than 80° to 95°C (180° to 200°F).

Hydrocarbon—organic compounds, the molecules of which consist primarily of carbon and hydrogen atoms.

Impairment of Visibility—*impairment of visibility* exists whenever horizontal visibility at or near ground level is reduced to three times the stopping distances presented below:

20 mph—43 ft. to stop

30 mph—79 ft. to stop

40 mph—126 ft. to stop

50 mph—183 ft. to stop

60 mph—251 ft. to stop

70 mph—328 ft. to stop

Incinerator—an engineered apparatus capable of withstanding heat and designed to efficiently reduce solid, semisolid, liquid, or gaseous waste at specified rates and from which the residue contains little or no combustible material. "Tepee" burners, "conical" burners and "jug" burners are not considered as incinerators.

Installation—an identifiable piece of processing equipment, manufacturing equipment, fuel burning equipment, incinerator, or other equipment or construction capable of creating or causing emissions.

Isokinetic Sampling—sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

Leak—(relating to fugitive emission control) an organic compound concentration exceeding 10,000 parts per million by volume (ppmv) or the dripping or exuding of process fluid having a true vapor pressure greater than 0.0435 psia at 68°F (20°C).

Light-Duty Truck—a motor vehicle rated at 8,500 pounds gross weight or less which is designed primarily for the purpose of transportation of property or is a derivative of such vehicle.

Low Organic Solvent Coating (LOSC)—coatings which contain less organic solvent than the conventional coatings used by the industry. *Low organic solvent coatings* include water-borne, higher solids, electrodeposition and powder coatings.

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*.

Micrograms per Cubic Meter ($\mu g/m^3$)—a weight to volume ratio used to measure the mass of an air contaminant present in a given volume of air.

Miscellaneous Metal Parts and Products Coating—the coating of miscellaneous metal parts and products in the following categories:

a. large farm machinery (harvesting, fertilizing, and planting machines; tractors; combines; etc.);

b. small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.);

c. small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.);

d. commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.);

e. industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

f. fabricated metal products (metal-covered doors, frames, etc.); and

g. any other category of coated metal products except those on the specified list in LAC 33:III.2123.C.1-8 and 10 of surface coating processes, which are included in the Standard Industrial Classification Code major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectrical machinery), major group 36 (electrical machinery), major group 37 (transportation equipment), major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries).

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.

Monitoring Device—the total equipment required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

Multiple Chamber Incinerator—any incinerator which has two or more refractory lined combustion furnaces in series, physically separated by a refractory wall, interconnected by gas ducts or ports, and employing adequate parameters for maximum combustion of the material to be burned.

Natural Finish Hardwood Plywood Panels—panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

Natural Gas Processing Plants—facilities engaged in the separation of natural gas liquids from field gas and/or fractionation of the liquids into natural gas products, such as ethane, propane, butane, and natural gasoline. Excluded from the definition are compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquified natural gas units, and field gas gathering systems unless these facilities are located at a gas plant.

New Design Furnace—an existing straight kraft recovery furnace with both welded-wall or membrane wall construction and emission-control-designed air systems, for which design specifications, purchase contract or manufacturer's warranty specifies a capability for continuous total reduced sulfur (TRS) emissions equivalent to the New Source Performance Standards (*Federal Register*, February 23, 1978, Part V).

New Source—any affected facility, the construction or modification of which is commenced after the adoption of these regulations.

Nitric Acid Production Unit—any facility producing weak nitric acid by either the pressure or atmospheric pressure process.

Nitrogen Oxides—compounds whose molecules consists of nitrogen and oxygen.

Nonattainment Area—an area (parish or group of parishes) declared by the administrative authority* to be not in compliance with a Federal National Ambient Air Quality Standard and listed in the *Federal Register* as a nonattainment area.

Nuisance—anything that unlawfully worketh hurt, inconvenience, or damage.

One-Hour Period—any 60 minute period commencing on the hour.

Opacity—the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Organic Solvents—liquid or gaseous hydrocarbons used for dissolving one or more other substances.

Outdoor Burning (Open Burning)—burning of any material without the benefit of equipment primarily designed for the combustion of fuel and/or waste material and/or in such a manner that the products of combustion are emitted directly to the atmosphere without passing through a *flue* or *combustion unit* as defined in LAC 33:III.111.*Combustion Unit*.

Owner or *Operator*—any person who owns, leases, operates, controls, or supervises a facility, building, structure, or installation which directly or indirectly results or may result in emissions of any air pollutant for which a national standard is in effect.

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

Packaging Rotogravure Printing—the printing upon paper, paper boards, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into containers and labels for articles to be sold.

Particleboard—a manufactured board made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure. *Particleboard* used as furniture component is not covered under this definition.

Particulate Matter—any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

Particulate Matter Emissions—all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by Method 5 in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003.

Penetrating Prime Coat—an application of low viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement.

Person—any individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity or their legal representatives, agents or assignees.

Petroleum Refinery—any facility engaged in producing gasoline, kerosene, distillate fuels oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking extraction, or reforming of unfinished petroleum derivatives.

Pharmaceutical Manufacturing Facility—any facility which manufactures pharmaceutical products by chemical syntheses.

Photochemical Oxidant—the products of a chemical reaction triggered by sunlight, between various hydrocarbon or organic compounds and the oxides of nitrogen.

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.

PM_{10} Emissions—finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by the methods specified in 40 CFR Part 52.

Polymer Manufacturing Industry—operations which convert monomer or chemical intermediate materials obtained from the basic petrochemical industry and the synthetic organic chemical manufacturing industry into polymer products. Such products are polyethylene, polypropylene and polystyrene.

Portland Cement Plant—any facility manufacturing Portland cement by either wet or dry process.

PPM by Volume—(parts per million by volume) a volume to volume ratio used to express volumetric concentrations of gaseous air contaminants in a million unit volume of air or gas.

Premises—that which is within the boundaries or confines of any real property.

Primer—the first surface coating applied to the surface.

Primer-Surfacer—the surface coating applied over the primer and beneath the top coat.

Printed Panels—panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

Process Weight—any total weight of all materials introduced into any specific process which may cause emissions. Solid fuel charged will be considered as part of the *process weight*, but liquid and gaseous fuels and combustion air will not.

Production Equipment Exhaust System—a device for collecting and directing out of the work area VOC fugitive emissions from reactor openings, centrifuge openings and other vessel openings for the purpose of protecting workers from excessive VOC exposure.

Property—any land owned or controlled by a person.

Proportional Sampling—sampling at a rate that produces a constant ratio of the sampling rate to that of the stack gas flow rate.

Public Nuisance—any condition of the ambient air beyond the property line of the offending person which is offensive to the senses, or which causes or constitutes an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

Publication Rotogravure Printing—the printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

Reference Method—any method of sampling and analyzing for an air pollutant as described in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003.

Refuse—all putrescible waste matter, all nonputrescible waste matter, ashes, animal and vegetable waste and all other waste matter, except sewage, from any public or private establishment, institution, or residence or resulting from construction, building operations, or the prosecution of any business, or trade.

Ringelmann Smoke Chart—the Ringelmann Scale for Grading the Density of Smoke, published by the U.S.

Bureau of Mines, or any chart, recorder, indicator or device for the measurement of smoke density which is approved by the administrative authority as the equivalent of the Ringelmann Scale.

Rubbish—all nonputrescible waste matter, except ashes, from any public or private establishment, institution, or residence.

Run—the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown—the cessations of operation of an affected facility for any purpose.

Six-Minute Period—any one of the 10 equal parts of a one-hour period.

Smoke—any small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon, ash, and other combustible material, and present in sufficient quantity to be observable.

Soiling Index—a measure of airborne particulates given as coefficient of haze per 1,000 linear feet of air.

Source—any and all points of origin of air contaminants as defined in *air contaminants*, LAC 33:III.111 hereof, whether privately or publicly owned or operated.

SPOC—the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC).

Stack or Chimney—any point in a source designed to emit solids, liquids or gases into the air including a pipe or duct but not including flares.

Standard Conditions—a gas at 21°C or 70°F and 29.92 inches (760 millimeters) of mercury.

Start-Up—the setting in operation of an affected facility for any purpose.

State—the state of Louisiana.

State Implementation Plan (SIP)—a plan required by the Clean Air Act that outlines the actions to be taken by a state air pollution control agency to reduce emissions of the nonattainment pollutant so as to change the nonattainment area to an attainment area and maintain the area in attainment status.

Submerged Fill Pipe—any fill pipe the discharge opening of which is entirely submerged when the liquid level is 6 inches (15 centimeters) above the bottom of the tank or when applied to a tank which is loaded from the side, means any fill pipe the discharge opening of which is entirely submerged when the liquid level is 18 inches (45 centimeters) above the bottom of the tank. Any nozzle in full contact with the bottom of the tank being filled shall be considered to meet these requirements. In addition, a nozzle which remains below the surface of the liquid in the tank during all normal operations (nozzle shall not be uncovered more than twice per year) shall be considered to meet these requirements.

Sulfation Rate—used as a measure of the sulphur compounds in the atmosphere. It is the rate at which oxidizable sulphur compounds in the atmosphere convert lead peroxide into lead sulphate.

Sulfuric Acid (H_2SO_4)—a heavy corrosive oily dibasic acid that is colorless when pure and is a vigorous oxidizing agent.

Sulfuric Acid Production Unit—any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

Sulphur Compounds—all inorganic or organic chemicals having an atom or atoms of sulphur in their chemical structure.

Sulphur Dioxide (SO_2)—an oxide of sulphur.

Sulphur Trioxide (SO_3)—an oxide of sulphur.

Synthetic Organic Chemical Manufacturing Industry (SOCMI)—the industry that produces, as intermediates or final products, one or more of the chemicals listed in LAC 33:III.2199.Appendix A, Table 8 of the regulations.

Thin Particleboard—particleboard with a nominal thickness of 1/4 inch or less. (Nominal 1/4 inch is from 0.210 inch to 0.265 inch).

Top Coat—the surface coating applied for the purpose of establishing the color and/or protective surface, including groundcoat and paint sealer materials.

Total Suspended Particulate (TSP)—particulate matter as measured by the method described in Title 40, Code of Federal Regulations, Part 50, Appendix B.

Transfer Efficiency—the portion of coating solids which is not lost or wasted during the application process expressed as percent of total volume of coating solids delivered by the application.

Upwind Level—the concentration of air contaminants in the atmosphere determined at some point upwind of the source. This concentration may be considered as the background level.

Variance—a waiver issued under the authority of the Department of Environmental Quality upon application to allow emissions greater than those allowable under the regulations and/or a license to do some act contrary to these regulations.

Volatile Organic Compound (effective March 1, 1990)—any organic compound that participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity. VOC may be measured

by a reference method, an equivalent method, or an alternative method. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, an owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard.

Waste Classification—those seven classifications of waste as enumerated in the Incinerator Institute of America incinerator standards.

Weak Nitric Acid (HNO_3)—acid which is 30 to 70 percent in strength.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 15:1061 (December 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:777 (August 1991), LR 21:1081 (October 1995), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2444 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:808 (May 2006), LR 32:1599 (September 2006), LR 33:2082 (October 2007), LR 34:70 (January 2008).

Chapter 2. Rules and Regulations for the Fee System of the Air Quality Control Programs

§201. Scope and Purpose

A. It is the purpose of these regulations to establish a fee system 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 in accordance with the Louisiana Environmental Quality Act (R.S. 30:2001 et seq.). Fees are required for all permits, licenses, registrations, and variances authorized by the Act.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:610 (September 1988), LR 19:1373 (October 1993).

§203. Authority

A. These regulations provide fees as required by R.S. 30:2014.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:610 (September 1988).

§205. Definitions

A. All terms used in these rules, unless the context otherwise requires or unless specifically defined in the Louisiana Environmental Quality Act, or in other regulations promulgated by the secretary of the Department of Environmental Quality or his predecessor, shall have their usual meaning.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:610 (September 1988).

§207. Application Fees

A. No application or amendments thereto shall be processed prior to payment of a permit fee, when it is determined that a permit fee is due. No permit, license, registration, or variance, unless otherwise authorized by the secretary, shall be issued until the full amount of the fee has been paid and such check or draft has been accepted by the bank or drawee and the department's account has been credited with the amount of the fee, when it is determined that a permit fee is due.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:610 (September 1988), LR 19:1373 (October 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:264 (February 2000).

§209. Annual Fees

A. All parties conducting activities for which an annual maintenance fee is provided shall be subject to the payment of such fee by the due date indicated on the invoice. The annual maintenance fees are based on a state fiscal year from July 1 to June 30. All major and all minor sources that have been issued a permit for air pollution emissions shall pay an annual maintenance fee.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:611 (September 1988), amended by the Office of Management and Finance, Fiscal Services Division, LR 22:17 (January 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:264 (February 2000).

§211. Methodology

A. Formula to Apportion Fees

Air Toxics Permits Application Fee for major sources of toxic pollutants (based on type of facility and on rated production capacity/throughput)	Surcharge of 10% of the permit application fee to be charged when there is an increase in toxic air pollutant emissions above the Minimum Emission Rates (MER) listed in LAC 33:III.5112, Table 51.1
Air Toxics Annual Emissions Fee for major sources of toxic air pollutants (based on air toxic pollutants emitted)[1]	Variable
Annual Maintenance Fee (based on type of facility and on rated production capacity/throughput)	Variable

New Application Fee (based on type of facility and on rated production capacity/throughput)	Variable
Major and Minor Modification Modified Permit Fee (based on type of facility and on rated production capacity/throughput)	Variable
PSD Application Fee (based on type of facility and on rated production capacity/throughput)	Surcharge of 50% of the application fee when a PSD permit application is being processed
"NESHAP" Maintenance Fee (based on type of facility and on rated production capacity/throughput)	Surcharge of 25% of the Annual Maintenance Fee for that particular process/plant to be added to the Annual Maintenance Fee
"NSPS" Maintenance Fee (based on type of facility and on rated production capacity/throughput)	Surcharge of 25% of the permit application fee to be charged for any permit application that includes the addition of new equipment subject to NSPS regulation
[1] Fees shall be assessed on major sources as defined in LAC 33:III.5103. Sources that have reduced emissions below major source thresholds are not required to submit annual emissions reports in accordance with LAC 33:III.5107.	

B. Fee Methodology

1. All fees required by this Chapter are listed in LAC 33:III.223, Fee Schedule Listing, which shall be referred to as the Fee Schedule in the remainder of this Chapter. All persons required to obtain a new or modified permit shall be subject to a permit application fee (see Fee Schedule) unless otherwise exempted. This fee shall be submitted with any application for a new or modified permit. The annual maintenance fee for a new or modified source shall be paid during the fiscal year (July 1 to June 30) in which the process specified in the permit comes on line.

2. The Standard Industrial Classification (SIC) codes listed in the Fee Schedule shall be used to assist in the determination of the proper fees to assess.

3. The permit fee for sources or facilities with multiple processes shall be equal to the total amounts required by the individual processes involved, as listed in the Fee Schedule, unless the entire facility is covered by a single fee category.

4. All invoices for annual maintenance fees for major sources shall be submitted to those sources during the fiscal year. The annual maintenance fee shall be applicable to the fiscal year beginning July 1 of each year and ending the following June 30. Failure to remit the annual maintenance fee in accordance with the above shall be considered grounds for revoking an existing permit. Maintenance fees not received for prior fiscal years are due upon receipt of new or duplicate invoices. Minor sources may or may not receive an annual compliance inspection. In this case the maintenance fee must be paid within 30 days after notification by the agency of the amount due. Only one such fee shall be charged annually.

5. If a conditional permit is issued in accordance with adopted procedures, fees submitted with that application for permit shall be retained and be applicable to the regular permit when it is acted upon.

6. If a process is not listed in the Fee Schedule and is not a source type exempted from fees by this regulation, then the department shall assign a fee based on the most similar processes in the Fee Schedule and negotiated separately. If a process or facility is specifically listed in the Fee Schedule, then the fee cannot be negotiated. The department shall analyze each permit request to determine the number of processes involved and the permit fee associated with each.

7. Annually, the department shall reevaluate the Fee Schedule based upon the previous fiscal year's reasonable costs involved in the operation of the permit system and submit such revised schedule to the secretary for approval.

8. When a company withdraws its application and claims refund for the permit fee, no refund shall be made if the review of the application is essentially completed at the time of withdrawal. However, up to 50 percent refund may be made when the review has been initiated, but is not essentially completed.

9. Annual maintenance fees (AMF) are not prorated. If a facility operates any part of a year or at a reduced rate during the year, the full annual maintenance fee is still charged. In order for the annual maintenance fee to be cancelled, the facility must not operate at all during the year and the permit to operate for the facility must be cancelled and/or changes must be made to the process or facility in order to make the process or facility not subject to regulation by the department. The cancellation of the permit shall require that a new permit be issued before the facility could be operated again. Failure to pay the annual maintenance fee will cause the permit for the facility covered by the fee to be cancelled.

10. When a permanent shutdown occurs and a company properly notifies the Office of Environmental Services by official change in the Emission Inventory Questionnaire (EIQ) and permit, then the maintenance fee would be dropped for that shutdown portion of the process/plant. This fee reduction or cancellation shall apply only in the fiscal years in which the shutdown portion of the plant or process did not operate at all. The EIQ and permit shall also need to be changed to delete the emissions from the shutdown portion of the plant or process before the start of the fiscal year in which the fee would have been charged.

11. For most fees listed in these regulations, the minor modification fee is equal to the annual maintenance fee (AMF). The major modification fee is three times the AMF, and the new application fee is five times the AMF. Minimum and maximum permit fees shall apply to all categories that have minimum and maximum AMF according to the following table. If the ratio was not used to establish the major modification and the new application fees for a category, then the actual ratio of major modification and new application fee to AMF shall be used.

Permit Fees	Minimum	Maximum
Minor Modification	min. AMF	max. AMF
Major Modification	3 x min. AMF	3 x max. AMF
New Application	5 x min. AMF	5 x max. AMF

12. NSPS fees may be waived when a PSD application fee is imposed.

13. The department shall determine the type of fee. This determination shall be based on the work load created by the permit application and shall be determined based on the factors described as follows.

a. New Application Fee. The new application fee shall be based on the new capacity when a new process or operation is added or the incremental increase in capacity when the capacity is increased by more than 80 percent. It applies when:

i. a new facility is added;

ii. a new operation in an existing facility is added; or

iii. an existing operation is expanded by more than 80 percent in capacity.

b. Major Modification Fee. The major modification fee shall be based on the existing capacity when the capacity is increased by more than 40 percent and less than 80 percent. The applicant has the option to choose to base the major modification fee on the incremental capacity increase and using the new permit application rate in cases where the incremental increase is small compared to the existing capacity. In that case, the applicant can choose the smaller fee as long as it is larger than the minimum major modification fee listed for the category. In all cases, the minimum amount of the fee would be equal to or greater than the minimum major modification fee for the category. The major modification fee applies when:

i. the modification will trigger PSD review;

ii. the modification would have triggered PSD review without the use of contemporaneous emission reductions or banked emissions;

iii. the modification will increase emissions by 25 tons/year or more of nonattainment pollutant;

iv. the modification will change emissions over 100 tons/year of a criteria pollutant for which the standard has been attained; or

v. the modification will increase capacity of an existing operation at least by 40 percent and less than 80 percent.

c. Minor Modification Fee. The minor modification fee (based on existing capacity) applies when a modification is not qualified under new application fee or major modification fee. The minor modification fee shall be based on the existing capacity when the capacity is increased by less than 40 percent. The applicant has the option to choose to base the minor modification fee on the incremental capacity increase and using the new permit application rate in cases where the incremental increase is small compared to the existing capacity. In that case, the applicant can choose the smaller fee as long as it is larger than the minimum minor modification fee listed for the category. In all cases, the minimum amount of the fee would be equal to or greater than the minimum minor modification fee for the category.

d. If a permit modification is such that it does not increase capacity and changes emissions by less than 25 tons/year of all nonattainment pollutants, by less than 10 tons/year of an individual toxic air pollutant, by less than 25 tons/year of total toxic air pollutants, and by less than 100 tons/year of all other criteria (attainment) pollutants, then the permit fee shall be charged equal to the minimum minor modification permit fee for each fee process category involved. If no minimum minor modification permit fee is listed in LAC 33:III.223, then the minimum minor modification fee is calculated as follows:

i. if the minor modification fee is greater than $800, then the minimum minor modification fee is equal to 25 percent of the minor modification fee;

ii. if the minor modification fee is $200 to $800, then the minimum minor modification fee is $200; and

iii. if the minor modification fee is less than $200, then the minimum minor modification fee is the same as the minor modification fee.

e. Small Source Permit. The small source permit, as defined by LAC 33:III.503.B.2, applies when a permitted source is not a major source. The permitted source must also emit and have the potential to emit less than 25 tons/year of any regulated pollutant. For permit applications with processes specifically listed in the fee schedule that would also qualify for the small source permit fee, the permit fee shall be the lesser of these listed fees.

14. Air Toxics Annual Emissions Fees based on actual annual emissions that occurred during the previous calendar year shall be assessed on *major sources* as defined in LAC 33:III.5103.

15. For permits issued under LAC 33:III.507 (Title V permits) the following applies:

a. no application fee shall be charged for the initial permit provided no modifications are being made at the facility; and

b. no application fee shall be charged for renewals of permits issued provided no modifications are being made at the facility.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:611 (September 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1205 (December 1991), LR 18:706 (July 1992), LR 19:1419 (November 1993), amended by the Office of Management and Finance, Fiscal Services Division, LR 22:17 (January 1996), amended by the

Office of Environmental Assessment, Environmental Planning Division, LR 26:264 (February 2000), LR 26:2444 (November 2000), LR 29:2776 (December 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2435 (October 2005), LR 33:2082 (October 2007), LR 33:2620 (December 2007).

§213. Determination of Fee

A. These regulations apply to all registrants, specific licenses, permittees and other persons subject to charges concerned with one or more of the various programs of the Department of Environmental Quality.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:612 (September 1988).

§215. Method of Payment

A. All fee payments shall be made by check, draft or money order payable to the Department of Environmental Quality, and mailed to the address provided on the invoice.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:612 (September 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:706 (July 1992), amended by the Office of Management and Finance, Fiscal Services Division, LR 22:18 (January 1996).

§217. Late Payment Fee

A. Payments not received within 15 days of the due date will be charged a late payment fee. Any late payment fee shall be calculated from the due date indicated on the invoice.

1. Payments not received by the department by the fifteenth day from the due date will be assessed a 5 percent late payment fee on the original assessed fee.

2. Payments not received by the department by the thirtieth day from the due date will be assessed an additional 5 percent late payment fee on the original assessed fee.

3. Payments not received by the department by the sixtieth day from the due date will be assessed an additional 5 percent late payment fee on the original assessed fee.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:612 (September 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:706 (July 1992), LR 19:1373 (October 1993), LR 21:781 (August 1995), amended by the Office of Management and Finance, Fiscal Services Division, LR 25:426 (March 1999).

§219. Failure to Pay

A. Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:612 (September 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1373 (October 1993), amended by the Office of Management and Finance, Fiscal Services Division, LR 25:426 (March 1999).

§221. Effective Date

A. The application fees prescribed herein shall be effective upon publication in the *Louisiana Register* as adopted.

B. The annual fees prescribed herein shall be effective for the state fiscal year in which these fee regulations are published in the *Louisiana Register* as adopted and each state fiscal year thereafter. Fees submitted to the department in accordance with previous fee regulations for the state fiscal year in which these fee regulations are published in the *Louisiana Register* as adopted shall be credited against the fees due and payable under these fee regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:612 (September 1988).

§223. Fee Schedule Listing

Table 1
Fee Schedule Listing

Fee Number	Air Contaminant Source	SICC	Annual Maintenance Fee	New Permit Application Fee	Modified Permit Fees	
					Major	Minor
0010	Reserved					
0015 *Note 20*	Iron Ore Processing per Million Dollars in Capital Cost	1011	52.80	264.00	158.00	52.00
0020	Bituminous Coal and Lignite Mining	1211	756.00	3,780.00	2,270.00	756.00
0030	Coal Preparation	1211	1,892.00	9,455.00	5,673.00	1,892.00

Table 1						
Fee Schedule Listing						
Fee Number	**Air Contaminant Source**	**SICC**	**Annual Maintenance Fee**	**New Permit Application Fee**	**Modified Permit Fees**	
					Major	**Minor**
0040	Crude Oil and Natural Gas Production (Less than 100 T/Yr Source)	1311	90.00	449.00	269.00	90.00
0041	Crude Oil and Natural Gas Production (Equal to or Greater than 100 T/Yr and Less than 250 T/Yr Source)	1311	150.00	756.00	454.00	151.00
0042	Crude Oil and Natural Gas Production 250 T/Yr to 500 T/Yr Source	1311	467.00	2,335.00	1,400.00	467.00
0043	Crude Oil and Natural Gas Production Greater than 500 T/Yr Source	1311	777.00	3,113.00	2,335.00	777.00
0050	Natural Gas Liquids per Unit	1321	379.00	1,892.00	1,134.00	379.00
0060	Construction Sand and Gravel	1442	150.00	756.00	454.00	151.00
0070	Industrial Sand	1446	150.00	756.00	454.00	151.00
0080	Salt Mining	1476	1,892.00	9,455.00	5,673.00	1,892.00
0090	Sulfur Mining	1477	1,892.00	9,455.00	5,673.00	1,892.00
0100	Commercial Rice Milling	2044	756.00	3,780.00	2,270.00	756.00
0110	Animal Feed Preparation	2048	756.00	3,780.00	2,270.00	756.00
0120	Cane Sugar, Except Refining Only	2061	1,892.00	9,455.00	5,673.00	1,892.00
0130	Cane Sugar Refining per 1,000 Lb/Hr Rated Capacity	2062 MIN.	15.11 1,866.00	75.65 9,340.00	45.38 5,603.00	15.11 1,866.00
0140	Cottonseed Oil Mill	2074	379.00	1,892.00	1,134.00	379.00
0150	Soybean Oil Mill	2075	265.00	1,324.00	795.00	265.00
0160	Animal and Marine Fats and Oil (Rendering) 10,000 or More Ton/Yr	2077	906.00	4,538.00	2,722.00	906.00
0170	Animal and Marine Fats and Oil (Rendering) Less than 10,000 Ton/Yr	2077	454.00	2,270.00	1,362.00	454.00
0180	Shortening, Table Oils, Margarine, and Other Edible Fats and Oils	2079	187.00	946.00	566.00	187.00
0190	Malt Beverages	2082	187.00	946.00	566.00	187.00
0200	Coffee Roasting per 1,000,000 Lb/Yr Rated Capacity	2095 MIN. MAX.	150.48 359.00 9,495.00	756.36 1,795.00 47,480.00	452.76 1,077.00 28,488.00	150.48 359.00 9,495.00
0210 *Note 9*	Sawmill and/or Planing Less than 25,000 Bd Ft/Shift	2421	379.00	1,892.00	1,134.00	379.00
0220 *Note 9*	Sawmill and/or Planing More than 25,000 Bd Ft/Shift	2421	1,134.00	5,673.00	3,404.00	1,134.00
0230 *Note 9*	Hardwood Mill	2426	680.00	3,404.00	2,042.00	680.00
0240 *Note 9*	Special Product Sawmill N.E.C.	2429	680.00	3,404.00	2,042.00	680.00
0250	Millwork with 10 Employees or More	2431	680.00	3,404.00	2,042.00	680.00
0260	Hardwood Veneer and Plywood	2435	1,513.00	7,564.00	4,538.00	1,513.00
0270	Softwood Veneer and Plywood	2436	1,513.00	7,564.00	4,538.00	1,513.00
0280	Wood Preserving	2491	379.00	1,892.00	1,134.00	379.00
0290	Particleboard/Waferboard Manufacture (O.S.B.)	2492	1,513.00	7,564.00	4,538.00	1,513.00
0300	Hardboard Manufacture	2499	1,134.00	5,673.00	3,404.00	1,134.00
0310	Furniture and Fixtures: A) 100 or More Employees	2511	478.00	2,394.00	1,436.00	478.00
0320	Furniture and Fixtures: B) More than 10 and Less than 100 Employees	2511	227.00	1,134.00	680.00	227.00
0330	Pulp Mills per Ton Daily Rated Capacity	2611 MIN.	5.65 3,892.00	28.35 19,459.00	17.03 11,675.00	5.65 3,891.00
0340 *Note 1*	Paper Mill per Ton Daily Rated Capacity	2621 MIN.	5.65 3,892.00	28.35 19,459.00	17.03 11,675.00	5.65 3,891.00
0350	Paperboard Mills per Ton Daily Rated Capacity	2631 MIN.	5.65 3,892.00	28.35 19,459.00	17.03 11,675.00	5.65 3,891.00
0360	Paper Coating	2641	227.00	1,134.00	680.00	227.00
0365	Paper Bag Manufacture	2643	288.00	1,436.00	862.00	288.00
0370	Insulation Manufacture	2649	379.00	1,892.00	1,134.00	379.00
0375	Folding Paper Board Boxes per Packaging Press Line	2651 MIN.	379.00 1,866.00	1,892.00 9,340.00	1,134.00 5,603.00	379.00 1,866.00
0380	Corrugated Boxes: Converters (with Boilers)	2653	566.00	2,835.00	1,703.00	566.00
0381	Corrugated Boxes: Sheet Plant	2653	239.00	1,197.00	718.00	239.00
0390	Building Board and Tile	2661	1,892.00	9,455.00	5,673.00	1,892.00
0400	Commercial Printing: Black and White per Press	2752 MIN.	226.00 1,089.00	1,134.00 5,448.00	680.00 3,268.00	226.00 1,089.00
0410	Commercial Printing: Color per Press	2752 MIN.	378.00 1,866.00	1,890.00 9,340.00	1,135.00 5,603.00	378.00 1,866.00

Table 1						
Fee Schedule Listing						
Fee Number	Air Contaminant Source	SICC	Annual Maintenance Fee	New Permit Application Fee	Modified Permit Fees	
					Major	Minor
0420 *Note 2*	Caustic/Chlorine per 1,000,000 Lb/Yr Rated Cap Posed on Chlorine	2812 MIN.	3.79 1,866.00	18.92 9,340.00	11.34 5,603.00	3.79 1,866.00
0440	Industrial Gases	2813	756.00	3,780.00	2,270.00	756.00
0450	Inorganic Pigments	2816	756.00	3,780.00	2,270.00	756.00
0460	Aluminum Sulfate Production per 100 Ton/Yr Rated Capacity	2819 MIN.	1.87 1,556.00	9.46 7,783.00	5.65 4,670.00	1.87 1,556.00
0470	Alumina per 1,000,000 Lb/Yr Rated Capacity	2819 MIN.	7.54 1,556.00	37.80 7,783.00	22.68 4,670.00	7.54 1,556.00
0480	Catalyst Mfg. and Cat. Regeneration per Line	2819	1,892.00	9,455.00	5,673.00	1,892.00
0490	Fluosilicates	2819	1,134.00	5,673.00	3,404.00	1,134.00
0500	Industrial Inorganic Chemicals Mfg. N.E.C. per 1,000,000 Lb/Yr	2819 MIN.	1.87 1,089.00	9.46 5,448.00	5.65 3,268.00	1.87 1,089.00
0510	Industrial Inorganic Acids N.E.C. per 1,000,000 Lb/Yr Rated Capacity	2819 MIN.	18.92 1,866.00	94.55 9,340.00	56.73 5,603.00	18.92 1,866.00
0520	Nitric Acid Manufacture per 1,000 Ton/Yr Rated Capacity	2819 MIN.	7.54 1,866.00	37.80 9,340.00	22.68 5,603.00	7.54 1,866.00
0530	Phosphoric Acid Mfg. per Ton Daily Rated Capacity	2819 MIN.	1.87 1,556.00	9.46 7,783.00	5.65 4,670.00	1.87 1,556.00
0540	Sulphuric Acid Manufacture per Ton Daily Rated Capacity	2819 MIN.	1.87 1,556.00	9.46 7,783.00	5.65 4,670.00	1.87 1,556.00
0550	Polyethylene/Polypropolene Manufacture per 1,000,000 Lb/Yr Rated Capacity	2821 MIN.	15.11 1,866.00	75.65 9,340.00	45.38 5,603.00	15.11 1,866.00
0560	PVC Manufacture per 1,000,000 Lb/Yr Rated Capacity	2821 MIN.	18.92 1,866.00	94.55 9,340.00	56.73 5,603.00	18.92 1,866.00
0570	Synthetic Resins Manufacture N.E.C. per 1,000,000 Lb/Yr Rated Capacity	2821 MIN.	18.92 1,866.00	94.55 9,340.00	56.73 5,603.00	18.92 1,866.00
0580	Rubber Mfg. per 1,000,000 Lb/Yr Rated Capacity	2822 MIN.	18.92 1,866.00	94.55 9,340.00	56.73 5,603.00	18.92 1,866.00
0585	Paint Manufacturing and Blending	2851	704.00	3,518.00	2,111.00	704.00
0590	Charcoal per Oven	2861	379.00	1,892.00	1,134.00	379.00
0600	Gum and Wood Chemicals per Unit	2861	1,134.00	5,673.00	3,404.00	1,134.00
0610	Styrene Monomer per 1,000,000 Lb/Yr Rated Capacity	2865 MIN.	7.54 1,866.00	37.80 9,340.00	22.68 5,603.00	7.54 1,866.00
0620	Halogenated Hydrocarbons per 1,000,000 Lb/Yr Rated Capacity	2869 MIN.	11.34 1,866.00	56.73 9,340.00	34.04 5,603.00	11.34 1,866.00
0630	Organic Oxides, Alcohols, Glycols per 1,000,000 Lb/Yr Rated Capacity	2869 MIN.	7.54 1,866.00	37.80 9,340.00	22.68 5,603.00	7.54 1,866.00
0635	Olefins and Aromatics N.E.C. per 1,000,000 Lb/Yr Rated Capacity	2869 MIN.	7.54 1,866.00	37.80 9,340.00	22.68 5,603.00	7.54 1,866.00
0640	Ammonia Manufacture per Ton Daily Rated Capacity	2873 MIN.	3.78 1,866.00	18.92 9,340.00	11.34 5,603.00	3.78 1,866.00
0650	Fertilizer Manufacture per 1,000 Ton/Yr Rated Capacity	2873 MIN.	1.87 1,089.00	9.46 5,448.00	5.65 3,268.00	1.87 1,089.00
0660	Urea and Ureaform per 1,000 Ton/Yr Rated Capacity	2873 MIN.	3.78 1,089.00	18.92 5,448.00	11.34 3,268.00	3.78 1,089.00
0670	Pesticides Mfg. per Train	2879	1,513.00	7,564.00	4,538.00	1,513.00
0680	Carbon Black Manufacture per 1,000,000 Lb/Yr Rated Capacity	2895 MIN.	22.68 1,866.00	113.44 9,340.00	68.09 5,603.00	22.68 1,866.00
0690	Chemical and Chemical Prep. N.E.C. per 1,000,000 Lb/Yr	2899 MIN.	18.92 1,556.00	94.55 7,783.00	56.73 4,670.00	18.92 1,556.00
0695	Chemical and Chemical Prep. N.E.C. with Output Less than 1,000,000 Lb/Yr	2899	1,077.00	5,388.00	3,233.00	1,077.00
0700	Drilling Mud-Storage and Distribution	2899	379.00	1,892.00	1,134.00	379.00
0710	Drilling Mud-Grinding	2899	1,513.00	7,564.00	4,538.00	1,513.00
0715	Salt Processing and Packaging per 1,000,000 Lb/Yr	2899 MIN.	0.30 467.00	1.54 2,335.00	0.92 1,400.00	0.30 467.00
0720 *Note 3*	Petroleum Refining per 1,000 BBL/Day Rated Capacity Crude Thruput	2911 MIN.	94.55 1,866.00	472.77 9,340.00	284.00 5,603.00	95.55 1,866.00
0730 *Note 4*	Asphaltic Concrete Paving Plants per Ton/Hr Rated Capacity	2951 MIN.	2.85 777.00	14.22 3,891.00	8.53 2,335.00	2.85 777.00
0740	Asphalt Blowing Plant (Not to be Charged Separately if in Refinery)	2951	1,134.00	5,673.00	3,404.00	1,134.00
0760 *Note 5*	Blending, Compounding, or Refining of Lubricants per Unit	2992	1,134.00	5,673.00	3,404.00	1,134.00

Table 1						
Fee Schedule Listing						
Fee Number	**Air Contaminant Source**	**SICC**	**Annual Maintenance Fee**	**New Permit Application Fee**	**Modified Permit Fees**	
					Major	**Minor**
0770	Petroleum Coke Calcining per 1,000 Ton/Yr Rated Capacity	2999 MIN.	15.11 1,866.00	75.65 9,340.00	45.38 5,603.00	15.11 1,866.00
0773	Fiberglass Swimming Pools	N/A	265.00	1,324.00	795.00	265.00
0775	Plastics Injection Moulding and Extrusion per Line	3079	379.00	1,892.00	1,134.00	379.00
0780	Glass and Glass Container Mfg. Natural Gas Fuel per Line	3229	566.00	2,835.00	1,703.00	566.00
0790	Cement Manufacture per 1,000 Ton/Yr Rated Capacity	3241 MIN.	11.34 1,556.00	56.73 7,783.00	34.04 4,670.00	11.34 1,556.00
0800	Glass and Glass Container Mfg. Fuel Oil per Line	3241	1,134.00	5,673.00	3,404.00	1,134.00
0810	Brick Manufacture per 1,000 Ton/Yr Rated Capacity	3251 MIN.	5.65 777.00	28.35 3,891.00	17.03 2,335.00	5.65 777.00
0815	Concrete Products	3272	383.00	1,915.00	1,148.00	383.00
0820 *Note 12*	Ready-Mix Concrete	3273	946.00	2,874.00	1,892.00	946.00
0830	Lime Manufacture per 1,000 Ton/Yr Rated Capacity	3274 MIN.	11.34 1,089.00	56.73 5,448.00	34.04 3,268.00	11.34 1,089.00
0840	Gypsum Manufacture per 1,000 Ton/Yr Rated Capacity	3275 MIN.	11.34 1,089.00	56.73 5,448.00	34.04 3,268.00	11.34 1,089.00
0850	Asbestos Products per Site or per Production Unit	3292	2,270.00	11,347.00	6,809.00	2,270.00
0860	Clay Kiln	3295	454.00	2,271.00	1,362.00	454.00
0870	Rock Crusher	3295	416.00	2,080.00	1,249.00	416.00
0880	Gray Iron and Steel Foundries: A) 3,500 or More Ton/Yr Production	3321	606.00	3,024.00	1,815.00	606.00
0890	Gray Iron and Steel Foundries: B) Less than 3,500 Ton/Yr Production	3321	301.00	1,513.00	906.00	301.00
0900	Malleable Iron Foundries: A) 3,500 or More Ton/Yr Production	3322	606.00	3,024.00	1,815.00	606.00
0910	Malleable Iron Foundries: B) Less than 3,500 Ton/Yr Production	3322	301.00	1,513.00	906.00	301.00
0920	Steel Investment Foundries: A) 3,500 or More Ton/Yr Production	3324	606.00	3,024.00	1,815.00	606.00
0930	Steel Investment Foundries: B) Less than 3,500 Ton/Yr Production	3324	301.00	1,513.00	906.00	301.00
0940	Steel Foundries N.E.C.: A) 3,500 or More Ton/Yr Production	3325	606.00	3,024.00	1,815.00	606.00
0950	Steel Foundries N.E.C.: B) Less than 3,500 Ton/Yr Production	3325	301.00	1,513.00	906.00	301.00
0960	Primary Smelting and Refining of Copper per 100,000 Lb/Yr Rated Capacity	3331 MIN.	7.54 1,866.00	37.80 9,340.00	22.68 5,603.00	7.54 1,866.00
0970	Aluminum Production per Pot	3334 MIN.	37.80 1,866.00	189.12 9,340.00	113.00 5,603.00	37.80 1,866.00
0980	Refining of Non-Ferrous Metals N.E.C. per 1,000 Lb/Yr Rated Capacity	3339 MIN.	0.04 1,866.00	0.36 9,340.00	0.21 5,603.00	0.04 1,866.00
0990	Secondary Smelting of Non-Ferrous Metals per Furnace	3341 MIN.	1,134.00 2,335.00	5,673.00 11,675.00	3,404.00 7,005.00	1,134.00 2,335.00
1000	Wire Manufacture	3357	756.00	3,780.00	2,270.00	756.00
1010	Aluminum Foundries (Castings) per Unit	3361	301.00	1,513.00	906.00	301.00
1020	Brass/Bronze/Copper-Based Alloy Foundry per Furnace	3362	379.00	1,892.00	1,134.00	379.00
1030	Metal Heat Treating Including Shotpeening	3398	227.00	1,134.00	680.00	227.00
1040	Metal Can Manufacture	3411	757.00	3,780.00	2,270.00	756.00
1050	Drum Manufacturing and/or Reconditioning	3412	1,134.00	5,673.00	3,404.00	1,134.00
1059	Fabricated Structural Steel with 5 or More Welders	3441	756.00	3,780.00	2,270.00	756.00
1060	Fabricated Plate Work with 5 or More Welders	3443	957.00	4,789.00	2,874.00	957.00
1070	Electroplating, Polishing and Anodizing with 5 or More Employees	3471	227.00	1,134.00	680.00	227.00
1080	Sandblasting or Chemical Cleaning of Metal: A) 10 or More Employees	3471	1,134.00	5,673.00	3,404.00	1,134.00
1090	Sandblasting or Chemical Cleaning of Metal: B) Less than 10 Employees	3471	566.00	2,835.00	1,703.00	566.00
1100	Coating, Engraving, and Allied Services: A) 10 or More Employees	3479	416.00	2,080.00	1,249.00	416.00
1110	Coating, Engraving, and Allied Services: B) Less than 10 Employees	3479	227.00	1,134.00	680.00	227.00
1120	Galvanizing and Pipe Coating Excluding All Other Activities	3479	454.00	2,270.00	1,362.00	454.00
1130	Painting Topcoat per Line	3479	379.00	1,892.00	1,134.00	379.00
1140	Potting per Line	3479	227.00	1,134.00	680.00	227.00
1150	Soldering per Line	3479	227.00	1,134.00	680.00	227.00
1160	Wire Coating per Line	3479	756.00	3,780.00	2,270.00	756.00

Table 1						
Fee Schedule Listing						
Fee Number	Air Contaminant Source	SICC	Annual Maintenance Fee	New Permit Application Fee	Modified Permit Fees	
					Major	Minor
1170	Oil Field Machinery and Equipment	3533	379.00	1,892.00	1,134.00	379.00
1180	Power Chain Saw Manufacture per Line	3546	566.00	2,835.00	1,703.00	566.00
1190	Commercial Grain Dryer	3559	454.00	2,270.00	1,362.00	454.00
1193	Commercial Laundry, Dry Cleaning, and Pressing Machines	3582	566.00	2,835.00	1,703.00	566.00
1195	Electric Transformers per 1,000 Units/Year	3612 MIN.	175.92 478.00	879.56 2,394.00	527.74 1,436.00	175.92 478.00
1200	Electrode Manufacture per Line	3624	529.00	2,645.00	1,588.00	529.00
1210	Telephone Manufacture per Line	3661	1,324.00	6,618.00	3,971.00	1,324.00
1220	Electrical Connector Manufacture per Line	3678	680.00	3,404.00	2,042.00	680.00
1230	Battery Manufacture per Line	3691	756.00	3,780.00	2,270.00	756.00
1240	Electrical Equipment per Line	3694	454.00	2,270.00	1,362.00	454.00
1245	Automobile, Truck, and Van Assembly per 1,000 Vehicles per Year Capacity	3711 MIN. MAX.	189.12 1,197.00 37,829.00	945.50 5,998.00 189,145.00	567.30 3,592.00 113,487.00	189.12 1,197.00 37,829.00
1250	Ship and Boat Building: A) 5001 or More Employees	3732	5,673.00	28,365.00	17,020.00	5,673.00
1260	Ship and Boat Building: B) 2501 to 5000 Employees	3732	3,780.00	18,912.00	11,347.00	3,780.00
1270	Ship and Boat Building: C) 1001 to 2500 Employees	3732	1,892.00	9,455.00	5,673.00	1,892.00
1280	Ship and Boat Building: D) 201 to 1000 Employees	3732	1,134.00	5,673.00	3,404.00	1,134.00
1290	Ship and Boat Building: E) 200 or Less Employees	3732	379.00	1,892.00	1,134.00	379.00
1300	Playground Equipment Manufacture per Line	3949	566.00	2,835.00	1,703.00	566.00
1310	Grain Elevators: A) 20,000 or More Ton/Yr	4221	1,208.00	6,050.00	3,630.00	1,208.00
1320	Grain Elevators: B) Less than 20,000 Ton/Yr	4221	606.00	3,025.00	1,815.00	606.00
1330 *Note 6*	A) Petroleum, Chemical Bulk Storage and Terminal (over 3,000,000 BBL Capacity)	4226	11,347.00	56,732.00	34,040.00	11,347.00
1340 *Note 6*	B) Petroleum, Chemical Bulk Storage and Terminal (1,000,000 - 3,000,000 BBL Capacity)	4226	7,564.00	37,821.00	22,692.00	7,564.00
1350 *Note 6*	C) Petroleum, Chemical Bulk Storage and Terminal (500,001 - 1,000,000 BBL Capacity)	4226	3,780.00	18,912.00	11,347.00	3,780.00
1360 *Note 6*	D) Petroleum, Chemical Bulk Storage and Terminal (500,000 BBL Capacity or Less)	4226	1,892.00	9,455.00	5,673.00	1,892.00
1361 *Note 8*	Wholesale Distribution of Coke and Other Bulk Goods per 1,000 Ton/Yr Capacity	4463 MIN.	0.77 1,866.00	3.79 9,340.00	2.24 5,603.00	0.77 1,866.00
1362	Crude Oil Pipeline: Facility with Less than 100,000 BBLS Storage Capacity	4612	838.00	4,191.00	2,515.00	838.00
1363	Crude Oil Pipeline: Facility with 100,000 to 500,000 BBLS Storage Capacity	4612	1,197.00	5,988.00	3,592.00	1,197.00
1364	Crude Oil Pipeline: Facility with over 500,000 BBLS Storage Capacity	4612	1,676.00	8,382.00	5,029.00	1,676.00
1366	Refined Oil Pipeline: Facility with Less than 100,000 BBLS Storage Capacity	4613	718.00	3,592.00	2,154.00	718.00
1367	Refined Oil Pipeline: Facility with 100,000 to 500,000 BBLS Storage Capacity	4613	957.00	4,789.00	2,874.00	957.00
1368	Refined Oil Pipeline: Facility with Over 500,000 BBLS Storage Capacity	4613	1,436.00	7,185.00	4,310.00	1,436.00
1370	Railcar/Barge/Tank Truck Cleaning Heavy Fuels Only	4742	379.00	1,892.00	1,134.00	379.00
1380	Railcar and Barge Cleaning Other Than Heavy Fuels	4742	1,892.00	9,455.00	5,673.00	1,892.00
1390	Tank Truck Cleaning Other Than Heavy Fuels	4742	1,134.00	5,673.00	3,404.00	1,134.00
1400	A) Electric Power Gen. per MW (over 0.7 Percent S in Fuel)	4911 MIN.	17.57 3,580.00	87.94 17,902.00	52.76 10,741.00	17.57 3,580.00
1410 *Note 7*	B) Electric Power Gen. per MW (0.7 Percent S or Less in Fuel)	4911 MIN.	10.53 1,712.00	52.76 8,562.00	31.65 5,137.00	10.53 1,712.00
1420	C) Electric Power Gen. per MW (Natural Gas Fired)	4911 MIN.	5.29 1,245.00	26.39 6,226.00	15.83 3,736.00	5.29 1,245.00
1430 *Note 11*	Natural Gas Comp per 100 H.P. (Turbines)	4922	7.54	37.80	22.68	7.54
1440 *Note 11*	Recip. Nat Gas Comp per 100 H.P.: A) 50,000 H.P.	4922	34.06	170.21	102.12	34.06
1450 *Note 11*	Recip. Nat Gas Comp per 100 H.P.: B) 20,000 to 50,000 H.P.	4922	37.80	189.12	113.44	37.80
1460 *Note 11*	Recip. Nat Gas Comp per 100 H.P.: C) 5,000 to 20,000 H.P.	4922	45.38	226.92	136.12	45.38
1470 *Note 11*	Recip. Nat Gas Comp per 100 H.P.: D) 2,500 to 5,000 H.P.	4922	52.96	264.71	158.84	52.96
1480 *Note 11*	Recip. Nat Gas Comp per 100 H.P.: E) 1,000 to 2,500 H.P.	4922	56.73	283.65	170.21	56.73

Table 1						
Fee Schedule Listing						
Fee Number	**Air Contaminant Source**	**SICC**	**Annual Maintenance Fee**	**New Permit Application Fee**	**Modified Permit Fees**	
					Major	**Minor**
1490 *Note 11*	Recip. Nat Gas Comp: F) Less than 1,000 H.P.	4922	756.00	1,892.00	756.00	756.00
1500 *Note 10*	Coal Gassification per $100,000 Capital Cost	4925 MIN. MAX.	7.54 1,197.00 60,558.00	37.80 5,988.00 302,788.00	22.68 3,592.00 181,672.00	7.54 1,197.00 60,558.00
1510 *Note 10*	Co-Generation per $100,000 Capital Cost	4939 MIN. MAX.	7.54 1,197.000 37,829.00	37.80 5,988.00 189,145.00	22.68 3,592.00 113,487.00	7.54 1,197.00 37,829.00
1520	Incinerators: A) 1,000 Lb/Hr and Greater Capacity	4953	478.00	2,394.00	1,436.00	478.00
1521	Incinerators: B) Less than 1,000 Lb/Hr Capacity	4953	154.00	777.00	467.00	154.00
1525	Sanitary Landfill per Million Mg of Planned Capacity	4953 MIN.	132.00 264.00	660.00 1,320.00	396.00 792.00	132.00 264.00
1530	Municipal Incinerators	4953	3,780.00	18,912.00	11,347.00	3,780.00
1532	Commercial Hazardous Waste Incinerator per 1,000,000 Btu per Hour Thermal Capacity	4953 MIN.	217.95 4,789.00	1,089.73 23,950.00	653.84 14,370.00	217.95 4,789.00
1533	Noncommercial Hazardous Waste Incinerator (per 1,000,000 Btu/Hr Thermal Capacity)	4953 MIN.	108.97 3,113.00	545.61 15,567.00	326.91 9,340.00	108.97 3,113.00
1534	Commercial Hazardous Waste Disp. Facility N.E.C.	4953	31,135.00	155,676.00	93,405.00	31,135.00
1535	Commercial Hazardous Waste Underground Injection (Surface Facilities) per Location	4953	6,226.00	31,135.00	18,681.00	6,226.00
1536	Recoverable/Re-usable Materials Proc. Facility (per 1,000,000 Btu/Hr Thermal Capacity)	4953 MIN. MAX.	108.97 3,113.00 15,567.00	544.86 15,567.00 77,838.00	326.91 9,340.00 46,702.00	108.97 3,113.00 15,567.00
1540	Steam Gen. Units per 1000 Lb/Hr Steam Cap: Natural Gas or Comb Non-Fossil Fuels	4961 MIN.	1.87 310.00	9.46 1,556.00	5.65 933.00	1.87 310.00
1550	Steam Gen. Units per 1000 Lb/Hr Steam Cap: Fuels with 0.7 Percent S or Less	4961 MIN.	3.79 777.00	18.92 3,891.00	11.34 2,335.00	3.79 777.00
1560	Steam Gen. Units per 1000 Lb/Hr Steam Cap: Fuels with More than 0.7 Percent S	4961 MIN.	5.65 1,089.00	28.35 5,448.00	17.03 3,268.00	5.65 1,089.00
1570	Cement (Bulk Distribution)	5052	1,513.00	7,564.00	4,538.00	1,513.00
1580	Wholesale Distribution of Coal per 1,000 Ton/Yr Throughput	5052 MIN.	0.36 1,089.00	1.87 5,448.00	1.11 3,268.00	0.36 1,089.00
1590	Automobile Recycling Scrap per 1000 Ton/Yr	5093 MIN. MAX.	15.56 777.00 37,829.00	77.83 3,891.00 189,145.00	46.70 2,335.00 113,487.00	15.56 777.00 37,829.00
1600	Bulk Loader: Over 100,000 Ton/Yr Throughput	5153	3,780.00	18,912.00	11,347.00	3,780.00
1610 *Note 14a*	Bulk Loader: Less Than or Equal to 100,000 and More Than 25,000 Ton/Yr Throughput	5153	1,892.00	9,455.00	5,673.00	1,829.00
1611 *Note 14a*	Bulk Loader: 25,000 Ton/Yr or Less Throughput	5153	1,077.00	5,388.00	3,233.00	1,077.00
1612 *Note 14a*	Bulk Loader: No Grain or Dusty Materials Transfer	5153	718.00	3,592.00	2,154.00	718.00
1620	Grain Elevators-Terminal per 10,000 BU/Yr Throughput	5153 MIN.	0.36 1,712.00	1.87 8,562.00	1.11 5,137.00	0.36 1,712.00
1630	Wholesale Distribution of Chemicals and Allied Products per Facility	5161	946.00	3,780.00	2,835.00	946.00
1640	Petroleum Bulk Plants	5171	77.00	379.00	227.00	77.00
1650	Petroleum Bulk Terminal	5171	756.00	3,780.00	2,270.00	756.00
1660	Petroleum Bulk Station	5171	77.00	379.00	227.00	77.00
1670	Storage Tank	5171	0.00	756.00	379.00	379.00
1680	Crude Oil Distribution	5172	1,134.00	5,673.00	3,404.00	1,134.00
1690	Tire Recapping Plant	7534	154.00	777.00	467.00	154.00
1700	Chemical Waste Disposal Facility for Nonhazardous Waste	9998	3,518.00	17,592.00	10,555.00	3,518.00
1710	Negotiated Fee	9999	0.00	0.00	0.00	0.00
1711	Research Fee for Alternate Disposal of Hazardous Waste	9999	0.00	0.00	0.00	0.00
1720 *Note 15*	Small Business Sources	N/A	143.00	713.00	428.00	143.00
1722	Small Source Permit	N/A	143.00	713.00	428.00	143.00

Table 2		
Additional Fees		
Fee Number	**Fee Description**	**Amount**
2000	Company Ownership/Operator Change or Name Change Transfer of an Existing Permit	150.00
2010	The Issuance or Denial of Relocation, Administrative Amendments, Variances, Authorization to Construct, Change of Tank Service, Research & Development, and Exemptions	300.00
2015 *Note 15*	The Issuance or Denial of Relocation, Administrative Amendments, Variances, Authorization to Construct, Change of Tank Service, Research & Development, and Exemptions for Small Business Sources	143.00
2020	The Issuance of an Asbestos Demolition Verification Form (ADVF)—(at least 10 working days notification given)	66.00
2030	The Issuance of an Asbestos Demolition Verification Form (ADVF)—(less than 10 working days notification given)	99.00
2040	Agent Accreditation for Asbestos: Includes Contractor/Supervisor, Inspector, Management Planner, or Project Designer-Normal Processing (greater than three working days after receipt of required documentation and fees)	264.00
2050	Agent Accreditation for Asbestos: Includes Contractor/Supervisor, Inspector, Management Planner, or Project Designer-Emergency Processing (less than or equal to three working days after receipt of required documentation and fees)	396.00
2060	Worker Accreditation for Asbestos-Normal Processing (greater than three working days after receipt of required documentation and fees)	66.00
2070	Worker Accreditation for Asbestos-Emergency Processing (less than or equal to three working days after receipt of required documentation and fees)	99.00
2080	Duplicate Certificate	33.00
2090	Training Organization Recognition Plus Trainer Recognition per Trainer-Normal Processing (greater than three working days after receipt of required documentation and fees)	396.00 66.00
2100	Training Organization Recognition Plus Trainer Recognition per Trainer-Emergency Processing (less than or equal to three working days after receipt of required documentation and fees)	594.00 99.00
2200 *Note 13*	Air Toxics Annual Fee per Ton Emitted on an Annual Basis:	
	Class I Pollutants	142.56
	Class II Pollutants	71.28
	Class III Pollutants	35.64
2300 *Note 14*	Criteria Pollutant Annual Fee per Ton Emitted on an Annual Basis (Non-Title V Facility): Nitrogen oxides (NO_x) Sulfur dioxide (SO_2) Non-toxic organic (VOC) Particulate (PM_{10})	12.83/ton
2310 *Note 14*	Criteria Pollutant Annual Fee per Ton Emitted on an Annual Basis (Title V Facility): Nitrogen oxides (NO_x) Sulfur dioxide (SO_2) Non-toxic organic (VOC) Particulate (PM_{10})	12.83/ton
2400	An application approval fee for Stage II Vapor Recovery An annual facility inspection fee for Stage II Vapor Recovery	132.00 198.00

Table 2		
Additional Fees		
Fee Number	**Fee Description**	**Amount**
2600 *Note 16*	Accident Prevention Program Annual Maintenance Fee: Program 1	264.00
2620 *Note 16*	Accident Prevention Program Annual Maintenance Fee: Program 2	528.00
2630 *Note 16*	Accident Prevention Program Annual Maintenance Fee: Program 3	3,300.00
2800	An application fee for mobile sources emissions banking (auto scrappage)	66.00
2810	An application fee for point source emissions banking (not applicable when filing application with a new permit or permit modification)	66.00
2900 *Note 19*	Lead Contractor License Evaluation Fee	500.00
2901 *Note 19*	Lead Project Supervisor Accreditation Fee	250.00
2902 *Note 19*	Lead Project Designer Accreditation Fee	500.00
2903 *Note 19*	Risk Assessor Accreditation Fee	250.00
2904 *Note 19*	Lead Inspector Accreditation Fee	150.00
2905 *Note 19*	Lead Worker Accreditation Fee	50.00
2906 *Note 19*	Accreditation Fee for Louisiana Lead Training Organizations, Application Processing Fee	500.00
2907 *Note 19*	Accreditation Fee for Louisiana Lead Training Organizations, Processing Fee per Instructor	50.00
2908 *Note 19*	Accreditation Fee for Out of State Training Organizations, Application Processing Fee	750.00
2909 *Note 19*	Accreditation Fee for Out of State Training Organizations, Processing Fee per Instructor	100.00
2910 *Note 19*	Lead Abatement Project Notification Fee, 2000 Square Feet and under	200.00
2911 *Note 19*	Lead Abatement Project Notification Fee for Each Additional Increment of 2000 Square Feet or Portion Thereof	100.00
2912 *Note 19*	Revisions to Lead Abatement Project Notification Fee	50.00

Table 2		
Additional Fees		
Fee Number	**Fee Description**	**Amount**
2913 *Note 19*	Soil Lead Abatement Project Notification Fee, Half Acre or Less	200.00
2914 *Note 19*	Soil Lead Abatement Project Notification Fee, Each Additional Half Acre or Portion Thereof	100.00

Explanatory Notes for Fee Schedule

Note 1. This category does not include building paper.

Note 2. This category is considered one process with the fee based on the rated yearly chlorine capacity.

Note 3. The fee for this category is based on crude throughput of the refinery. Throughput includes additional purchased charge stocks.

Note 4. The fees for this category apply to both batch and continuous processes.

Note 5. This fee applied to lubricants meaning lubricating oils and greases. This fee is not to be charged for units which are part of a facility for which the petroleum refinery fee was paid.

Note 6. The fees for this category are based on the organic compound storage capacity of the facility.

Note 7. For an electric power generation unit to be placed in this category it must burn fuel oil or coal of less than 0.7 percent Sulphur.

Note 8. Wholesale grain distribution is not included in this category.

Note 9. Facilities with no fuel or waste burning equipment are exempted from both the annual compliance and permit fees. Power must be supplied by electric motors or internal combustion engines.

Note 10. For coal gasification and cogeneration projects when computing application fees, the capital cost for the control equipment that reduces emissions to a level below the applicable NSPS regulations should be deducted from the capital cost.

Note 11. The maximum annual maintenance fee for Categories 1430-1490 is not to exceed $37,829 total for any one gas transmission company.

Note 12. The maximum annual maintenance fee for one location with two or more plants shall be $1,711.

Note 13. Fees will be determined by aggregating and rounding (e.g., parts of a ton less than 0.50 are invoiced as zero and parts of a ton equal to or greater than 0.50 are invoiced as one ton) actual annual emissions of each class of toxic air pollutants (as delineated in the tables in LAC 33:III.5112) for a facility and applying the appropriate fee schedule for that class. If a facility emits more than 4000 tons per year of any single toxic air pollutant, fees shall be assessed on only the first 4000 tons. In no case shall the fee for this category be less than $132.

Note 14. Fees will not be assessed for emissions of a single criteria pollutant over and above 4,000 tons per year from a facility. Criteria fees will be assessed on actual annual emissions that occurred during the previous calendar year. The minimum fee for this category shall be $132.

Note 14a. The throughput of these categories shall be based on the amount of grain or other materials that are known to produce significant amounts of particulate emissions. The determination of which materials or grains are considered as dusty materials is based on the material having similar emission factors to grain or having similar properties that can be used to estimate potential emissions.

Note 15. Applications must be accompanied by a certificate of eligibility authorized by the department's Small Business Technical Assistance Program. Final determination of a facility's eligibility is to be made by the administrative authority or his designee and may be based on (but not limited to) the following factors: risk assessment, proposed action, location, etc. For the purpose of this Chapter a small business is a facility which: has 50 employees or fewer; is independently owned; is a small business concern as defined pursuant to the Small Business Act; emits less than 5 tons/year of any single hazardous air pollutant and less than 15 tons/year of any combination of hazardous air pollutants; emits less than 25 tons/year of any regulated pollutant; has an annual gross revenue that does not exceed $5,000,000; is not a major stationary source; and does not incinerate, recycle, or recover any off-site hazardous, toxic, industrial, medical, or municipal waste.

Note 16. The choice of which program level applies is based on the highest level assigned to any process at the facility that applies at any time during the state fiscal year for which the invoice is being prepared (Program 3 being the highest). This annual maintenance fee is charged based on a state fiscal year from July to June.

Note 17. Reserved.

Note 18. Reserved.

Note 19. The fee for emergency processing will be 1.5 times the regular fees.

Processing Timelines		
Notification or Application	**Normal Processing**	**Emergency Processing**
Lead Training Provider and Trainers' Recognition	30 days	Applicant requests the application be processed in five working days or less
Accreditation	2 weeks	Applicant requests the application be processed in three working days or less
Notification	Postmarked or hand-delivered 10 working days prior to start-up	Postmarked or hand-delivered less than 10 working days prior to start-up
Contractors' "letter of approval"	30 days	Applicant requests processing in five working days or less

Note 20. This fee category applies to facilities that use a direct reduction process to process iron ore. The fees are based on the capital cost of the facility. In determination of fees for this fee category, the capital cost shall be used in the same manner as the capacity in other fee categories.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054, 2341, and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:613 (September 1988), LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1205 (December 1991), repromulgated LR 18:31 (January 1992), amended LR 18:706 (July 1992), LR 18:1256 (November 1992), LR 19:1373 (October 1993), LR 19:1420 (November 1993), LR 19:1564 (December 1993), LR 20:421 (April 1994), LR 20:1263 (November 1994), LR 21:22 (January 1995), LR 21:782 (August 1995), LR 21:942 (September 1995), repromulgated LR 21:1080 (October 1995), amended LR 21:1236 (November 1995), LR 23:1496, 1499 (November 1997), LR

23:1662 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:267 (February 2000), LR 26:485 (March 2000), LR 26:1606 (August 2000), repromulgated LR 27:192 (February 2001), amended LR 29:672 (May 2003), LR 29:2042 (October 2003), LR 30:1475 (July 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2620 (December 2007).

Chapter 5. Permit Procedures

§501. Scope and Applicability

A. Applicability. The provisions of this Chapter apply to the owner and operator of any source which emits or has the potential to emit any air contaminant in the state of Louisiana.

1. Such sources shall include, but are not limited to:

a. any major source as defined herein;

b. any nonmajor (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 nonmajor (minor) source required to obtain an air quality permit pursuant to this Chapter or to other regulations promulgated by the Louisiana Department of Environmental Quality;

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

e. any solid waste incineration unit required to obtain a permit pursuant to Section 129(e) of the federal Clean Air Act.

2. Program-specific permitting requirements pertaining to certain air quality control programs are addressed in the chapter which provides the control requirements of the program or in relevant subsections under this Chapter.

B. Exemptions and Special Provisions

1. General Exemptions. The requirement to obtain a permit in accordance with this Chapter does not apply to:

a. activities conducted on residential property, unless such activities constitute a Part 70 source under LAC 33:III.507.A.1;

b. the distribution or application of pesticides;

c. mobile sources such as automobiles, trucks, and aircraft; or

d. any *upset*, as defined in LAC 33:III.507.J.1; however, the permitting authority shall be advised of such occurrences without delay, in accordance with all applicable upset or emergency provisions of Louisiana Air Quality regulations and of LAC 33:I.Chapter 39.

2. Statutory Exemptions. The requirement to obtain a permit in accordance with this Chapter does not apply to:

a. air quality conditions existing solely within the property boundaries of commercial and industrial plants;

b. controlled burning of agricultural by-products in the field or of cotton gin agricultural wastes; or

c. controlled burning in connection with timber stand management, or of pastureland or marshland in connection with trapping or livestock production.

3. Source Category Exemptions. No nonmajor source will be required to obtain a permit under this Chapter solely because it is a regulated source under one or more of the following:

a. 40 CFR 61.145-NESHAP for Asbestos, Standard for Demolition and Renovation;

b. LAC 33:III.5151-Emission Standard for Asbestos;

c. 40 CFR Part 60 AAA-Standards of Performance for New Residential Wood Heaters; or

d. regulations promulgated in accordance with the federal Clean Air Act under Section 112(r)-Prevention of Accidental Releases.

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 5 tons per year of any regulated air pollutant;

ii. the source emits and has the potential to emit less than the minimum emission rate listed in LAC 33:III.5112, Table 51.1, 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.

5. Insignificant Activities List. 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.

Insignificant Activities List
A. Based on Size or Emission Rate
Permit applications submitted under Subsection A of this Section for sources that include any of the following emissions units, operations, or activities must either list them as insignificant activities or provide the information for emissions units as specified under LAC 33:III.517:
1. external combustion equipment with a design rate greater than or equal to 1 million Btu per hour, but less than or equal to 10 million Btu per hour, provided that the aggregate emissions from all such units listed as insignificant do not exceed 5 tons per year;
2. storage tanks less than 250 gallons storing organic liquids having a true vapor pressure less than or equal to 3.5 psia, provided that the aggregate emissions from all such organic liquid storage tanks listed as insignificant do not exceed 5 tons per year, do not exceed any Minimum Emission Rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established pursuant to Section 112(g) of the federal Clean Air Act;
3. storage tanks less than 10,000 gallons storing organic liquids having a true vapor pressure less than 0.5 psia, provided that the aggregate emissions from all such organic liquid storage tanks listed as insignificant do not exceed 5 tons per year, do not exceed any Minimum Emission Rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established pursuant to Section 112(g) of the federal Clean Air Act;
4. emissions of any inorganic air pollutant that is not a *regulated air pollutant* as defined under LAC 33:III.502, provided that the aggregate emissions from all such pollutants listed as insignificant do not exceed 5 tons per year;
5. external combustion equipment with a design rate less than 1 million Btu per hour;
6. emissions from laboratory equipment/vents used exclusively for routine chemical or physical analysis for quality control or environmental monitoring purposes, provided that the aggregate emissions from all such equipment vents considered insignificant do not exceed 5 tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act;
7. noncommercial water washing operations of empty drums less than or equal to 55 gallons with less than 3 percent of the maximum container volume of material;
8. portable fuel tanks used on a temporary basis in maintenance and construction activities, provided that the aggregate emissions from all such tanks listed as insignificant do not exceed 5 tons per year;

Insignificant Activities List
9. emissions from process stream or process vent analyzers, provided that the aggregate emissions from all such analyzers listed as insignificant do not exceed 5 tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act;
10. storage tanks containing, exclusively, soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, molasses, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials, the tanks are not subject to 40 CFR 60, Subpart Kb or other federal regulation, and the aggregate emissions from all such tanks listed as insignificant do not exceed 5 tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act;
11. catalyst charging operations, provided all such operations listed as insignificant do not exceed 5 tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act; and
12. portable cooling towers used on a temporary basis in maintenance activities, provided the aggregate emissions from all such cooling towers listed as insignificant do not exceed 5 tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act.
B. Based on Activity
The following activities need not be included in a permit application:
1. activities which occur strictly for maintenance of grounds or buildings, including: lawn care, weed control, pest control, grinding, cutting, welding, woodworking, general repairs, janitorial activities, steam cleaning, and water washing activities;
2. surface-coating of equipment during miscellaneous maintenance and construction activities, including spray painting, roll-coating and painting with aerosol spray cans, provided no paint or coating exceeds a maximum 3.5 lb/gal organic toxic air pollutant listed in LAC 33:III.5112, Table 51.1 or 51.3, and no paint or coating exceeds any limitations listed in LAC 33:III.2123. This activity specifically does not include any facility whose primary business activity is surface-coating or includes surface-coating of products;
3. miscellaneous equipment maintenance or construction unless otherwise regulated by state or federal regulation, which may include, but is not limited to, such activities as: welding, steam cleaning, equipment used for hydraulic or hydrostatic testing, miscellaneous solvent use [1], miscellaneous sandblasting, sweeping, nonasbestos insulation removal, acid washing, caustic washing, water blasting, application of refractory and insulation, brazing, soldering, the use of adhesives, grinding, and cutting;
4. exhaust emissions or vehicle refueling emissions from cars, trucks, forklifts, courier vehicles, front-loaders, graders, cranes, carts, maintenance trucks, locomotives, helicopters, marine vessels, and other self-propelled on-road and nonroad mobile sources unless required to obtain a permit under Title V of the Clean Air Act. This exemption does not include any transportable emissions units such as temporary compressors or boilers, unless regulated by Title II of the Clean Air Act. This exemption does not cover loading racks or fueling operations covered by LAC 33:III.Chapter 21;
5. office activities such as photocopying, blueprint copying, and photographic processes;
6. site assessment work to characterize waste disposal or remediation sites;

Insignificant Activities List
7. operation of groundwater remediation wells, including emissions from the pumps and collection activities. This does not include emissions from air-stripping or storage;
8. emissions from storage or use of water-treating chemicals, except for toxic air pollutants as listed in LAC 33:III.5112, Table 51.1 or 51.3, or pollutants listed under regulations promulgated pursuant to Section 112(r) of the federal Clean Air Act, for use in cooling towers, drinking water systems, and boilerwater/feedwater systems;
9. miscellaneous additions or upgrades of instrumentation or control systems;
10. emissions from food preparation at restaurants, cafeterias, and facilities where food is consumed on-site;
11. emissions from air contaminant detectors, air contaminant recorders, combustion controllers, or combustion shutoff devices;
12. buildings, cabinets, and facilities used for storage of chemicals in closed containers, unless subject to any federally applicable requirement as defined under LAC 33:III.503 or any requirement under LAC 33:III;
13. use of products for the purpose of maintaining motor vehicles operated by the facility, not including air conditioning units of such vehicles (i.e., antifreeze, fuel additives);
14. reserved;
15. stacks or vents to prevent escape of sanitary sewer gases through plumbing traps;
16. emissions from equipment lubricating systems (i.e., oil mist) not to include storage tanks unless exempt elsewhere in this Section;
17. air conditioning or comfort ventilation systems not regulated under Title VI of the federal Clean Air Act;
18. residential wood heaters, cookstoves, or fireplaces;
19. recreational fireplaces;
20. log wetting areas;
21. log flumes;
22. instrument air systems, excluding fuel-fired compressors;
23. paved parking lots;
24. air vents from air compressors;
25. periodic use of air for cleanup;
26. solid waste dumpsters;
27. emissions of wet lime mud from lime mud mix tanks, lime mud washers, lime mud piles, lime mud filter and filtrate tanks, and lime mud slurry tanks;
28. emissions from pneumatic starters on reciprocating engines, turbines, or other equipment;
29. emissions from natural gas odoring activities unless the permitting authority determines that a nuisance may occur;
30. emissions from engine crackcase vents;
31. storage tanks used for the temporary containment of materials resulting from an emergency response to an unanticipated release of pulping liquor;
32. generators, boilers, or other fuel burning equipment that is of equal or smaller capacity than the primary operating unit, that cannot be used in conjunction with the primary operating unit [except for short durations when shutting down the primary operating unit (maximum of 24 hours) and when starting up the primary operating unit until it reaches steady-state operation (maximum of 72 hours)], and that does not increase emissions of or the potential to emit any regulated air pollutant;
33. equipment used exclusively to mill or grind coatings in roll grinding and rebuild and molding compounds where all materials charged are in paste form;

Insignificant Activities List
34. mixers, blenders, roll mills, or calendars for rubber or plastics for which no materials in powder form are added and in which no organic solvents, diluents, or thinners are used;
35. the storage handling and handling equipment for bark and wood residues not subject to fugitive dispersion offsite;
36. reserved;
37. maintenance dredging of pulp and paper mill surface impoundments and ditches containing cellulosic and cellulosic derived biosolids and inorganic materials such as lime, ash, or sand;
38. liquid and gas sampling systems for routine pulp and paper process control instrument calibration and regulatory information. For example, pulping liquor concentration, black liquor solids, whitewater chemistry;
39. tall oil soap storage, skimming, and loading;
40. emissions from caustic storage tanks that contain no VOC;
41. emissions from fire fighting training conducted in accordance with LAC 33:III.1109.D.7;
42. emissions from *oil and gas well and pipeline* as defined in accordance with LAC 33:III.502;
43. produced water treatment units (e.g., Wemco units) on crude oil and natural gas production platforms in state waters of the Gulf of Mexico that discharge produced water in accordance with an LPDES permit. These units are the final step in water treatment prior to water discharge under the LPDES permit;
44. portable diesel fuel storage tanks used on a temporary basis in maintenance and construction activities;
45. emergency electrical power generators used only during power outages at sites not otherwise required to have a permit under LAC 33:III.Chapter 5 and operated no more than 500 hours per year; and
46. reserved.
C. Based on Type of Pollutant
Emissions of the following pollutants need not be included in a permit application:
1. water vapor;
2. oxygen;
3. carbon dioxide;
4. nitrogen;
5. hydrogen.
D. Exemptions Based on Emissions Levels
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 or permit modification, as appropriate.
a. The emissions unit emits and has the potential to emit no more than 5 tons per year of any regulated pollutant.
b. The emissions unit emits and has the potential to emit less than the minimum emission rate listed in LAC 33:III.5112, Table 51.1, 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.
d. No new federally enforceable limitations or permit conditions are necessary to ensure compliance with any applicable requirement.

[1] State or federal regulations may apply.

6. Grandfathered Status. Those facilities which were under actual construction or operation as of June 19, 1969, and granted grandfathered status by DEQ may maintain such grandfathered status, provided a current and accurate

Emissions Inventory Questionnaire is maintained on file with the permitting authority and provided the owner or operator of such facility is not required or requested to submit a permit application in accordance with this Paragraph. Grandfathered status shall be maintained until final action is taken by the permitting authority on the permit application, provided such application is submitted in a timely manner. A permit application shall be submitted in accordance with LAC 33:III.517.A if any of the following criteria are met or will be met by a planned change at the facility:

a. the facility is a *major source* of Louisiana toxic air pollutants, as defined in LAC 33:III.Chapter 51;

b. the facility is a *Part 70 source*, as defined in LAC 33:III.502;

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

d. emissions have been initiated or increased at the facility, since the time grandfathered status was granted, as a result of new construction, modification, change of process or raw materials, or change of operating schedule; or

e. the facility is otherwise required to obtain a permit based upon a determination by the permitting authority.

7. Research and Development Facilities. The permitting authority may allow a research and development facility to be considered as a separate source with regard to the requirements of this Chapter, provided that the facility has a different two-digit Standard Industrial Classification (SIC) code from, and is not a support facility of, the source with which it is co-located.

8. Any term or condition in a permit that references 40 CFR Part 63, Subpart DDDDD shall be null and unenforceable, unless the condition was included in the permit in lieu of an alternative applicable, enforceable condition. Such terms or conditions shall be removed or modified, as appropriate, in the next modification or renewal of the permit.

C. Scope

1. For each source to which this Chapter applies, the owner or operator shall submit a timely and complete permit application to the Office of Environmental Services as required in accordance with the procedures delineated herein. Permit applications shall be submitted prior to construction, reconstruction, or modification unless otherwise provided in this Chapter.

2. No construction, modification, or operation of a facility which ultimately may result in an initiation or increase in emission of *air contaminants* as defined in LAC 33:III.111 shall commence until the permit application has been approved, an appropriate permit fee paid (in accordance with LAC 33:III.Chapter 2), and a permit (certificate of approval) has been issued by the permitting authority.

3. Notwithstanding Paragraph 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.

4. The owner or operator of each source to which this Chapter applies shall have a general duty to operate under a permit, unless an exemption to the source applies or has been granted in accordance with this Chapter. The source shall be operated in accordance with all terms and conditions of the permit. Noncompliance with any term or condition of the permit shall constitute a violation of this Chapter and shall be grounds for enforcement action, for permit revision or termination, or for denial of a permit renewal application.

5. The owner or operator of each source to which this Chapter applies shall comply with any *federally applicable requirement*, as defined in LAC 33:III.502, established under the federal Clean Air Act as amended or promulgated by the administrator pursuant to the federal Clean Air Act as amended.

6. The permitting authority shall incorporate into each permit sufficient terms and conditions to ensure compliance with all state and federally applicable air quality requirements and standards at the source and such other terms and conditions as determined by the permitting authority to be reasonable and necessary. It is the intent of this regulation that suitable controls be applied to new installations and relocations and in cases where modifications are to be made or where significant changes in emissions are anticipated.

7. The terms and conditions of the permit shall be enforceable by the administrative authority and may be utilized to implement and enforce all requirements and standards incorporated therein. Any terms and conditions of the permit issued pursuant to the State Implementation Plan or to LAC 33:III.507 are enforceable by the administrator unless specifically designated in the permit as not being federally enforceable.

8. Each permit issued shall fulfill the requirements to obtain both a preconstruction and an operating permit in accordance with state and federal air quality programs. Permit issuance, amendments, revisions, and renewals shall be issued in accordance with the procedures established in this Chapter.

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.

10. Before issuing any permit for a new or existing source or transfer of ownership of a permit, the administrative authority may conduct an evaluation of the applicant and may include such conditions in the permit as reasonably deemed necessary for the protection of human health and the environment or may deny any application for

the issuance, renewal, or transfer of the permit. Requirements of LAC 33:I.1701 are not applicable to permit modifications, unless such modifications include or are limited to a change of ownership.

11. Emissions shall be calculated in accordance with LAC 33:III.919.C.

12. Emissions estimation methods set forth in the Compilation of Air Pollution Emission Factors (AP-42) and other department-accepted estimation methods may be promulgated or revised. As a result of new or revised AP-42 emission factors for sources or source categories and/or department-accepted estimation methods, changes in calculated emissions may occur. Changes in reported emission levels as required by LAC 33:III.919.B.2.a due solely to revised AP-42 emission factors or department-accepted estimation methods do not constitute violations of the air permit; however, the department may evaluate changes in emissions on a case-by-case basis, including but not limited to, assessing compliance with other applicable Louisiana air quality regulations.

13. If the emission factors or estimation methods for any source or source category used in preparing the Annual Emission Statement required by LAC 33:III.918 and 919 differ from the emission factors or estimation methods used in the current air permit such that resulting "calculated" emissions reflect a change as defined in LAC 33:III.919.B.2.a, notification of the use of updated emission factors or estimation methods shall be included in the Title V Annual Certification, as specified in the affected permit. The notification shall include the old and new emission factor or estimation method reference source and the date, volume, and edition (if applicable); the raw data for the reporting year used for that source category calculation; and applicable emission point and permit numbers that are impacted by such change. The notification shall include any other explanation, as well as the facility's intended time frame to reconcile the emission limits in the applicable permit. The department reserves the right to reopen a permit pursuant to LAC 33:III.529.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:613 (July 1990), LR 17:478 (May 1991), LR 19:1420 (November 1993), LR 20:1281 (November 1994), LR 20:1375 (December 1994), LR 23:1677 (December 1997), amended by the Office of the Secretary, LR 25:660 (April 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2445 (November 2000), LR 28:997 (May 2002), amended by the Office of Environmental Assessment, LR 31:1063 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2436 (October 2005), LR 32:1842 (October 2006), LR 33:2082 (October 2007), LR 33:2626 (December 2007).

§502. Definitions

A. Except where specifically provided in another Section herein, the following definitions apply to terms used in this Chapter. Except as provided in this Chapter, terms used in this Chapter retain the definition provided them in LAC 33:III.111 or the Louisiana Air Quality regulations. Wherever provisions related to the Acid Rain Program are concerned, the definitions provided in 40 CFR Part 72 shall apply.

Affected Source—a source that includes one or more affected units regulated by the federal Acid Rain Program established pursuant to Title IV of the federal Clean Air Act.

Affected State—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 permit, permit revision, or permit renewal is being proposed.

Affected Unit—a unit that is subject to any acid rain emissions reduction requirement or acid rain emissions limitation pursuant to Title IV of the Clean Air Act.

Clean Air Act—the federal *Clean Air Act*, as amended, 42 U.S.C 7401 et seq.

DEQ—the Department of Environmental Quality.

Designated Representative—a responsible natural 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, 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.

Emissions Unit—any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any hazardous air pollutant listed under Section 112(b) of the Clean Air Act. With regard to equipment leaks, all components from which such emissions may occur may be considered in the aggregate to be a single emissions unit. This term is not meant to alter or affect the definition of the term unit for the purposes of Title IV of the Clean Air Act.

EPA—the United States Environmental Protection Agency, its administrator or the administrator's designee.

Federally Applicable Requirement—all 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 this Chapter:

a. 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 revisions to that plan promulgated in 40 CFR Part 52, Subpart T;

b. 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 D (Nonattainment);

c. 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);

d. 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;

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

f. 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;

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

h. 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;

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

j. 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

k. any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the Clean Air Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Clean Air Act.

Final Permit—the version of a permit which is issued by the permitting authority after all required public notice and affected state and EPA review procedures have been completed in accordance with the requirements of LAC 33:III.531 and 533.

Fugitive Emissions—those emissions which do not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

General Permit—a single permit, intended to cover numerous similar sources or activities at different locations, which is issued according to the requirements of LAC 33:III.513.A.

Major Source—for the purposes of determining the applicability of 40 CFR Part 70 or of LAC 33:III.507, any stationary source or any group of stationary sources that are located on one or more contiguous or adjacent properties, that are under common control of the same person (or persons under common control), and that are described in Subparagraph a, b, or c of this definition:

a. a major source under Section 112 of the Clean Air Act, which is defined as:

i. for pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to Section 112 of the Clean Air Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the administrator may establish by rule. Notwithstanding the preceding sentence, hazardous air pollutant emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources under this Subparagraph; or

ii. for radionuclides, major source shall have the meaning specified by the administrator by rule;

b. any stationary source that directly emits or has the potential to emit 100 tpy or more of any regulated air pollutant excluding any air pollutant regulated solely under Section 112(r) of the Clean Air Act. Fugitive emissions of a stationary source shall be considered in determining whether it is a major source under this Subparagraph:

i. for those source categories listed in Table A of LAC 33:III.509; and

ii. for all other stationary source categories, which as of August 7, 1980, are being regulated by a standard promulgated under Section 111 (NSPS) or 112 (Hazardous Air Pollutants) of the Clean Air Act;

c. any major stationary source as defined in Part D (Nonattainment) of Title I of the Clean Air Act, including any source defined as a major stationary source under LAC 33:III.504.K.

Oil and Gas Well and Pipeline—for the purposes of permitting requirements under LAC 33:III.507 and 40 CFR Part 70, any oil and gas well or pipeline as defined herein shall be an insignificant emission unit pursuant to 40 CFR 70.5(c). For the purposes of determining the applicability of R.S. 30:2022(C)(1), these terms are used as follows.

a. *Well*—an orifice in the ground, including the wellhead, from which crude oil, condensate, or natural gas is produced. The wellhead shall include the assembly of valves, pipes, and fittings used to control the flow of oil, condensate, or natural gas.

b. *Pipeline*—all parts of those facilities, including pipe, connectors, valves, and other appurtenance attached to pipe, through which crude oil, condensate, natural gas, or refined petroleum products move in transport from one

stationary source to another. Pipeline shall not include those facilities directly associated with storage, refinement, or treatment of such substances, or facilities used to impart the energy to transport such substances from one point to another, or any equipment or pipe located at the stationary source which is receiving such substances.

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 nonmajor (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 nonmajor 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 of 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.

Permit Modification—any permit revision which incorporates a minor modification or significant modification pursuant to LAC 33:III.525 or 527.

Permit Renewal (or Renewal)—the reissuance of a permit at the end of its duration in accordance with LAC 33:III.507.E.

Permit Revision (or Revision)—any administrative amendment, minor modification, or significant modification to a permit.

Permitting Authority—the secretary, or designee, of the Department of Environmental Quality.

Potential to Emit—the maximum capacity of a stationary source to emit any 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 if:

a. the limitation is enforceable by the administrator, when the *potential to emit* is being considered with regard to federally applicable requirements; or

b. the limitation is enforceable by the department when the *potential to emit* is being considered with regard to state applicable requirements.

Proposed Permit—the version of a permit for which the permitting authority (DEQ) offers public participation, affected state review, or EPA review.

Regulated Air Pollutant—for the purposes of this Chapter, any of the following:

a. nitrogen oxides;

b. volatile organic compounds;

c. any pollutant for which a National Ambient Air Quality Standard has been promulgated;

d. any pollutant subject to a standard under Section 111 (NSPS) of the Clean Air Act;

e. 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;

f. any pollutant regulated pursuant to Section 112 (Hazardous Air Pollutants) of the Clean Air Act;

g. 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;

h. 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.

Responsible Official—one of the following:

a. for a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or 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 and either:

i. the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

ii. the delegation of authority to such representatives is approved by the permitting authority prior to submittal of any certification by such person;

b. for a partnership or sole proprietorship: a general partner or the proprietor, respectively. If a general partner is a corporation, the provisions of Subparagraph a of this definition apply;

c. for a municipality, state, federal, or other public agency: either 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

d. for affected sources:

i. 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; and

ii. the designated representative for any other purposes under 40 CFR Part 70 or LAC 33:III.507.

State-Only Change—any change that is not addressed or prohibited under the federally enforceable terms and conditions of the permit, and for which a permit revision is not required under 40 CFR Part 70, but for which a permit revision is required by the department under this Chapter.

Stationary Source—any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under this Chapter.

Title I Modification—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 emission 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.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2445 (November 2000), LR 28:1950 (September 2002).

§503. Minor Source Permit Requirements

A. The owner or operator of each source of air contaminants to which this Chapter applies shall comply with the general duty to operate in accordance with a permit as established in LAC 33:III.501. Emissions below levels defining a *major source*, as defined under any chapter of LAC 33:III, Air Quality, do not relieve the owner or operator from the obligation to obtain a permit.

B. The following provisions may be utilized to meet the permitting requirements for minor sources.

1. Exemption. The owner or operator of a stationary source which is not a major source by any definition under this Chapter may apply for an exemption provided the criteria in LAC 33:III.501.B.4 are met.

2. Small Source Permit. The owner or operator of a stationary source which is not a major source may apply for a small source permit provided the source emits and has the potential to emit less than 25 tons per year of any regulated pollutant.

3. General Permit. The owner or operator of any stationary source, the design and operation of which meets the qualifications covered by a general permit issued under LAC 33:III.513.A, may apply for coverage by such general permit.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993).

§504. Nonattainment New Source Review Procedures

A. Applicability. The provisions of this Section apply to the construction of any new *major stationary source* or to any *major modification* at a major stationary source, as defined herein, provided such source or modification will be located within a nonattainment area so designated in accordance with Section 107 of the federal Clean Air Act, and will emit a regulated pollutant for which it is major and for which the area is designated nonattainment. If any provision of this Section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this Section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

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

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

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

a. Actual-to-Projected-Actual Applicability Test for Projects That Only Involve Existing Emissions Units. The emissions increase of a regulated pollutant shall be calculated by summing the difference between the *projected actual emissions*, as defined in Subsection K of this Section, and the *baseline actual emissions*, as defined in Subsection K of this Section, specifically Subparagraphs a and b of the definition, for each existing emissions unit.

b. Actual-to-Potential Test for Projects That Only Involve Construction of New Emissions Units. The emissions increase of a regulated pollutant shall be calculated by summing the difference between the *potential to emit*, as defined in Subsection K of this Section, from each new emissions unit following completion of the project and the *baseline actual emissions*, as defined in Subsection K of this Section, specifically Subparagraph c of the definition, of these units before the project.

c. Reserved.

d. Hybrid Test for Projects That Involve Multiple Types of Emissions Units. The emissions increase of a regulated pollutant shall be calculated using the methods specified in Subparagraphs A.3.a-b of this Section, as applicable, with respect to each emissions unit, for each type of emissions unit.

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

5. Reserved.

6. For any major stationary source with a plantwide applicability limit (PAL) for a regulated pollutant, the owner or operator shall comply with Subsection J of this Section.

7. For applications deemed administratively complete in accordance with LAC 33:III.519.A prior to December 20, 2001, the requirements of this Section shall not apply to NO_x increases; furthermore, the 1.40 to 1 VOC internal offset ratio for serious ozone nonattainment areas shall not apply. In such situations, a 1.30 to 1 internal offset ratio shall apply to VOC if lowest achievable emission rate (LAER) is not utilized.

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

B. Source Obligation

1. The requirements of this Section shall apply as though construction had not yet commenced at the time that a source or modification becomes a major source or major modification solely due to a relaxation in any enforceable limitation established after August 7, 1980.

2. The issuance of a permit by the department shall not relieve any owner or operator of the responsibility to comply with the provisions of the Louisiana Air Control Law, any applicable regulations of the department, and any other requirements under local, state, or federal law.

3. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. For a phased construction project, each phase must commence construction within 18 months of the projected and approved commencement date. The administrative authority may extend the 18-month period upon a satisfactory showing that an extension is justified.

4. For phased construction projects, the determination of the lowest achievable emission rate (LAER) shall be reviewed and modified as appropriate at the latest reasonable time but no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of the LAER.

5. If the owner or operator, who previously had been issued a permit under this regulation, applies for an extension as provided for under Paragraph B.3 of this Section, and the new proposed date of construction is greater than 18 months from the date that the permit would become invalid, the determination of the LAER shall be reviewed and modified as appropriate before such an extension is granted. At such time, the owner or operator may be required to demonstrate the adequacy of any previous determination of the LAER.

C. Source Information. The owner or operator of a proposed major stationary source or major modification shall submit all information necessary to the Office of Environmental Services in order to perform any analysis or make any determination required under this regulation. Information shall include, but is not limited to:

1. a description of the nature, location, design capacity, and typical operating schedule of the major stationary source or major modification, including specifications and drawings showing the design and plant layout;

2. a detailed schedule for construction of the major stationary source or major modification; and

3. a detailed description of the planned system of emission controls to be implemented, emission estimates, and other information necessary to demonstrate that the LAER or any other applicable limitation will be maintained.

D. Nonattainment New Source Review Source Requirements. Prior to constructing any new major stationary source or major modification a permit shall be obtained from the Louisiana Department of Environmental Quality in accordance with the requirements of this Section. 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 this state 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. The major stationary source or major modification shall be designed such that the LAER will be met and maintained for each pollutant emitted which is subject to this regulation. The LAER must 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.

3. Notwithstanding Paragraph D.2 of this Section, 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, as specified in Paragraph F.1 of this Section, from other operations, units, or activities within the source at an internal offset 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 requirements for LAER shall not apply.

4. For any new major stationary source or major modification in accordance with this Section, it shall be assured that the total tonnage of the emissions increase that would result from the proposed construction or modification shall be offset by an equal or greater reduction as applicable, in the actual emissions of the regulated pollutant from the same or other sources in accordance with Paragraph F.9 of this Section. The total tonnage of increased emissions, in tons per year, shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit. A higher level of offset reduction may be required in order to demonstrate that a net air quality benefit will occur.

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

6. The proposed major stationary source or major modification will meet all applicable emission requirements in the Louisiana State Implementation Plan (SIP), any applicable new source performance standard in 40 CFR Part 60, and any national emission standard for hazardous air pollutants in 40 CFR Part 61 or Part 63.

7. 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.

8. The administrative authority shall allow a source to offset, by alternative or innovative means, emission increases from rocket engine and motor firing, and cleaning related to such firing, at an existing or modified major source that tests rocket engines or motors under the following conditions.

a. Any modification proposed is solely for the purpose of expanding the testing of rocket engines or motors at an existing source that is permitted to test such engines on the date of enactment of this Subsection.

b. The source demonstrates to the satisfaction of the administrative authority that it has used all reasonable means to obtain and utilize offsets, as determined on an annual basis, for the emissions increases beyond allowable levels, that all available offsets are being used, and that sufficient offsets are not available to the source.

c. The source has obtained a written finding from the Department of Defense, Department of Transportation, National Aeronautics and Space Administration, or other appropriate federal agency, that the testing of rocket motors or engines at the facility is required for a program essential to the national security.

d. The source will comply with an alternative measure, imposed by the administrative authority, designed to offset any emission increases beyond permitted levels not directly offset by the source. In lieu of imposing any alternative offset measures, the administrative authority may impose an emissions fee to be paid to such authority of a state which shall be an amount no greater than 1.5 times the average cost of stationary source control measures adopted in that area during the previous three years. The administrative authority shall utilize the fees in a manner that maximizes the emission reductions in that area.

9. For existing emissions units at a major stationary source, other than projects at a source with a PAL, in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use, for the purpose of calculating projected actual emissions, the method specified in Subparagraphs K.*Projected Actual Emissions*.a-c of this Section, the following shall apply.

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

i. a description of the project;

ii. identification of the emissions units whose emissions of a regulated pollutant could be affected by the project; and

iii. 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 under Subparagraph K.*Projected Actual Emissions*.c of this Section (i.e., demand growth) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

b. 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 information set out in Subparagraph D.9.a of this Section to the administrative authority.

c. The owner or operator shall monitor the emissions of any regulated pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in Clause D.9.a.ii of this Section, and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five 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 pollutant at such emissions unit.

d. If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the administrative authority within 60 days after the end of each year during which records must be generated under Subparagraph D.9.c of this Section setting out the unit's annual emissions during the year that preceded submission of the report.

e. If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the administrative authority if the annual emissions, in tons per year, from the project identified in Subparagraph D.9.a of this Section, exceed the baseline actual emissions, as documented and maintained in accordance with Clause D.9.a.iii of this Section, by a *significant* amount, as defined in Subsection K of this Section, for that regulated pollutant, and if such emissions differ from the preconstruction projection as documented and maintained in accordance with Clause D.9.a.iii of this Section. Such report shall be submitted to the administrative authority within 60 days after the end of such year. The report shall contain the following:

i. the name, address, and telephone number of the major stationary source;

ii. the annual emissions as calculated in accordance with Subparagraph D.9.c of this Section; and

iii. 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).

10. The owner or operator of the source shall make the information required to be documented and maintained in accordance with Paragraph D.9 of this Section available for review upon a request for inspection by the administrative authority or the general public in accordance with the requirements contained in 40 CFR 70.4(b)(3)(viii).

11. 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 the project has resulted or will now result in a significant net emissions increase, the owner or operator must either:

a. 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

b. submit a revised permit application within 180 days requesting that the original project be deemed a major modification.

E. Additional Requirements for Sources Impacting Mandatory Federal Class I Areas

1. The department shall transmit to the administrator and any affected federal land manager a copy of each permit application and any information relevant to any proposed major stationary source or major modification which may have an impact on visibility in any mandatory federal Class I area. Relevant information will include an analysis of the proposed source's anticipated impacts on visibility in the federal Class I area. The application shall be transmitted within 30 days of receipt by the department and at least 60 days prior to any public hearing on the application. Additionally, the department shall notify any affected federal land manager within 30 days from the date the department receives a request for a pre-application meeting from a proposed source subject to this regulation. The department shall consult with the affected federal land manager prior to making a determination of completeness for any such permit application. The department shall also provide the federal land manager and the administrator with a copy of the preliminary determination on the permit application and shall make available to them any materials used in making that determination.

2. The owner or operator of any proposed major stationary source or major modification which may have an impact on visibility in a mandatory federal Class I area shall include in the permit application an analysis of the anticipated impacts on visibility in such areas.

3. The department may require monitoring of visibility in any mandatory federal Class I area where the department determines an adverse impact on visibility may occur due to the operations of the proposed new major stationary source or major modification. Such monitoring shall be conducted following procedures approved by the department and subject to the following conditions:

a. visibility monitoring methods specified by the department shall be reasonably available and not require any research and development; and

b. both preconstruction and post-construction visibility monitoring may be required. In each case, the duration of such monitoring shall not exceed one year.

4. The department shall consider any analysis with respect to visibility impacts provided by the federal land manager if it is received within 30 days from the date a complete application is given to the federal land manager. In any case where the department disagrees with the federal land manager's analysis, the department shall either explain its decision to the federal land manager or give notice as to where the explanation can be obtained. In the case where the department disagrees with the federal land manager's analysis, the department will also explain its decision or give notice to the public by means of an advertisement in a newspaper of general circulation in the area in which the proposed source would be constructed as to where the decision can be obtained.

5. In making its determination as to whether or not to issue a permit, the department shall ensure that the source's emissions will be consistent with making progress toward the national visibility goal of preventing any future impairment of visibility in mandatory federal Class I areas. The department may take into account the costs of compliance, the time necessary for compliance, the energy and non-air-quality environmental impacts of compliance, and the useful life of the source.

F. Emission Offsets. All emission offsets approved by the department shall be surplus, permanent, quantifiable, and enforceable in accordance with LAC 33.III.Chapter 6 and 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 NO_x credit to offset a VOC emission increase, is not allowed. Except as specified in Subsection M of this Section, offsets shall be required at the ratio specified in Subsection L, Table 1 of this Section.

2. 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.

5. Offset credit for any emission reduction can be claimed only to the extent that the department or the United States Environmental Protection Agency (USEPA) has not relied on it in previously issuing any permit or in demonstrating attainment or reasonable further progress.

6. The emission limit for determining emission offset credit involving an existing fuel combustion source shall be the most stringent emission standard which is allowable under the applicable regulation for this major stationary source for the type of fuel being burned at the time the permit application is filed. If the existing source commits to switch to a cleaner fuel, emission offset credit based on the difference between the allowable NO_x or VOC emissions of the fuels involved shall be acceptable only if an alternative control measure, which would achieve the same degree of emission reductions should the source switch back to a fuel which produces more pollution, is specified in a permit issued by the department.

7. The owner or operator desiring to utilize emission reductions as an offset shall submit to the Office of Environmental Services the following information:

a. a detailed description of the process to be controlled and the control technology to be used;

b. emission calculations showing the types and amounts of actual emissions to be reduced; and

c. the effective date of the reduction.

8. Emissions reductions achieved by shutting down an existing emissions unit or curtailing production or operating hours below baseline levels may be generally credited if such reductions are surplus, permanent, quantifiable, and federally enforceable, and if:

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

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

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

9. Emission offsets shall be obtained from the same source in the case of internal offsets provided in accordance with Paragraph D.3 of this Section. In all other cases emission offsets shall be obtained from the same source or other sources in the same nonattainment area, except that such emission reductions may be obtained from a source in another nonattainment area if:

a. the other area has an equal or higher nonattainment classification than the area in which the major stationary source is located; and

b. emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the proposed new or modified major stationary source would construct.

10. Emission reductions otherwise required by the Federal Clean Air Act or by state regulations shall not be credited for purposes of satisfying the offset requirement. Incidental emission reductions which are not otherwise required by the act or by state regulations may be creditable as offsets.

G. Reserved.

H. Reserved.

I. Reserved.

J. Actuals PALs

1. Applicability

a. The administrative authority may approve the use of an actuals PAL for any existing major stationary source, except as provided in Subparagraph J.1.b of this Section, if the PAL meets the requirements of this Subsection. The term "PAL" shall mean "actuals PAL" throughout this Subsection.

b. The administrative authority shall not allow an actuals PAL for VOC or NO_x for any major stationary source located in an extreme ozone nonattainment area.

c. Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of this Subsection, and complies with the PAL permit:

i. is not a major modification for the PAL pollutant;

ii. does not have to be approved through this Section; and

iii. is not subject to the provisions in Paragraph B.1 of this Section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the nonattainment major NSR program).

d. Except as provided under Clause J.1.c.iii of this Section, a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

2. Definitions. For purposes of this Subsection, the terms below shall have the meaning herein as follows. When a term is not defined in this Paragraph, it shall have the meaning given in Subsection K of this Section or in the Clean Air Act.

a. *Actuals PAL*—a PAL based on the *baseline actual emissions*, as defined in Subsection K of this Section, of all *emissions units*, as defined in Subsection K of this Section, at the source that emit or have the potential to emit the PAL pollutant.

b. *Allowable Emissions*—as defined in Subsection K of this Section, except with the following modifications.

i. The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

ii. An emissions unit's potential to emit shall be determined using the definition in Subsection K of this Section, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

c. *Major Emissions Unit*—

i. any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

ii. any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the appropriate major stationary source threshold value listed in Subsection L, Table 1 of this Section for the PAL pollutant.

d. *Plantwide Applicability Limitation (PAL)*—an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with this Subsection.

e. *PAL Effective Date*—generally the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

f. *PAL Effective Period*—the period beginning with the PAL effective date and ending 10 years later.

g. *PAL Major Modification*—notwithstanding the definitions for *major modification* and *net emissions increase* in Subsection K of this Section, 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.

h. *PAL Permit*—the major NSR permit, the minor NSR permit, or the state operating permit under a program that is approved into the State Implementation Plan or the Title V permit issued by the administrative authority that establishes a PAL for a major stationary source.

i. *PAL Pollutant*—the pollutant for which a PAL is established at a major stationary source.

j. *Significant Emissions Unit*—an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the *significant* level, as defined in Subsection K of this Section or in the Clean Air Act, whichever is lower, for that PAL pollutant, but less than

the amount that would qualify the unit as a *major emissions unit* as defined in Subparagraph J.2.c of this Section.

k. *Small Emissions Unit*—an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the *significant* level for that PAL pollutant, as defined in Subsection K of this Section or in the Clean Air Act, whichever is lower.

3. Permit Application Requirements. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the administrative authority for approval:

a. a list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit;

b. 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;

c. the calculation procedures that the major stationary 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 as required by Subparagraph J.13.a of this Section.

4. General Requirements for Establishing PALs

a. The administrative authority may establish a PAL at a major stationary source, provided that at a minimum, the following requirements are met.

i. The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall 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 major stationary source owner or operator shall 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.

ii. The PAL shall be established in a PAL permit that meets the public participation requirements in Paragraph J.5 of this Section.

iii. The PAL permit shall contain all the requirements of Paragraph J.7 of this Section.

iv. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

v. Each PAL shall regulate emissions of only one pollutant.

vi. Each PAL shall have a PAL effective period of 10 years.

vii. The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in Paragraphs J.12-14 of this Section for each emissions unit under the PAL through the PAL effective period.

b. At no time during or after the PAL effective period are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under Subsection F of this Section 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.

5. Public Participation Requirement for PALs. Procedures to establish, renew, or increase PALs for existing major stationary sources shall be the same as the procedures for permit issuance in accordance with LAC 33:III.519. These include the requirement that the administrative authority provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comments. The administrative authority shall address all material comments before taking final action on the permit.

6. Setting the 10-Year Actuals PAL Level

a. Except as provided in Subparagraph J.6.b of this Section, the actuals PAL level for a major stationary source shall be established as the sum of the *baseline actual emissions*, as defined in Subsection K of this Section, of the PAL pollutant for each emissions unit at the source, plus an amount equal to the applicable *significant* level for the PAL pollutant, as defined in Subsection K of this Section or in the Clean Air Act, whichever is lower. When establishing the actuals 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. The administrative authority shall specify a reduced PAL level (in tons/yr) in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the administrative authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half 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.

b. 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 as specified in Subparagraph J.6.a of this Section, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

7. Contents of the PAL Permit. The PAL permit shall contain, at a minimum, the following information:

a. the PAL pollutant and the applicable source-wide emission limitation in tons per year;

b. the PAL permit effective date and the expiration date of the PAL (PAL effective period);

c. specification that if a major stationary source owner or operator applies to renew a PAL in accordance with Paragraph J.10 of this Section 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 the administrative authority;

d. a requirement that emission calculations for compliance purposes include emissions associated with startup, shutdown, and malfunction;

e. a requirement that, once the PAL expires, the major stationary source is subject to the requirements of Paragraph J.9 of this Section;

f. the calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by Subparagraph J.13.a of this Section;

g. a requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Paragraph J.12 of this Section;

h. a requirement to retain the records required under Paragraph J.13 of this Section on site. Such records may be retained in an electronic format;

i. a requirement to submit the reports required under Paragraph J.14 of this Section by the required deadlines;

j. any other requirements that the administrative authority deems necessary to implement and enforce the PAL.

8. PAL Effective Period and Reopening of the PAL Permit

a. PAL Effective Period. The administrative authority shall specify a PAL effective period of 10 years.

b. Reopening of the PAL Permit

i. During the PAL effective period, the administrative authority shall reopen the PAL permit to:

(a). correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(b). reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under Subsection F of this Section;

(c). revise the PAL to reflect an increase in the PAL as provided under Paragraph J.11 of this Section.

ii. The administrative authority has the discretion to reopen the PAL permit in order to:

(a). reduce the PAL to reflect newly applicable federal requirements [e.g., New Source Performance Standards (NSPS)] with compliance dates after the PAL effective date;

(b). reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the state may impose on the major stationary source;

(c). reduce the PAL if the administrative authority determines that a reduction is necessary to avoid causing or contributing to a national ambient air quality standard (NAAQS) or PSD increment violation, or to an adverse impact on an air quality-related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

iii. Except for the permit reopening in Subclause J.8.b.i.(a) of this Section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Paragraph J.5 of this Section.

9. Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in Paragraph J.10 of this Section shall expire at the end of the PAL effective period, and the following requirements shall apply.

a. 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.

i. Within the time frame specified for PAL renewals in Subparagraph J.10.b of this Section, the major stationary source 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 the administrative authority, by distributing the PAL allowable emissions for the major stationary 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, as required under Subparagraph J.10.e of this Section, such distribution shall be made as if the PAL had been adjusted.

ii. The administrative authority 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, as the administrative authority determines is appropriate.

b. Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The administrative authority may approve the use of monitoring systems (source testing, emission factors, etc.) other than continuous emissions monitoring systems (CEMS), continuous emissions rate monitoring systems (CERMS), predictive emissions monitoring systems (PEMS), or continuous parameter monitoring systems (CPMS) to demonstrate compliance with the allowable emission limitation.

c. Until the administrative authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under Clause J.9.a.i of this Section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

d. Any physical change or change in the method of operation at the major stationary source will be subject to the nonattainment major NSR requirements if such change meets the definition of *major modification* in Subsection K of this Section.

e. The major stationary source owner or operator 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 those emission limitations that had been established in accordance with Paragraph B.1 of this Section, but were eliminated by the PAL in accordance with the provisions in Clause J.1.c.iii of this Section.

10. Renewal of a PAL

a. The administrative authority shall follow the procedures specified in Paragraph J.5 of this Section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the administrative authority.

b. Application Deadline. A major stationary source owner or operator shall submit a timely application to the administrative authority to request renewal of a PAL. A timely application is one that is submitted at least six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source 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.

c. Application Requirements. The application to renew a PAL permit shall contain the following information:

i. the information required in Subparagraphs J.3.a-c of this Section;

ii. a proposed PAL level;

iii. the sum of the potential to emit of all emissions units under the PAL, with supporting documentation;

iv. any other information the owner or operator wishes the administrative authority to consider in determining the appropriate level for renewing the PAL.

d. PAL Adjustment. In determining whether and how to adjust the PAL, the administrative authority shall consider the options outlined in Clauses J.10.d.i-ii of this Section. However, in no case may any such adjustment fail to comply with Clause J.10.d.iii of this Section.

i. If the emissions level calculated in accordance with Paragraph J.6 of this Section is equal to or greater than 80 percent of the PAL level, the administrative authority may renew the PAL at the same level without considering the factors set forth in Clause J.10.d.ii of this Section.

ii. The administrative authority may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines 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 the administrative authority in his or her written rationale.

iii. Notwithstanding Clauses J.10.d.i-ii of this Section:

(a). if the potential to emit of the major stationary source is less than the PAL, the administrative authority shall adjust the PAL to a level no greater than the potential to emit of the source; and

(b). the administrative authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Paragraph J.11 of this Section regarding increasing a PAL.

e. If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the administrative authority 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.

11. Increasing a PAL during the PAL Effective Period

a. The administrative authority may increase a PAL emission limitation only if the major stationary source complies with the following provisions.

i. The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions units contributing to the increase in emissions so as to cause the

major stationary source's emissions to equal or exceed its PAL.

ii. As part of this application, the major stationary source owner or operator 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.

iii. The owner or operator shall obtain a major NSR permit for all emissions units identified in Clause J.11.a.i of this Section, 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 nonattainment major NSR program process (e.g., LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.

iv. 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.

b. The administrative authority 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 as determined in accordance with Clause J.11.a.ii of this Section, plus the sum of the baseline actual emissions of the small emissions units.

c. The PAL permit shall be revised to reflect the increased PAL level in accordance with the public notice requirements of Paragraph J.5 of this Section.

12. Monitoring Requirements for PALs

a. General Requirements

i. 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.

ii. The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in Clauses J.12.b.i-iv of this Section and must be approved by the administrative authority.

iii. Notwithstanding Clause J.12.a.ii of this Section, an owner or operator may also employ an alternative monitoring approach that meets the requirements of Clause J.12.a.i of this Section if approved by the administrative authority.

iv. Failure to use a monitoring system that meets the requirements of this Paragraph renders the PAL invalid.

b. Minimum Performance Requirements for Approved Monitoring Approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in Subparagraphs J.12.c-i of this Section:

i. mass balance calculations for activities using coatings or solvents;

ii. CEMS;

iii. CPMS or PEMS; and

iv. emission factors.

c. Mass Balance Calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

i. 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;

ii. 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

iii. 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 owner or operator shall use the highest value of the range to calculate the PAL pollutant emissions unless the administrative authority determines there is site-specific data or a site-specific monitoring program to support another content within the range.

d. CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

i. CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and

ii. CEMS must sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

e. CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

i. 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

ii. each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the administrative authority, while the emissions unit is operating.

f. Emission Factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

i. all emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

ii. the emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

iii. 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 the administrative authority determines that testing is not required.

g. A source owner or operator 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.

h. Notwithstanding the requirements in Subparagraphs J.12.c-d of this Section, 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, the administrative authority shall, at the time of permit issuance:

i. establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or

ii. 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.

i. Revalidation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the administrative authority. Such testing must occur at least once every five years after issuance of the PAL.

13. Recordkeeping Requirements

a. The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this Subsection and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.

b. The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five years:

i. a copy of the PAL permit application and any applications for revisions to the PAL; and

ii. each annual certification of compliance in accordance with Title V and the data relied on in certifying the compliance.

14. Reporting and Notification Requirements. The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the administrative authority in accordance with the applicable Title V operating permit program. The reports shall meet the following requirements.

a. Semiannual Report. The semiannual report shall be submitted to the administrative authority within 30 days of the end of each reporting period. This report shall contain the following information:

i. the identification of the owner or operator and the permit number;

ii. total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded in accordance with Subparagraph J.13.a of this Section;

iii. all data relied upon, including but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions;

iv. a list of any emissions units modified or added to the major stationary source during the preceding 6-month period;

v. 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;

vi. 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, as provided by Subparagraph J.12.g of this Section;

vii. a signed statement by the responsible official, as defined by the applicable Title V operating permit program, certifying the truth, accuracy, and completeness of the information provided in the report.

b. Deviation Report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted in accordance with 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:

i. the identification of the owner or operator and the permit number;

ii. the PAL requirement that experienced the deviation or that was exceeded;

iii. emissions resulting from the deviation or the exceedance; and

iv. a signed statement by the responsible official, as defined by the applicable Title V operating permit program, certifying the truth, accuracy, and completeness of the information provided in the report.

c. Revalidation Results. The owner or operator shall submit to the administrative authority the results of any revalidation test or method within three months after completion of such test or method.

15. Transition Requirements

a. No administrative authority may issue a PAL that does not comply with the requirements of this Subsection after the administrator has approved regulations incorporating these requirements into the State Implementation Plan.

b. The administrative authority may supersede any PAL that was established prior to the date of approval of the State Implementation Plan by the administrator with a PAL that complies with the requirements of this Subsection.

K. Definitions. The terms in this Section are used as defined in LAC 33:III.111 with the exception of those terms specifically defined as follows.

Actual Emissions—the actual rate of emissions of a pollutant from an emissions unit as determined in accordance with the following, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under Subsection J of this Section. Instead, the definitions of *projected actual emissions* and *baseline actual emissions* in this Subsection shall apply for those purposes.

a. In general, *actual emissions* as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period that precedes the particular date 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. *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. The administrative authority may presume that source-specific allowable emissions for the unit are equivalent to the *actual emissions* of the unit.

c. For any emissions unit that has not begun normal operations on the particular date, *actual emissions* shall equal the allowable emissions of the unit.

Administrator—the *administrator* of the USEPA or an authorized representative.

Adverse Impact on Visibility—visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the mandatory federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of the visibility impairments and how these factors correlate with:

a. times of visitor use of the mandatory federal Class I area; and

b. the frequency and timing of natural conditions that reduce visibility.

This term does not include effects on integral vista as defined at 40 CFR 51.301, Definitions.

Allowable Emissions—the emissions 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. the applicable standard set forth in 40 CFR Part 60, 61, or 63;

b. any applicable State Implementation Plan 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.

Baseline Actual Emissions—the rate of emissions, in tons per year, of a regulated pollutant, determined as follows.

a. For any existing electric utility steam generating unit, *baseline actual emissions* means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the five-year period immediately preceding when the owner or operator begins actual construction of the project. The administrative authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

i. The average rate shall include fugitive emissions to the extent quantifiable, and authorized

emissions associated with startups, shutdowns, and malfunctions.

ii. The average rate shall 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.

iii. For a regulated pollutant, 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.

iv. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Clause a.ii of this definition.

b. For an existing emissions unit, other than an electric utility steam generating unit, *baseline actual emissions* means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 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 the administrative authority for a permit required under this Section, except that the 10-year period shall not include any period earlier than November 15, 1990.

i. The average rate shall include fugitive emissions to the extent quantifiable, and authorized emissions associated with startups, shutdowns, and malfunctions.

ii The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

iii. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR Part 63, the *baseline actual emissions* need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of Paragraphs F.4 and 5 of this Section.

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

v. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Clauses b.ii-iii of this definition.

c. For a new emissions unit, the *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.

d. For a PAL for a major stationary source, the *baseline actual emissions* shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in Subparagraph a of this definition, for other existing emissions units in accordance with the procedures contained in Subparagraph b of this definition, and for a new emissions unit in accordance with the procedures contained in Subparagraph c of this definition.

Begin Actual Construction—initiation of physical on-site construction activities on an emissions unit that are of a permanent nature. Such activities include, but are not limited to, installation of building support and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities that mark the initiation of the change.

Best Available Control Technology (BACT)—as defined in LAC 33:III.509.

Building, Structure, Facility, or Installation—all of the pollutant-emitting activities that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, or are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

Clean Air Act—the federal Clean Air Act, 42 U.S.C. 7401-7671(q).

Commence—as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

a. begun, or caused to begin, a continuous program of actual on-site construction of the major stationary source, to be completed within a reasonable time; or

b. entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the major stationary source to be completed within a reasonable time.

Construction—any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in actual emissions.

Continuous Emissions Monitoring System (CEMS)—all of the equipment that may be required to meet the data acquisition and availability requirements of this Section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

Continuous Emissions Rate Monitoring System (CERMS)—the total equipment required for the determination and recording of the pollutant mass emissions rate, in terms of mass per unit of time.

Continuous Parameter Monitoring System (CPMS)—all of the equipment necessary to meet the data acquisition and availability requirements of this Section, to monitor process and control device operational parameters (e.g., control device secondary voltages and electric currents) and other information (e.g., gas flow rate, O_2 or CO_2 concentrations), and to record average operational parameter values on a continuous basis.

Electric Utility Steam Generating Unit—any steam-electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Emissions Unit—any part of a major stationary source that emits or would have the potential to emit any regulated pollutant, and includes an *electric utility steam generating unit* as defined in this Subsection. For purposes of this Section, there are two types of *emissions units* as described below.

a. 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.

b. An *existing emissions unit* is any emissions unit that does not meet the requirements in Subparagraph a of this definition. A *replacement unit*, as defined in this Subsection, is an *existing emissions unit*.

Federal Class I Area—any federal land that is classified or reclassified as a "Class I" area in accordance with the federal Clean Air Act.

Federal Land Manager—with respect to any lands in the United States, the secretary of the department with authority over such lands.

Federally Enforceable—all limitations and conditions which are *federally enforceable* by the administrator, including those requirements developed in accordance with 40 CFR Parts 60, 61, and 63, requirements within any applicable State Implementation Plan, any permit requirements established in accordance with 40 CFR 52.21 or under regulations approved in accordance with 40 CFR Part 51, Subpart I including 40 CFR 51.165 and 40 CFR 51.166.

Fugitive Emissions—those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Lowest Achievable Emission Rate—for any source, the more stringent rate of emissions based on the following:

a. the most stringent emissions limitation that 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 that 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.

Major Modification—

a. Any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase, as listed in Subsection L, Table 1 of this Section, of any regulated pollutant for which the stationary source is already major.

b. Any net emissions increase that is considered significant for VOC or NO_x shall be considered significant for ozone. VOC and NO_x emissions shall not be aggregated for the purpose of determining significant net emissions increases.

c. A physical change or change in the method of operation shall not include:

i. routine maintenance, repair, and replacement;

ii. 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;

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

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

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

(a). 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

(b). the source is approved to use under any permit issued under regulations approved in accordance with this Section;

vi. 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;

vii. any change in ownership at a stationary source.

d. This definition shall not apply with respect to a particular regulated pollutant when the major stationary source is complying with the requirements under Subsection J of this Section for a PAL for that pollutant. Instead, the definition at Subparagraph J.2.g of this Section shall apply.

Major Stationary Source—

a. any stationary source (including all emission points and units of such source located within a contiguous area and under common control) of air pollutants which emits, or has the potential to emit, any regulated pollutant at or above the threshold values defined in Subsection L, Table 1 of this Section; or

b. any physical change that would occur at a stationary source not qualifying under Subparagraph a of this definition as a *major stationary source*, if the change would constitute a *major stationary source* by itself;

c. a *major stationary source* that is major for VOC or NO_x shall be considered major for ozone. VOC and NO_x emissions shall not be aggregated for the purpose of determining *major stationary source* status;

d. a stationary source shall not be a *major stationary source* due to fugitive emissions, to the extent that they are quantifiable, unless the source belongs to:

i. any category in Table A in LAC 33:III.509; or

ii. any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act;

e. a stationary source shall not be a *major stationary source* due to secondary emissions.

Malfunctions—for purposes of this Section, *malfunctions* shall include any such emissions authorized by permit, variance, or the on-line operating adjustment provisions of LAC 33:III.1507.B and 2307.C.2, but exclude any emissions that are not compliant with federal or state standards.

Mandatory Federal Class I Area—those federal lands that are international parks, national wilderness areas which exceed 5,000 acres in size, national memorial parks which exceed 5,000 acres in size, and national parks which exceed 6,000 acres in size, and that were in existence on August 7, 1977. These areas may not be redesignated.

Natural Conditions—includes naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.

Necessary Preconstruction Approvals or Permits—those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

Net Emissions Increase—the amount by which the sum of the following exceeds zero:

a.i. any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source as calculated in accordance with Paragraph A.3 of this Section; and

ii. any other creditable increases and decreases in actual emissions at the major stationary source over a period including the calendar year of the proposed increase, up to the date on which the proposed increase will occur, and the preceding four consecutive calendar years. Baseline actual emissions for calculating increases and decreases under this Clause shall be determined as provided in Subsection K.*Baseline Actual Emissions* of this Section except that Clauses a.iii and b.iv of that definition shall not apply;

b. an increase or decrease in actual emissions is creditable only if neither the department nor the administrator has relied on it in issuing a permit for the source under this regulation and, for a decrease, the administrator has not relied on it in issuing a permit under 40 CFR 52.21, which permit is in effect when the increase in actual emissions from the particular change occurs;

c. Reserved;

d. 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;

e. a decrease in actual emissions is creditable only to the extent that:

i. the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of allowable emissions;

ii. it is enforceable as a practical matter at and after the time that actual construction of the particular change begins;

iii. it has not been relied on by the state in demonstrating attainment or reasonable further progress; and

iv. it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change;

f. 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;

g. Subparagraph K.A*ctual Emissions*.a of this Section shall not apply for determining creditable increases and decreases or after a change.

Nonattainment Area—for any air pollutant, an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the administrator to be reliable) to exceed any national ambient air quality standard for such pollutant. Such term includes any area identified under Subparagraphs (A)-(C) of Section 107(d)(1) of the Federal Clean Air Act.

Pollution Prevention—any activity that, through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants, including fugitive emissions, and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

Portable Stationary Source—a source that can be relocated to another operating site with limited dismantling and reassembly.

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 only 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.

Predictive Emissions Monitoring System (PEMS)—all of the equipment necessary to monitor process and control device operational parameters (e.g., control device secondary voltages and electric currents) and other information (e.g., gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (e.g., lb/hr) on a continuous basis.

Prevention of Significant Deterioration (PSD) Permit—any permit that is issued under a major source preconstruction permit program that has been approved by the administrator and incorporated into the State Implementation Plan to implement the requirements of 40 CFR 51.166, or under the program in 40 CFR 52.21.

Project—a physical change in, or change in the method of operation of, an existing major stationary source.

Projected Actual Emissions—the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated pollutant in any one of the five 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 major stationary source. In determining the *projected actual emissions* before beginning actual construction, the owner or operator of the major stationary source:

a. 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; and

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

c. shall 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* as defined in this Subsection and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

d. in lieu of using the method set out in Subparagraphs a-c of this definition, may elect to use the emissions unit's *potential to emit*, in tons per year, as defined in this Subsection.

Regulated Pollutant—any air pollutant, the emission or ambient concentration of which is regulated in accordance with the Clean Air Act.

Replacement Unit—an emissions unit for which all the following criteria are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

a. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.

b. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

c. The emissions unit does not alter the basic design parameters of the process unit.

d. The replaced emissions unit is permanently removed from the major stationary source, 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*, as defined in this Subsection.

Secondary Emissions—emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the

purpose of this Section, *secondary emissions* must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. *Secondary emissions* include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. *Secondary emissions* do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

Significant—in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed the lower of any of the following rates or the applicable major modification significant net increase threshold in Subsection L, Table 1 of this Section.

Pollutant	Emission Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Ozone	40 tpy of volatile organic compounds
Lead	0.6 tpy

Stationary Source—any building, structure, facility, or installation which emits or may emit any regulated pollutant.

Temporary Source—a stationary source that changes its location or ceases to exist within one year from the date of initial start of operations.

Visibility Impairment—any humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.

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

Table 1
Major Stationary Source/Major Modification Emission Thresholds

Pollutant	Major Stationary Source Threshold Values (tons/year)	Major Modification Significant Net Increase (tons/year)	Offset Ratio Minimum
Ozone VOC/NO_x		Trigger Values	
Marginal	100	40(40)[2]	1.10 to 1
Moderate	100	40(40)[2]	1.15 to 1
Serious	50	25[3](5)[4]	1.20 to 1 w/LAER or 1.40 to 1 internal w/o LAER
Severe	25	25[3](5)[4]	1.30 to 1 w/LAER or 1.50 to 1 internal w/o LAER
Extreme	10	Any increase	1.50 to 1
CO			
Moderate	100	100	>1.00 to 1
Serious	50	50	>1.00 to 1
SO_2	100	40	>1.00 to 1
PM_{10}[1]			

Table 1
Major Stationary Source/Major Modification Emission Thresholds

Pollutant	Major Stationary Source Threshold Values (tons/year)	Major Modification Significant Net Increase (tons/year)	Offset Ratio Minimum
Moderate	100	15	>1.00 to 1
Serious	70	15	>1.00 to 1
Lead	100	0.6	>1.00 to 1

[1] The requirements of LAC 33:III.504 applicable to major stationary sources and major modifications of PM_{10} shall also apply to major stationary sources and major modifications of PM_{10} precursors, except where the administrator determines that such sources do not contribute significantly to PM_{10} levels that exceed the PM_{10} NAAQS in the area.

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

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

[4] Consideration of the net emissions increase will be triggered 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 or of NO_X for a period of five years after the effective date of the rescission of the NO_X waiver, and within the contemporaneous period thereafter.

VOC = volatile organic compounds
NO_X = oxides of nitrogen
CO = carbon monoxide
SO_2 = sulfur dioxide
PM_{10} = particulate matter of less than 10 microns in diameter

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

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

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

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

i. 1,3-butadiene;

ii. butenes (all isomers);

iii. ethylene;

iv. propylene.

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

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

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

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

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:176 (February 1993), repromulgated LR 19:486 (April 1993), amended LR 19:1420 (November 1993), LR 21:1332 (December 1995), LR 23:197 (February 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2445 (November 2000), LR 27:2225 (December 2001), LR 30:752 (April 2004), amended by the Office of Environmental Assessment, LR 30:2801 (December 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2436 (October 2005), LR 31:3123, 3155 (December 2005), LR 32:1599 (September 2006), LR 33:2082 (October 2007).

§505. Acid Rain Program Permitting Requirements

A. The Acid Rain Program regulations, published in the *Code of Federal Regulations* at 40 CFR Part 72, July 1, 2005, and as revised at 70 FR 25162-25405, May 12, 2005, and 71 FR 25328-25469, April 28, 2006, are hereby incorporated by reference.

B. Copies of documents incorporated by reference in this Section may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html; from the Department of Environmental Quality, Office of Environmental Services; or from a public library.

C. Modifications or Exceptions. A copy of each report or notice or of any other documentation required by the referenced regulations (i.e., 40 CFR Part 72) to be provided to "the Administrator" shall be provided to the Office of Environmental Services by the person required to make the submission to "the Administrator."

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), LR 21:678 (July 1995), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2446 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2429, 2436 (October 2005), LR 32:1598 (September 2006), LR 33:2083 (October 2007).

§506. Clean Air Interstate Rule Requirements

A. Clean Air Interstate Rule (CAIR) Nitrogen Oxide (NO_x) Annual Program. This Subsection is adopted in lieu of 40 CFR 97.141 and 97.142 as promulgated under the CAIR Federal Implementation Plan (FIP) NO_x Annual Trading Program on April 28, 2006, at 71 FR 25328. All provisions of 40 CFR Part 97, Subparts AA – HH, continue to apply, with the exception of §97.141 (Timing Requirements for CAIR NO_x Allowance Allocations) and §97.142 (CAIR NO_x Allowance Allocations). The provisions of this Subsection state how the CAIR NO_x annual allowances shall be allocated in accordance with this Section and 40 CFR 97.144(a).

1. Definitions. The terms used in Subsection A of this Section have the meaning given to them in the CAIR FIP (40 CFR Part 97 as promulgated on April 28, 2006), except for those terms defined herein.

Certified Unit or *Contract*—an electricity-generating unit or contract that has been certified by the LPSC or approved by a municipal authority but was not in operation on, or approved by, December 31, 2004.

Department—the Louisiana Department of Environmental Quality.

LPSC—the Louisiana Public Service Commission.

LPSC or *Municipal Certification*—the process under which the LPSC certifies, or the relevant municipal authority approves, an electricity-generating facility and/or all of its component units, additions, and up-rated or re-powered units as being in the public convenience and necessity. This process includes the certification or approval of long-term contracts that dedicate a portion of the electrical output of any generation facility to a utility unit. Long-term contracts are those contracts of at least one year in duration, provided that the municipality or utility unit expects to receive power under the contract within one year of the contract execution.

Municipal Authority—a municipal corporation, public power authority, or other political subdivision including, but not limited to, the Louisiana Energy and Power Authority.

Non-Utility Unit—an electricity-generating unit that has not been certified by the LPSC or approved by a municipal authority, and that does not have an effective and active long-term contract with a utility unit. This includes, but is not limited to, units owned by independent power producers (IPPs) that are the owners or operators of electricity-generating units that produce electricity for sale, and *cogeneration units* as defined in 40 CFR Part 97.

Utility Unit—a certified unit that is in operation, a previously-operational certified unit, or a non-utility unit that has an effective and active long-term contract with a utility unit. Long-term contracts are those contracts of at least one year in duration, provided that the municipality or utility unit expects to receive power under the contract within one year of the contract execution.

2. Allocation of CAIR NO_x Annual Allowances. Total NO_x allowances allocated per control period shall not be in

excess of the CAIR NO_x annual budget as found in 40 CFR 97.140 (35,512 tons per control period from 2009-2014 and 29,593 tons per control period thereafter).

a. Non-Utility Units. For each CAIR non-utility unit, the NO_x allowances shall be equal to the average of the actual NO_x annual emissions of the three calendar years immediately preceding the year in which the control period allocations are submitted to the administrator. The actual NO_x annual emissions as reported in the emission inventory required by LAC 33:III.919 shall be used, except that the allowances submitted in 2007 shall use the actual NO_x emissions for calendar years 2002, 2003, and 2004. When data is not available in the emission inventory, data reported to the Federal Acid Rain Program shall be used. When actual reported NO_x annual emissions data are available for only two of the three calendar years immediately preceding the deadline for submission of the control period allocations, the average of the actual reported NO_x annual emissions data for those two years shall be used. When actual reported NO_x annual emissions data are available for only one of the three calendar years, the actual reported NO_x annual emissions data for that one year shall be used. When no actual reported NO_x annual emissions data for any of the three calendar years are available, no allocations shall be made under this Paragraph.

b. Certified Units. A certified unit subject to CAIR shall be allocated NO_x allowances for the control period in which the unit will begin operation, and for each successive control period, for which no NO_x allowances have been previously allocated until operating data are available for the three calendar years immediately preceding the deadline for submission of the control period allocations. Until a unit has three calendar years of operating data immediately preceding the allocation submittal deadline, the converted heat input as calculated in Clause A.2.b.i or ii of this Section shall be used to allocate allowances for the unit. The certified unit shall be treated as a utility unit for the purposes of this allocation, except that converted heat input shall be used instead of adjusted heat input. Converted heat input is calculated as follows.

i. For a coal-fired unit, the hourly heat input for a specified calendar year shall equal the control period gross electrical output, including the capacity factor, of the generator(s) served by the unit multiplied by 7,900 BTU/KWh and divided by 1,000,000 BTU/MMBTU. The control period gross electrical output as stated in the documentation presented for the LPSC or municipal certification shall be used in this calculation. If a generator is served by two or more units, then the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of all the units for the year.

ii. For a non-coal-fired unit, the hourly heat input for a specified calendar year shall equal the control period gross electrical output, including the capacity factor, of the generator(s) served by the unit multiplied by 6,675 BTU/KWh and divided by 1,000,000 BTU/MMBTU. The control period gross electrical output as stated in the documentation presented for the LPSC or municipal certification shall be used in this calculation. If a generator is served by two or more units, then the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of all the units for the year.

c. Utility Units. The department shall allocate CAIR NO_x allowances to each CAIR utility unit by multiplying the CAIR NO_x budget for Louisiana (40 CFR 97.140), minus the allowances allocated under Subparagraph A.2.a of this Section, by the ratio of the adjusted baseline heat input of the CAIR utility unit and/or converted heat input of a certified unit to the total amount of adjusted baseline heat input and converted heat input of all CAIR utility units and certified units in the state and rounding to the nearest whole allowance. The adjusted baseline heat input (in MMBTU) used with respect to the CAIR NO_x annual allowance for each CAIR utility unit shall be established as follows.

i. The average of the unit's control period adjusted heat input for the three calendar years immediately preceding the deadline for submission of allocations to the administrator shall be used (except that the allocation submitted in 2007 shall use the average of the control period adjusted heat input for calendar years 2002, 2003, and 2004), with the control period adjusted heat input for each year calculated as follows.

(a). If the unit is coal-fired during a year, the unit's control period heat input for that year shall be multiplied by 100 percent.

(b). If the unit is oil-fired during a year, the unit's control period heat input for that year shall be multiplied by 60 percent.

(c). If the unit is not subject to Subclause A.2.c.i.(a) or (b) of this Section, the unit's control period heat input for the year shall be multiplied by 40 percent.

ii. A unit's control period heat input, status as coal-fired or oil-fired, and total tons of NO_x emissions during a calendar year shall be determined in accordance with 40 CFR Part 97 and reported in accordance with LAC 33:III.919.

3. Timing Requirements for CAIR NO_x Annual Allowance Allocations

a. By April 30, 2007, the department shall submit to the administrator the CAIR NO_x annual allowance allocations, in a format prescribed by the administrator and in accordance with Paragraph A.2 of this Section, for the control periods in 2009, 2010, and 2011.

b. By October 31, 2008, for the year 2012, and by October 31 of each year thereafter, the department shall submit to the administrator CAIR NO_x annual allowance allocations, in a format prescribed by the administrator and in accordance with Paragraph A.2 of this Section, for the control period in the fourth year after the year of the applicable deadline for submission under this Section.

B. Clean Air Interstate Rule (CAIR) Nitrogen Oxide (NO_x) Ozone Season Program. This Subsection is adopted in lieu of 40 CFR 97.341 and 97.342 as promulgated under the CAIR Federal Implementation Plan (FIP) NO_x Ozone Season Trading Program on April 28, 2006, at 71 FR 25328. All provisions of 40 CFR Part 97, Subparts AAAA – HHHH, continue to apply, with the exception of §97.341 (Timing Requirements for CAIR NO_x Ozone Season Allowance Allocations) and §97.342 (CAIR NO_x Ozone Season Allowance Allocations). The provisions of this Subsection state how the CAIR NO_x ozone season allowances shall be allocated in accordance with this Section and 40 CFR 97.343(a).

1. Definitions. The terms used in Subsection B of this Section have the meaning given to them in the CAIR FIP (40 CFR Part 97 as promulgated on April 28, 2006), and in Paragraph A.1 of this Section.

2. Allocation of CAIR NO_x Ozone Season Allowances. Total NO_x ozone season allowances allocated per control period shall not be in excess of the CAIR NO_x ozone season budget as found in 40 CFR 97.340 (17,085 tons per control period from 2009-2014 and 14,238 tons per control period thereafter).

a. Non-Utility Units. For each CAIR non-utility unit, the NO_x allowances shall be equal to the average of the actual NO_x ozone season emissions of the three calendar years immediately preceding the year in which the control period allocations are submitted to the administrator. The actual NO_x ozone season emissions as reported in the emission inventory required by LAC 33:III.919 shall be used, except that the allowances submitted in 2007 shall use the actual NO_x emissions for calendar years 2002, 2003, and 2004 that were reported to the Federal Acid Rain Program. When data is not available in the emission inventory, data reported to the Federal Acid Rain Program shall be used. When actual reported NO_x ozone season emissions data are available for only two of the three calendar years immediately preceding the deadline for submission of the control period allocations, the average of the actual reported NO_x ozone season emissions data for those two years shall be used. When actual reported NO_x ozone season emissions data are available for only one of the three calendar years, the actual reported NO_x ozone season emissions data for that one year shall be used. When no actual reported NO_x ozone season emissions data for any of the three calendar years are available, no allocations shall be made under this Paragraph.

b. Certified Units. A certified unit subject to CAIR shall be allocated NO_x allowances for the ozone season of the control period in which the unit will begin operation, and for each successive ozone season in a control period, for which no NO_x allowances have been previously allocated until ozone season operating data are available for the three calendar years immediately preceding the deadline for submission of the control period allocations. Until a unit has three years of ozone season operating data preceding the allocation submittal deadline, the converted heat input as calculated in Clause B.2.b.i or ii of this Section shall be used to allocate ozone season allowances for the unit. The certified unit shall be treated as a utility unit for purposes of this allocation, except that ozone season converted heat input shall be used instead of ozone season adjusted heat input. Ozone season converted heat input is calculated as follows.

i. For a coal-fired unit, the hourly heat input for a specified calendar year shall equal the control period gross electrical output, including the capacity factor, of the generator(s) served by the unit multiplied by 7,900 BTU/KWh and divided by 1,000,000 BTU/MMBTU and multiplied by 5/12. The control period gross electrical output as stated in the documentation presented for the LPSC or municipal certification shall be used in this calculation. If a generator is served by two or more units, then the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of all the units for the specified ozone season.

ii. For a non-coal-fired unit, the hourly heat input for a specified calendar year shall equal the control period gross electrical output, including the capacity factor, of the generator(s) served by the unit multiplied by 6,675 BTU/KWh and divided by 1,000,000 BTU/MMBTU and multiplied by 5/12. The control period gross electrical output as stated in the documentation presented for the LPSC or municipal certification shall be used in this calculation. If a generator is served by two or more units, then the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of all the units for the specified ozone season.

c. Utility Units. The department shall allocate CAIR NO_x ozone season allowances to each CAIR utility unit by multiplying the CAIR NO_x ozone season budget for Louisiana (40 CFR 97.340), minus the allowances allocated under Subparagraph B.2.a of this Section, by the ratio of the ozone season adjusted baseline heat input of the CAIR utility unit and/or converted heat input of a certified unit to the total amount of ozone season adjusted baseline heat input and converted heat input of all CAIR utility units and certified units in the state and rounding to the nearest whole allowance. The ozone season adjusted baseline heat input (in MMBTU) used with respect to the CAIR NO_x ozone season allowance for each CAIR utility unit shall be established as follows.

i. The average of the unit's control period ozone season adjusted heat input for the three calendar years immediately preceding the deadline for submission of allocations to the administrator shall be used (except that the allocation submitted in 2007 shall use the average of the control period ozone season adjusted heat input for calendar years 2002, 2003, and 2004), with the control period ozone season adjusted heat input for each year calculated as follows.

(a). If the unit is coal-fired during a year, the unit's control period ozone season heat input for that year shall be multiplied by 100 percent.

(b). If the unit is oil-fired during a year, the unit's control period ozone season heat input for that year shall be multiplied by 60 percent.

(c). If the unit is not subject to Subclause B.2.c.i.(a) or (b) of this Section, the unit's control period ozone season heat input for the year shall be multiplied by 40 percent.

ii. A unit's control period ozone season heat input, status as coal-fired or oil-fired, and total tons of NO_x ozone season emissions during a calendar year shall be determined in accordance with 40 CFR Part 97 and reported in accordance with LAC 33:III.919.

3. Timing Requirements for CAIR NO_x Ozone Season Allowance Allocations

a. By April 30, 2007, the department shall submit to the administrator the CAIR NO_x ozone season allowance allocations, in a format prescribed by the administrator and in accordance with Paragraph B.2 of this Section, for the control periods in 2009, 2010, and 2011.

b. By October 31, 2008, for the year 2012, and by October 31 of each year thereafter, the department shall submit to the administrator the CAIR NO_x ozone season allowance allocations, in a format prescribed by the administrator and in accordance with Paragraph B.2 of this Section, for the control period in the fourth year after the year of the applicable deadline for submission under this Section.

C. Annual Sulfur Dioxide. Except as specified in this Section, the Federal SO_2 Model Rule, published in the *Code of Federal Regulations* at 40 CFR Part 96, July 1, 2005, and as revised at 70 FR 25162-25405, May 12, 2005, and 71 FR 25328-25469, April 28, 2006, is hereby incorporated by reference, except for Subpart III—CAIR SO_2 Opt-in Units and all references to opt-in units.

D. Copies of documents incorporated by reference in this Section may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html; from the Department of Environmental Quality, Office of Environmental Services; or from a public library.

E. Modifications or Exceptions. A copy of each report or notice or of any other documentation required by the referenced regulations (i.e., 40 CFR Part 96) to be provided to "the Administrator" shall be provided to the Office of Environmental Services by the person required to make the submission to "the Administrator."

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:1597 (September 2006), amended LR 33:1622 (August 2007), LR 33:2083 (October 2007).

§507. Part 70 Operating Permits Program

A. Applicability. The effective date of this Section shall be the date of full or interim approval by the United States Environmental Protection Agency of the Louisiana Part 70 program consistent with 40 CFR Part 70. Notice of the date of EPA approval of the Louisiana Part 70 program shall be published in the next subsequent *Louisiana Register* following such approval.

1. The following sources are designated Part 70 sources and are required to obtain a permit which will meet the requirements of this Section:

a. any *major source* as defined in LAC 33:III.502;

b. any nonmajor (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 nonmajor source required to obtain an operating permit pursuant to regulations promulgated under Section 111 of the federal Clean Air Act;

d. any *affected source*, as defined in LAC 33:III.502, pursuant to the acid rain provisions of 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.

2. The owner or operator of any source exempt from the requirements to obtain a permit under this Section may opt to apply for a permit under this Section.

3. Any permit issued under the requirements of this Section shall incorporate all federally applicable requirements for each emissions unit at the source.

B. Obligation to Operate under a Permit

1. Obtaining a permit in accordance with the requirements of this Section shall fulfill the obligation of the owner and operator of a Part 70 source to have a permit issued under the requirements of Title V of the federal Clean Air Act (42 U.S.C. 7401 et seq.) and 40 CFR Part 70.

2. No Part 70 source may operate after the time that the owner or operator of such source is required to submit a permit application under Subsection C of this Section, unless an application has been submitted by the submittal deadline and such application provides information addressing all applicable sections of the application form and has been certified as complete in accordance with LAC 33:III.517.B.1. No Part 70 source may operate after the deadline provided for supplying additional information requested by the permitting authority under LAC 33:III.519, unless such additional information has been submitted within the time specified by the permitting authority. Permits issued to the Part 70 source under this Section shall include the elements required by 40 CFR 70.6. The department hereby adopts and incorporates by reference the provisions of 40 CFR 70.6(a), July 1, 2006. Upon issuance of the permit, the Part 70 source shall be operated in compliance

with all terms and conditions of the permit. Noncompliance with any federally applicable term or condition of the permit shall constitute a violation of the Clean Air Act and shall be grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.

C. Initial Permit Applications

1. Existing Sources. The owner or operator of any Part 70 source for which construction or operation has begun prior to the effective date of this Section shall submit an application for an initial Part 70 permit. Permit applications shall be prepared in accordance with LAC 33:III.517 and with forms and guidance provided by the permitting authority, and shall be submitted no later than one year after the effective date of the Louisiana Part 70 program.

a. Owners and operators of Part 70 sources may be required to submit initial Part 70 permit applications prior to the date one year from the effective date of the Louisiana Part 70 program upon request of the permitting authority. Notice of requests for submittal of permit applications prior to one year from program approval shall be published in the *Louisiana Register* and shall allow a reasonable time for response, which shall be no less than 90 days from the date the request is published. It is the intent of the permitting authority to take final action on at least one-third of initial applications submitted for existing Part 70 sources annually over a period not to exceed three years after the effective date of this Section.

b. Notwithstanding the time periods for application submittal established in Paragraph C.1 and Subparagraph C.1.a of this Section, permit applications for affected Phase II sources under the federal Acid Rain Program shall be submitted in accordance with the timeframes specified in LAC 33:III.505.D.2.

c. Final action on any application containing an early reduction demonstration under Section 112(i)(5) of the Clean Air Act shall be taken within nine months of receipt of the complete application.

2. New Sources. The owner or operator of any source which will constitute a Part 70 source and for which construction will commence after the effective date of the Louisiana Part 70 program shall submit a permit application prior to construction and pursuant to LAC 33:III.517. The application shall include all information required for applications pertaining to a Part 70 source. Construction shall not begin prior to approval by the permitting authority. Such approval may be provided either by authorization to construct in accordance with LAC 33:III.501.C.3 or by issuance of the permit.

3. Newly Regulated Sources. The owner or operator of any source that becomes subject to the requirements of this Section after the effective date of the Louisiana Part 70 program due to regulations promulgated by the administrator or by the Department of Environmental Quality shall submit an application to the Office of Environmental Services in accordance with the requirements established by the applicable regulation. In no case shall the required application be submitted later than one year from the date on which the source first becomes subject to this Section.

D. Permit Revisions

1. Transition Period. The following provisions shall apply after the effective date of this Section and prior to the issuance of the initial permit for a Part 70 source under this Section.

a. The terms and conditions of any permit or exemption issued to a Part 70 source by the permitting authority prior to the effective date of this Section shall remain in effect, unless otherwise inconsistent with the provisions of this Chapter or revised in accordance with this Chapter, until the initial permit under this Section for such Part 70 source is issued.

b. Any Part 70 source operating under grandfathered status on the effective date of this Section may maintain such grandfathered status in the transition period consistent with the provisions of LAC 33:III.501.B.6.

c. The owner or operator of any Part 70 source who intends to make a change at the source after the effective date of this Section and prior to release of the initial proposed permit under this Section shall submit any required notification, request, or permit application in accordance with the provisions of this Chapter. The owner or operator shall obtain any required permit revision to the existing air quality permit for such source. If the application for an initial permit under this Section has already been submitted, the owner or operator shall supplement and amend the pending application consistent with LAC 33:III.517.C.

d. The permitting authority may revise any existing permit, or for previously exempt or grandfathered sources may issue a new permit, prior to issuance of an initial permit under this Section. To limit duplicative permitting activities, the owner or operator or the permitting authority may request that the initial permit under this Section be issued timely with regard to the proposed change at the source.

2. The following provisions shall apply after the issuance of the initial permit for a Part 70 source under this Section.

a. Revisions to the initial permit shall be accomplished in accordance with the procedures provided for in LAC 33:III.521, 525, or 527.

b. Applications for permit revisions for Part 70 sources shall be submitted prior to commencement of any proposed construction or modification.

c. Prior to commencement of construction or modification of a Part 70 source, the owner or operator shall obtain from the permitting authority either written authorization to construct in accordance with LAC 33:III.501.C.3 or a permit or permit revision.

E. Permit Duration, Expiration and Renewal

1. Permits issued to any Part 70 source shall be effective for a duration of five years from the effective date

of the permit. Permits are effective on the date of issuance, unless a later date is specified therein.

2. The starting date of the five-year permit duration is not altered by any revision or reopening of the permit which affects only a portion of the permit. 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.

3. Unless renewed in accordance with this Section, permits issued under this Section shall expire at the end of the effective duration. Permit expiration terminates the owner's and operator's right to operate the source, consistent with Subsection B of this Section, unless a timely and complete renewal application has been submitted pursuant to the following paragraph, or for Phase II repowering extensions, in accordance with LAC 33:III.505.H.3. Terms and conditions of the existing permit shall remain in effect until such time as the permitting authority takes final action on the application for renewal.

4. Any permit application to renew an existing permit shall be submitted at least six months prior to the date of permit expiration, or at such earlier time as may be required by the existing permit or approved by the permitting authority. In no event shall the application for permit renewal be submitted more than 18 months before the date of permit expiration.

5. Any permit being renewed shall be subject to the same procedural requirements that apply to initial permit issuance, as found in LAC 33:III.519.

F. Changes Requiring State-Only Permit Revisions

1. Any change at a Part 70 source which is not addressed or prohibited in the federally enforceable terms and conditions of the permit may be designated as a state-only change, and may be made without a revision to the federally enforceable terms and conditions currently existing in the permit, provided that the change:

a. shall meet all applicable standards and requirements;

b. does not violate any existing federally enforceable permit term or condition;

c. is not subject to any requirement under Title IV of the Clean Air Act;

d. is not a Title I modification; and

e. shall not be protected by a permit shield under LAC 33:III.507.I.

2. Designation of a change as state-only affects only the federal requirements for processing of the change under 40 CFR Part 70, and does not relieve the owner or operator of the source from the obligation to comply with all applicable state preconstruction review and permitting requirements. Any change designated as state-only will be treated as appropriate under state permitting requirements.

3. The owner or operator of a Part 70 source who plans to initiate a change meeting the criteria established in Paragraph F.1 of this Section may submit a request to the permitting authority that the change be designated state-only. Such request shall be accompanied by any notification or application required pursuant to LAC 33:III.511 or 517.

4. Any submittal pertaining to a change designated as state-only pursuant to Paragraph F.3 of this Section shall be submitted by the applicant to EPA and shall be maintained on file by the applicant in fulfillment of the obligation to provide written notice and to keep records under 40 CFR 70.4(b)(14).

G. Operational Flexibility

1. Nothing in this Subsection shall be construed to relieve the owner or operator of a Part 70 source from complying with all applicable requirements and regulations, including all applicable state and federal preconstruction review and permitting requirements.

2. Changes which Contravene a Permit Term. The owner or operator of a Part 70 source may institute a change at the permitted facility which contravenes an express federally enforceable permit term or condition without revising the existing federally enforceable permit terms and conditions, provided:

a. the change will not violate any applicable requirement;

b. the change will not result in an exceedance of emissions allowable under the permit, whether expressed therein as a rate of emissions or in terms of total emissions;

c. the change will not contravene any testing, monitoring, recordkeeping, reporting, or compliance certification requirements of the existing permit;

d. the change will not constitute a *Title I Modification*, as defined in LAC 33:III.502, and is not to an acid rain permit term or condition; and

e. at least seven days prior to making the change, the owner or operator will provide written notice to the administrator and to the permitting authority which shall include a description of the change, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The source, the permitting authority, and EPA shall each attach the written notice to their copy of the permit.

3. Terms Allowing for Emissions Trading under a Cap. Upon request of the owner or operator, the permitting authority shall include in the federally enforceable terms of the permit provisions allowing for the trading of emissions increases and decreases in the 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, provided:

a. the permit applicant shall include in its application proposed replicable procedures and permit terms

that ensure the emissions trades are quantifiable and enforceable;

b. the permitting authority shall include in the emissions trading provisions only those emissions units for which emissions are verifiable and quantifiable and for which there are replicable procedures to enforce the emissions trades;

c. the permit shall require compliance at all times with all applicable requirements at the source. The owner or operator shall provide seven-day written notice to the administrator and to the permitting authority prior to making a trade in emissions. Such notice shall state when the change will occur and shall describe the changes in emissions that will occur and how these increases and decreases in emissions will comply with the terms and conditions of the permit. The source, the permitting authority, and EPA shall each attach the written notice to their copy of the permit.

4. Alternative Emission Limits under the SIP. The owner or operator of a Part 70 source may utilize emissions trading or alternative emission limits to comply with the State Implementation Plan as follows.

a. In cases where the State Implementation Plan allows a determination of an alternative emission limit equivalent to that contained in the plan, the owner or operator may request that such an alternative emission limit be specified in the permit. Any such request shall demonstrate, in the permit application, accountable, enforceable, and based on replicable procedures, and shall propose permit terms and conditions to satisfy these requirements.

b. In cases where the State Implementation Plan provides for emission trades without a permit revision, the owner or operator may trade increases and decreases in emissions at the permitted facility where the permit does not already allow such trading, provided a seven-day notice is submitted as prescribed by 40 CFR 70.4(b)(12)(ii). The source, the permitting authority, and EPA shall each attach the written notice to their copy of the permit. Within 180 days of implementing the emissions trading, permit terms and conditions satisfying the requirements of Subparagraph G.4.a of this Section shall be incorporated into the permit.

5. Alternative Operating Scenarios. The owner or operator of a Part 70 source may operate such source under any operating scenario incorporated in the applicable permit. Contemporaneous with making a change from one operating scenario to another, the owner or operator shall record in a log at the permitted facility a record of the scenario under which it is operating. Any reasonably anticipated alternative operating scenarios may be identified by the owner or operator through a permit application submitted in accordance with LAC 33:III.517, and included in the permit as approved by the permitting authority.

H. Compliance Measures and Certifications of Compliance. Each permit issued to a Part 70 source shall include the following elements with regard to compliance:

1. compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit as required by 40 CFR 70.6(a)(3), including:

a. where an applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to 40 CFR 70.6(a)(3)(iii). Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this Subparagraph;

b. for any document required to be submitted under this Paragraph, a certification by a *responsible official* as defined in LAC 33:III.502 and required by LAC 33:III.517.B.1;

2. inspection and entry requirements sufficient to allow the permitting authority or an authorized representative to enter the property where the Part 70 source is located and to perform inspections of records, facilities, equipment, practices, or operations regulated or required under the permit and to perform any other inspection or monitoring activity authorized by the Clean Air Act or by the Louisiana Environmental Quality Act;

3. a schedule of compliance consistent with LAC 33:III.517.E.4;

4. a requirement for progress reports to be submitted to the Office of Environmental Compliance at least semiannually, or at a more frequent period if specified in the applicable requirement. Such progress reports shall contain the following:

a. dates for achieving the activities, milestones, or compliance required in the schedule of compliance and dates when such activities, milestones, or compliance were achieved; and

b. an explanation of why dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted;

5. requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. Permits shall include each of the following:

a. the frequency (not less than annually or such more frequent periods as specified in the applicable requirement or by the permitting authority) of submissions of compliance certifications;

b. a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;

c. a requirement that the compliance certification include the following:

i. the identification of each term or condition of the permit that is the basis of the certification;

ii. the compliance status;

iii. whether compliance was continuous or intermittent;

iv. the method(s) used for determining the compliance status of the source; and

v. such other facts as the permitting authority may require to determine the compliance status of the source;

d. a requirement that all compliance certifications be submitted to the administrator as well as to the Office of Environmental Compliance; and

e. such additional requirements as may be specified pursuant to Sections 114(a)(3) and 504(b) of the Clean Air Act; and

6. such other provisions as the permitting authority may require.

I. Permit Shields

1. Requests. The owner or operator of any Part 70 source may include in the permit application a request that the permit incorporate a permit shield for explicitly stated federally applicable requirements provided that the shield shall not affect applicable requirements of the federal Acid Rain Program and that the request pertains only to one or more of the following:

a. applicability determinations of standards and requirements under the following federal programs:

i. New Source Performance Standards (NSPS);

ii. Prevention of Significant Deterioration (PSD);

iii. Nonattainment New Source Review (NNSR);

iv. Hazardous Air Pollutants (MACT/NESHAP);

b. interpretations regarding the frequency of and procedures for monitoring, recordkeeping, and reporting provisions of federally applicable requirements; and

c. interpretations regarding appropriate means of compliance when more than one federal requirement applies to the same emissions unit at a source.

2. Action on Requests

a. The permitting authority shall have full discretion in determining whether to grant or deny any permit shield request or any portion thereof.

b. A statement indicating that a permit shield is incorporated in the proposed permit shall appear in the public notice provided for under LAC 33:III.531. A permit shield shall not be granted without prior public notice and shall not extend to any permit term or condition which has not undergone public notice.

c. A permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. Effect of the Permit Shield

a. Any permit shield granted by the permitting authority shall explicitly state that compliance with specified permit terms and conditions shall be deemed compliance with specified corresponding federally applicable requirements. Additionally, for shields pertaining to applicability determinations, the shield may state that specified federal requirements are not applicable to the source provided that the permit shall contain the applicability determination.

b. The issuance of a shield shall not affect enforcement or compliance determinations or liability for any activity or violation of applicable requirements prior to or at the time of permit issuance.

c. The issuance of a shield shall not affect the provisions of Section 303 (Emergency Orders) or Section 114 (Inspections, Monitoring, and Entry) of the Clean Air Act, including the authority of the administrator under those sections.

d. A permit shield shall not be construed or utilized to guarantee emission control efficiency of any control equipment or operating scheme.

4. Revocation or Revision of the Permit Shield

a. If any determination or interpretation made pursuant to Paragraph I.1 of this Section is determined to have been based upon inaccurate data or information pertaining to the source, the corresponding provision of the permit shield may be deemed invalid from the time of issuance by the permitting authority without regard to willful or knowing intent of the owner or operator upon submittal of the inaccurate data.

b. The permitting authority shall have full discretion to reopen the permit and to terminate or revise the permit shield at any time under LAC 33:III.529.

J. Upset Provisions

1. For the purposes of this Subsection, an *upset* is any situation arising from sudden and reasonably unforeseeable 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.

2. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitations provided the owner or operator demonstrates through properly signed, contemporaneous operating logs or other relevant evidence that:

a. an upset occurred and that the owner or operator can identify the cause(s) of the upset;

b. the permitted facility was at the time being properly operated;

c. during the period of the upset the operator took all reasonable steps to minimize levels of emissions that exceeded the emissions standards and other requirements in the permit; and

d. the owner or operator notified the permitting authority in accordance with LAC 33:I.Chapter 39.

3. In any enforcement proceeding, the owner and operator seeking to establish the occurrence of an upset has the burden of proof.

4. The provisions of this Subsection are in addition to any emergency or upset provisions contained in any applicable requirement.

5. The provisions of this Subsection do not apply to acid rain emission limitations.

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§509. Prevention of Significant Deterioration

A. Applicability Procedures

1. The requirements of this Section apply to the construction of any new *major stationary source*, as defined in Subsection B of this Section, or any project at an existing *major stationary source* in an area designated as attainment or unclassifiable under Sections 107(d)(1)(A)(ii) or (iii) of the Clean Air Act.

2. The requirements of Subsections J-R of this Section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this Section otherwise provides.

3. No new major stationary source or major modification to which the requirements of Subsection J-Paragraph R.5 of this Section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The administrative authority has authority to issue any such permit.

4. The requirements of the program will be applied in accordance with the following principles.

a. Except as otherwise provided in Paragraph A.5 of this Section, and consistent with the definition of *major modification* contained in Subsection B of this Section, a project is a major modification for a regulated new source review (NSR) pollutant if it causes two types of emissions increases—a *significant* emissions increase, as defined in Subsection B of this Section, and a significant *net emissions increase*, as defined in Subsection B of this Section. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

b. The procedure for calculating, before beginning actual construction, whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to Subparagraphs A.4.c-f of this Section. The procedure for calculating, before beginning actual construction, whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is as defined in Subsection B.*Net Emissions Increase* of this Section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

c. Actual-to-Projected-Actual Applicability Test for Projects That Only Involve Existing Emissions Units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the *projected actual emissions*, as defined in Subsection B of this Section, and the *baseline actual emissions*, as defined in Subparagraphs B.*Baseline Actual Emissions*.a and b of this Section, for each existing emissions unit, equals or exceeds the *significant* amount for that pollutant, as defined in Subsection B of this Section.

d. Actual-to-Potential Test for Projects That Only Involve Construction of a New Emissions Unit. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the *potential to emit*, as defined in Subsection B of this Section, from each new emissions unit following completion of the project and the *baseline actual emissions*, as defined in Subparagraph B.*Baseline Actual Emissions*.c of this Section, of these units before the project equals or exceeds the *significant* amount for that pollutant, as defined in Subsection B of this Section.

e. Reserved.

f. Hybrid Test for Projects That Involve Multiple Types of Emissions Units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in Subparagraphs A.4.c-d of this Section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant, as defined in Subsection B of this Section.

5. For any major stationary source for a plantwide applicability limit (PAL) for a regulated NSR pollutant, the

major stationary source shall comply with the requirements under Subsection AA of this Section.

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

Actual Emissions—the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with the following, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under Subsection AA of this Section. Instead, Subsection B.*Projected Actual Emissions* and *Baseline Actual Emissions* of this Section shall apply for those purposes.

a. In general, *actual emissions* as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period that precedes the particular date and which is representative of normal source operation. The administrative authority shall allow the use of a different time period upon a determination that it is more representative of normal 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. The administrative authority may presume that source-specific allowable emissions for the unit are equivalent to the *actual emissions* of the unit.

c. For any emissions unit that has not begun normal operations on the particular date, *actual emissions* shall equal the potential to emit of the unit on that date.

Adverse Impact on Visibility—visibility impairment that interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with:

a. times of visitor use of the federal Class I area; and

b. the frequency and timing of natural conditions that reduce visibility.

Allowable Emissions—the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits that restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

a. the applicable standards as set forth in 40 CFR Parts 60 and 61; or

b. the applicable implementation plan 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.

Baseline Actual Emissions—the rate of emissions, in tons per year, of a regulated NSR pollutant, determined as follows.

a. For any existing electric utility steam generating unit, *baseline actual emissions* means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the five-year period immediately preceding when the owner or operator projects to begin actual construction of the project. The administrative authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

i. The average rate shall include fugitive emissions to the extent quantifiable, and authorized emissions associated with startups, shutdowns, and malfunctions.

ii. The average rate shall 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.

iii. For a regulated NSR pollutant, 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 NSR pollutant.

iv. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Clause a.ii of this definition.

b. For an existing emissions unit, other than an electric utility steam generating unit, *baseline actual emissions* means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 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 the administrative authority for a permit required under this Section, except that the 10-year period shall not include any period earlier than November 15, 1990.

i. The average rate shall include fugitive emissions to the extent quantifiable, and authorized emissions associated with startups, shutdowns, and malfunctions.

ii. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

iii. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrative authority proposed or promulgated under 40 CFR Part 63, the *baseline actual emissions* need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).

iv. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the *baseline actual emissions* for all the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR pollutant.

v. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Clauses b.ii and iii of this definition.

c. For a new emissions unit, the *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.

d. For a PAL for a stationary source, the *baseline actual emissions* shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in Subparagraph a of this definition, for other existing emissions units in accordance with the procedures contained in Subparagraph b of this definition, and for a new emissions unit in accordance with the procedures contained in Subparagraph c of this definition.

Baseline Area—

a. any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(D) or (E) of the Clean Air Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 $\mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established;

b. area redesignations under Section 107(d)(1)(D) or (E) of the Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification that:

i. establishes a minor source baseline date; or

ii. is subject to 40 CFR 52.21 or under regulations approved in accordance with 40 CFR 51.166 and would be constructed in the same state as the state proposing the redesignation;

c. any *baseline area* established originally for the total suspended particulates (TSP) increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that such *baseline area* shall not remain in effect if the administrative authority rescinds the corresponding minor source baseline date in accordance with Subparagraph B.*Baseline Date*.d of this Section.

Baseline Concentration—

a. that ambient concentration level that 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:

i. the actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in Subparagraph b of this definition;

ii. the allowable emissions of major stationary sources that commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date;

b. the following will not be included in the *baseline concentration* and will affect the applicable maximum allowable increase:

i. actual emissions from any major stationary source on which construction commenced after the major source baseline date; and

ii. actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

Baseline Date—

a. *Major Source Baseline Date—*

i. in the case of particulate matter (PM_{10}) and sulfur dioxide, January 6, 1975; and

ii. in the case of nitrogen dioxide, February 8, 1988.

b. *Minor Source Baseline Date*—the earliest date after the trigger date on which a major stationary source or a major modification subject to this Section submits a complete application under the relevant regulations. The trigger date is:

i. in the case of particulate matter (PM_{10}) and sulfur dioxide, August 7, 1977; and

ii. in the case of nitrogen dioxide, February 8, 1988.

c. The *baseline date* is established for each pollutant for which increments or other equivalent measures have been established if:

i. the area in which the proposed source or modification would construct is designated as attainment or unclassifiable under Section 107(d)(i)(D) or (E) of the Clean Air Act for the pollutant on the date of its complete

application under 40 CFR 52.21 or under regulations approved in accordance with 40 CFR 51.166; and

ii. in the case of a major stationary source, the pollutant would be emitted in significant amounts or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

d. Any *minor source baseline date* established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that the administrative authority shall rescind a *minor source baseline date* where it can be shown, to the satisfaction of the administrative authority, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM_{10} emissions.

Begin Actual Construction—in general, initiation of physical on-site construction activities on an emissions unit that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities, other than preparatory activities, that mark the initiation of the change.

Best Available Control Technology (BACT)—

a. an emissions limitation, including a visible emission standard, based on the maximum degree of reduction for each pollutant subject to regulation under this Section that would be emitted from any proposed major stationary source or major modification that the administrative authority, 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;

b. in no event shall application of *best available control technology* result in emissions of any pollutant that would exceed the emissions allowed by an applicable standard under 40 CFR Parts 60 and 61. If the administrative authority 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 to satisfy the requirement for the application of *best available control technology*. 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.

Building, Structure, Facility, or Installation—all of the pollutant-emitting activities that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same *Major Group* (i.e., which have the same first two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101–0066 and 003–005–00176–0, respectively).

Clean Air Act—the federal Clean Air Act, as amended (42 U.S.C. Chapter 85).

Commence—as applied to construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits and either has:

a. begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

b. entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

Complete—in reference to an application for a permit, that the application contains all of the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the administrative authority from requesting or accepting any additional information.

Construction—any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, that would result in a change in actual emissions.

Continuous Emissions Monitoring System (CEMS)—all of the equipment that may be required to meet the data acquisition and availability requirements of this Section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

Continuous Emissions Rate Monitoring System (CERMS)—the total equipment required for the determination and recording of the pollutant mass emissions rate, in terms of mass per unit of time.

Continuous Parameter Monitoring System (CPMS)—all of the equipment necessary to meet the data acquisition and availability requirements of this Section, to monitor process and control device operational parameters (e.g., control device secondary voltages and electric currents) and other information (e.g., gas flow rate, O_2 or CO_2 concentrations), and to record average operational parameter values on a continuous basis.

Electric Utility Steam Generating Unit—any steam-electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam

supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Emissions Unit—any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant, and includes an *electric utility steam generating unit*, as defined in this Subsection. For purposes of this Section, there are two types of *emissions units.*

a. 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.

b. An *existing emissions unit* is any emissions unit that is not a new emissions unit. A *replacement unit*, as defined in this Subsection, is an *existing emissions unit*.

Federal Land Manager—with respect to any lands in the United States, the secretary of the department with authority over such lands.

Federally Enforceable—all limitations and conditions that are enforceable by the administrator, including those requirements developed in accordance with 40 CFR Parts 60, 61, and 63, requirements within any applicable State Implementation Plan, any permit requirements established in accordance with 40 CFR 52.21 or under regulations approved in accordance with 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.

Fugitive Emissions—those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

High Terrain—any area having an elevation 900 feet or more above the base of the stack of a source.

Indian Governing Body—the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

Indian Reservation—any federally-recognized reservation established by treaty, agreement, executive order, or act of Congress.

Innovative Control Technology—any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

Low Terrain—any area other than *high terrain*, as defined in this Subsection.

Lowest Achievable Emission Rate (LAER)—as defined in LAC 33:III.504.

Major Modification—

a. any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant, and a significant net emissions increase of that pollutant from the major stationary source;

b. any significant emissions increase from any emissions unit or net emissions increase at a major stationary source that is significant for volatile organic compounds (VOCs) or nitrogen oxides ($NO_{x)}$ shall be considered significant for ozone;

c. a physical change or change in the method of operation shall not include:

i. routine maintenance, repair, and replacement;

ii. use of an alternative fuel or raw material by reason of any 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;

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

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

v. use by a source of an alternate fuel or raw material that:

(a). 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

(b). 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;

vi. an increase in the hours of operation or in the production rate, 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;

vii. any change in source ownership;

d. this definition shall not apply with respect to a particular pollutant subject to regulation under this Section when the major stationary source is complying with the requirements under Subsection AA of this Section for a PAL for that pollutant. Instead, the definition at Subparagraph AA.2.g of this Section shall apply.

Major Stationary Source—

a. any of the stationary sources of air pollutants listed in Table A of this definition that emits, or has the

potential to emit, 100 tons per year or more of any pollutant subject to regulation under this Section;

b. for stationary source categories other than those listed in Table A of this definition, any stationary source that emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under this Section; or

c. any physical change that would occur at a source not otherwise qualifying as a major stationary source under Subparagraphs a and b of this definition if the change would constitute a major source by itself;

d. a major source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone;

e. the fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this Section whether it is a *major stationary source*, unless the source is listed in Table A of this definition or, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act.

Table A – Stationary Sources of Air Pollutants	
1	Fossil fuel-fired steam electric plants of more than 250 million British thermal units (Btu) per hour 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 250 tons of refuse per 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 million Btu per hour 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
26	Charcoal production plants

Malfunctions—for purposes of this Section, *malfunctions* shall include any such emissions authorized by permit, variance, or the on-line operating adjustment provisions of LAC 33:III.1507.B and 2307.C.2, but exclude any emissions that are not compliant with federal or state standards.

Necessary Preconstruction Approvals or Permits—those permits or approvals required under all applicable air quality control laws and regulations.

Net Emissions Increase—

a. with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

i. the increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated in accordance with Paragraph A.4 of this Section; and

ii. any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this Clause shall be determined as provided in Subsection B.*Baseline Actual Emissions* of this Section, except that Clauses B.*Baseline Actual Emissions*.a.iii and b.iv of this Section shall not apply;

b. an increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

i. the date five years before construction on the particular change commences; and

ii. the date that the increase from the particular change occurs;

c. an increase or decrease in actual emissions is creditable only if the administrative authority has not relied on it in issuing a permit for the source under this Section, which permit is in effect when the increase in actual emissions from the particular change occurs;

d. an increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available;

e. an increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level;

f. a decrease in actual emissions is creditable only to the extent that:

i. the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

ii. it is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and

iii. it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

g. Reserved;

h. an increase that results from a physical change at a 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;

i. Subparagraph B.*Actual Emissions*.a of this Section shall not apply for determining creditable increases and decreases.

Pollution Prevention—any activity that, through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants, including fugitive emissions, and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

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 federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

Predictive Emissions Monitoring System (PEMS)—all of the equipment necessary to monitor process and control device operational parameters (e.g., control device secondary voltages and electric currents) and other information (e.g., gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (e.g., lb/hr) on a continuous basis.

Prevention of Significant Deterioration (PSD) Program—a major source preconstruction permit program that has been approved by the administrator and incorporated into the State Implementation Plan to implement the requirements of this Section or the program in 40 CFR 52.21. Any permit issued under such a program is a major NSR permit.

Project—a physical change in, or change in the method of operation of, an existing major stationary source.

Projected Actual Emissions—the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated pollutant in any one of the five 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 major stationary source. In determining the *projected actual emissions* before beginning actual construction, the owner or operator of the major stationary source:

a. 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; and

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

c. shall 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* as defined in this Subsection and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

d. in lieu of using the method set out in Subparagraphs a-c of this definition, may elect to use the emissions unit's *potential to emit*, in tons per year, as defined in this Subsection.

Reasonably Available Control Technology (RACT)—devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account:

a. the necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;

b. the social, environmental, and economic impact of such controls; and

c. alternative means of providing for attainment and maintenance of such standard.

Regulated NSR Pollutant—

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

b. any pollutant that is subject to any standard promulgated under Section 111 of the Clean Air Act;

c. any Class I or II substance subject to a standard promulgated under or established by Title VI of the Clean Air Act; or

d. any pollutant that otherwise is subject to regulation under the Clean Air Act; except that any or all hazardous air pollutants either listed in Section 112 of the Clean Air Act or added to the list in accordance with Section 112(b)(2) of the Clean Air Act, which have not been delisted in accordance with Section 112(b)(3) of the Clean Air Act, are not *regulated NSR pollutants* unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Clean Air Act.

Replacement Unit—an emissions unit for which all the criteria listed in Subparagraphs a-d of this definition are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced:

a. the emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit;

b. the emissions unit is identical to or functionally equivalent to the replaced emissions unit;

c. the emissions unit does not alter the basic design parameters of the process unit;

d. the replaced emissions unit is permanently removed from the major stationary source, 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*, as defined in this Subsection.

Secondary Emissions—emissions that would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purposes of this definition, *secondary emissions* must be specific, well defined, and quantifiable, and impact the same general areas as the stationary source modification that causes the secondary emissions. *Secondary emissions* include emissions from any offsite support facility that would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. *Secondary emissions* do not include any emissions that come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

Significant—

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

Pollutant	Emission Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy of particulate emissions
	15 tpy of PM_{10} emissions
Ozone	40 tpy of volatile organic compounds or nitrogen oxides
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H_2S)	10 tpy
Total reduced sulfur (including H_2S)	10 tpy
Reduced sulfur compounds (including H_2S)	10 tpy
Municipal waste combustor organics[1]	0.0000035 tpy
Municipal waste combustor metals[2]	15 tpy
Municipal waste combustor acid gases[3]	40 tpy
Municipal solid waste landfills emissions[4]	50 tpy

[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.
[4]Measured as nonmethane organic compounds.

b. in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that Subparagraph a of this definition does not list, any emissions rate;

c. notwithstanding Subparagraph a of this definition, any emissions rate or any net emissions increase associated with a major stationary source or major modification that would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1$\mu g/m^3$ (24-hour average).

Significant Emissions Increase—for a regulated NSR pollutant, an increase in emissions that is *significant*, as defined in this Subsection, for that pollutant.

Stationary Source—any building, structure, facility, or installation that emits or may emit any pollutant subject to regulation under this Section.

C. Ambient Air Increments. In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the following.

Pollutant	Maximum Allowable Increase (Micrograms per Cubic Meter)[1]
Class I	
Particulate matter:	
PM_{10}, annual arithmetic mean	4
PM_{10}, 24-hr maximum	8
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
Class II	
Particulate matter:	
PM_{10}, annual arithmetic mean	17
PM_{10}, 24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
Class III	
Particulate matter:	
PM_{10}, annual arithmetic mean	34
PM_{10}, 24-hr maximum	60
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700

Pollutant	Maximum Allowable Increase (Micrograms per Cubic Meter)[1]
Nitrogen dioxide:	
Annual arithmetic mean	50

[1]For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

D. Ambient Air Ceilings. No concentration of a pollutant shall exceed:

1. the concentration permitted under the national secondary ambient air quality standard; or

2. the concentration permitted under the national primary ambient air quality standard; whichever concentration is lowest for the pollutant for a period of exposure.

E. Restrictions on Area Classifications

1. All of the following areas that were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

a. international parks;

b. national wilderness areas that exceed 5,000 acres in size;

c. national memorial parks that exceed 5,000 acres in size; and

d. national parks that exceed 6,000 acres in size.

2. Areas that were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this Section.

3. Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this Section.

4. The following areas may be redesignated only as Class I or II:

a. an area that as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, or a national lakeshore or seashore; and

b. a national park or national wilderness area established after August 7, 1977, that exceeds 10,000 acres in size.

F. Reserved.

G. Redesignation

1. All areas, except as otherwise provided under Subsection E of this Section, are designated Class II as of December 5, 1974. Redesignation, except as otherwise precluded by Subsection E of this Section, may be proposed by the respective states or Indian governing bodies, as provided below, subject to approval by the administrative authority as a revision to the applicable State Implementation Plan.

2. The state may submit to the administrator a proposal to redesignate areas of the state Class I or Class II, provided that:

a. at least one public hearing has been held in accordance with procedures established in 40 CFR 51.102;

b. other states, Indian governing bodies, and federal land managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

c. a discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

d. prior to the issuance of notice respecting the redesignation of an area that includes any federal lands, the state has provided written notice to the appropriate federal land manager and afforded adequate opportunity (not in excess of 60 days) to confer with the state respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any federal land manager had submitted written comments and recommendations, the state shall have published a list of any inconsistency between such redesignation and such comments and recommendations, together with the reasons for making such redesignation against the recommendation of the federal land manager; and

e. the state has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

3. Any area other than an area to which Subsection E of this Section refers may be redesignated as Class III if:

a. the redesignation would meet the requirements of Paragraph G.2 of this Section;

b. the redesignation, except any established by an Indian governing body, has been specifically approved by the governor of the state, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless state law provides that the redesignation must be specifically approved by state legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

c. the redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

d. any permit application for any major stationary source or major modification, subject to review under Subsection L of this Section, which could receive a permit under this Section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

4. Lands within the exterior boundaries of Indian reservations may be redesignated only by the appropriate Indian governing body. The appropriate Indian governing body may submit to the administrative authority a proposal to redesignate areas Class I, Class II, or Class III, provided that:

a. the Indian governing body has followed procedures equivalent to those required of a state under Paragraph G.2 and Subparagraphs G.3.c and d of this Section; and

b. such redesignation is proposed after consultation with the states in which the Indian reservation is located and which border the Indian reservation.

H. Stack Heights

1. The degree of emission limitation required for control of any air pollutant under this Section shall not be affected in any manner by:

a. so much of the stack height of any source as exceeds good engineering practice; or

b. any other dispersion technique.

2. Paragraph H.1 of this Section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

I. Exemptions

1. The requirements of Subsections J-R of this Section shall not apply to a particular major stationary source or major modification if:

a. the major stationary source would be a nonprofit health or nonprofit educational institution or a major modification that would occur at such an institution; or

b. 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 following categories:

i. coal cleaning plants (with thermal dryers);

ii. kraft pulp mills;

iii. portland cement plants;

iv. primary zinc smelters;

v. iron and steel mills;

vi. primary aluminum ore reduction plants;

vii. primary copper smelters;

viii. municipal incinerators capable of charging more than 250 tons of refuse per day;

ix. hydrofluoric, sulfuric, or nitric acid plants;

x. petroleum refineries;

xi. lime plants;

xii. phosphate rock processing plants;

xiii. coke oven batteries;

xiv. sulfur recovery plants;

xv. carbon black plants (furnace process);

xvi. primary lead smelters;

xvii. fuel conversion plants;

xviii. sintering plants;

xix. secondary metal production plants;

xx. chemical process plants;

xxi. fossil fuel boilers (or combination thereof) totaling more than 250 million british thermal units per hour heat input;

xxii. petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

xxiii. taconite ore processing plants;

xxiv. glass fiber processing plants;

xxv. charcoal production plants;

xxvi. fossil fuel-fired steam electric plants of more than 250 million british thermal units per hour heat input;

xxvii. any other stationary source category that, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act; or

c. the source or modification is a portable stationary source that has previously received a permit under requirements equivalent to those contained in Subsections J-R of this Section, if:

i. the source proposes to relocate and emissions of the source at the new location would be temporary; and

ii. the emissions from the source would not exceed its allowable emissions; and

iii. the emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

iv. 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 the administrative authority.

2. The requirements of Subsections J-R of this Section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under Section 107 of the Clean Air Act.

3. The requirements of Subsections K, M, and O of this Section shall not apply to a proposed major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

4. The requirements of Subsections K, M, and O of this Section as they relate 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. The administrative authority may exempt a stationary source or modification from the requirements of Subsection M of this Section, with respect to monitoring for a particular pollutant, if:

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

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

b. the concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in Subparagraph I.5.a of this Section; or

c. the pollutant is not listed in Subparagraph I.5.a of this Section.

6. Reserved.

7. Reserved.

8. The permitting requirements of Paragraph K.2 of this Section shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this Section before the provisions embodying the maximum allowable increase took effect as part of the applicable State Implementation Plan and the permitting authority subsequently determined that the application as submitted before that date was complete.

9. The permitting requirements of Paragraph K.2 of this Section shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM_{10} if:

a. the owner or operator of the source or modification submitted an application for a permit under this Section before the provisions embodying the maximum allowable increases for PM_{10} took effect in a State Implementation Plan to which this Section applies; and

b. the permitting authority subsequently determined that the application as submitted before that date was complete. Instead, the applicable requirements equivalent to Paragraph K.2 of this Section shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

J. Control Technology Review

1. A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emission standard and standard of performance under 40 CFR Parts 60 and 61.

2. A new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

3. A major modification shall apply best available control technology for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

4. For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time that occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

K. Source Impact Analysis. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable

emissions increases or reductions, including secondary emissions, would not cause or contribute to air pollution in violation of:

1. any national ambient air quality standard in any air quality control region; or

2. any applicable maximum allowable increase over the baseline concentration in any area.

L. Air Quality Models

1. All estimates of ambient concentrations required under this Subsection shall be based on applicable air quality models, databases, and other requirements specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models).

2. Where an air quality model specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with Subsection Q of this Section.

M. Air Quality Analysis

1. Preapplication Analysis

a. Any application for a permit under this Section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

i. for the source, each pollutant that it would have the potential to emit in a significant amount;

ii. for the modification, each pollutant for which it would result in a significant net emissions increase.

b. With respect to any such pollutant for which no national ambient air quality standard exists, the analysis shall contain such air quality monitoring data as the administrative authority determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

c. With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

d. In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the administrative authority determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.

e. For any application that became complete, except as to the requirements of Subparagraphs M.1.c and d of this Section, between June 8, 1981 and February 9, 1982, the data that Subparagraph M.1.c of this Section requires shall have been gathered over at least the period from February 9, 1981, to the date the application became otherwise complete, except:

i. if the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations;

ii. if the administrative authority determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that Subparagraph M.1.c of this Section requires shall have been gathered over at least that shorter period;

iii. if the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the administrative authority may waive the otherwise-applicable requirements of this Subsection to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.

f. The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51, Appendix S, Section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under Paragraph M.1 of this Section.

g. For any application that became complete, except as to the requirements of Subparagraphs M.1.c and d of this Section pertaining to PM_{10}, after December 1, 1988 and no later than August 1, 1989, the data that Subparagraph M.1.c of this Section requires shall have been gathered over at least the period from August 1, 1988, to the date the application becomes otherwise complete, except that if the administrative authority determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that Subparagraph M.1.c of this Section requires shall have been gathered over that shorter period.

h. With respect to any requirements for air quality monitoring of PM_{10} under Subparagraphs I.9.a and b of this Section, the owner or operator of the source or modification shall use a monitoring method approved by the administrative authority and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the administrative authority.

2. Post-Construction Monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or

modification, conduct such ambient monitoring as the administrative authority determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

3. Operations of Monitoring Stations. The owner or operator of a major stationary source or major modification shall meet the requirements of 40 CFR Part 58, Appendix B during the operation of monitoring stations for purposes of satisfying the requirements of this Subsection.

N. Source Information. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this Section.

1. With respect to a source or modification to which Subsections J, L, N, and P of this Section apply, such information shall include:

a. a description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

b. a detailed schedule for construction of the source or modification;

c. a detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that best available control technology would be applied.

2. Upon request of the administrative authority, the owner or operator shall also provide information on:

a. the air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

b. the air quality impacts, and the nature and extent of, any or all general commercial, residential, industrial, and other growth that has occurred since August 7, 1977, in the area the source or modification would affect.

O. Additional Impact Analyses

1. The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

2. The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or modification.

3. Visibility Monitoring. The administrative authority may require monitoring of visibility in any federal Class I area near the proposed new stationary source for major modification for such purposes and by such means as the administrative authority deems necessary and appropriate.

P. Sources Impacting Federal Class I Areas—Additional Requirements

1. Notice to Federal Land Managers. The administrative authority shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the federal land manager and the federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the federal Class I area. The administrative authority shall also provide the federal land manager and such federal officials with a copy of the preliminary determination required under Subsection Q of this Section, and shall make available to them any materials used in making that determination, promptly after the administrative authority makes such determination. Finally, the administrative authority shall also notify all affected federal land managers within 30 days of receipt of any advance notification of any such permit application.

2. Federal Land Manager. The federal land manager and the federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality-related values, including visibility, of such lands and to consider, in consultation with the administrative authority, whether a proposed source or modification will have an adverse impact on such values.

3. Visibility Analysis. The administrative authority shall consider any analysis performed by the federal land manager, provided within 30 days of the notification required by Paragraph P.1 of this Section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any federal Class I area. Where the administrative authority finds that such an analysis does not demonstrate to the satisfaction of the administrative authority that an adverse impact on visibility will result in the federal Class I area, the administrative authority must, in the notice of public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.

4. Denial—Impact on Air Quality-Related Values. The federal land manager of any such lands may demonstrate to the administrative authority that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values, including visibility, of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations that would exceed the maximum allowable increases for a Class I area. If the administrative authority concurs with such demonstration, then he shall not issue the permit.

5. Class I Variances. The owner or operator of a proposed source or modification may demonstrate to the federal land manager that the emissions from such source or modification would have no adverse impact on the air quality-related values of any such lands, including visibility, notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations that would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with such demonstration and he so certifies, the administrative authority, provided that the applicable requirements of this Section are otherwise met, may issue the permit with such emission limitations as may be necessary to ensure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants.

Pollutant	Maximum Allowable Increase (Micrograms per Cubic Meter)
Particulate matter:	
PM_{10}, annual arithmetic mean	17
PM_{10}, 24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide:	
Annual arithmetic mean	25

6. Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence. The owner or operator of a proposed source or modification that cannot be approved under Paragraph P.4 of this Section may demonstrate to the governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of 24 hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this Paragraph would not adversely affect the air quality-related values of the area, including visibility. The governor, after consideration of the federal land manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the administrative authority may issue a permit to such source or modification in accordance with the requirements of Paragraph P.7 of this Section, provided that the applicable requirements of this Section are otherwise met.

7. Variance by the Governor with the President's Concurrence. In any case where the governor recommends a variance in which the federal land manager does not concur, the recommendations of the governor and the federal land manager shall be transmitted to the President. The President may approve the governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the administrative authority may issue a permit in accordance with the requirements of this Paragraph, provided that the applicable requirements of this Section are otherwise met.

8. Emission Limitations for Presidential or Gubernatorial Variance. In the case of a permit issued in accordance with Paragraph P.5 or 6 of this Section, the source or modification shall comply with such emission limitations as may be necessary to ensure that emissions of sulfur dioxide from the source or modification would not, during any day on which the otherwise applicable maximum allowable increases are exceeded, cause or contribute to concentrations that would exceed the following maximum allowable increases over the baseline concentration and to ensure that such emissions would not cause or contribute to concentrations that exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period.

Maximum Allowable Increase (Micrograms per Cubic Meter)		
Period of Exposure	Terrain Areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

Q. Public Participation

1. The administrative authority shall notify all applicants within 60 days after receipt of the application as to the completeness of the application or any deficiency in the application or information submitted. In the event of such a deficiency, the date of receipt of the application shall be the date on which the administrative authority received all required information.

2. Within one year after receipt of a complete application, the administrative authority shall:

a. make a preliminary determination whether construction should be approved, approved with conditions, or disapproved;

b. make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination;

c. notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for comment at a public hearing as well as written public comment;

d. send a copy of the notice of public comment to the applicant, the administrator, and officials and agencies having cognizance over the location where the proposed construction would occur, as follows:

i. any other state or local air pollution control agencies;

ii. the chief executives of the city and parish where the source would be located;

iii. any comprehensive regional land use planning agency; and

iv. any state, federal land manager, or Indian governing body whose lands may be affected by emissions from the source or modification;

e. provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations;

f. consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing in making a final decision on the approvability of the application. The administrative authority shall make all comments available for public inspection in the same locations where the administrative authority made available preconstruction information relating to the proposed source or modification;

g. make a final determination whether construction should be approved, approved with conditions, or disapproved;

h. notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the administrative authority made available preconstruction information and public comments relating to the source.

R. Source Obligation

1. Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted in accordance with this Section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this Section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

2. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The administrative authority may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

3. Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state, or federal law.

4. At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation that was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of Subsections J-S of this Section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

5. Reserved.

6. The provisions of this Paragraph apply to projects at an existing emissions unit at a major stationary source, other than projects at a source with a PAL, in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in Subparagraphs B.*Projected Actual Emissions.*a-c of this Section for calculating projected actual emissions.

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

i. a description of the project;

ii. identification of the emission units whose emissions of a regulated NSR pollutant could be affected by the project; and

iii. a description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under Subparagraph B.*Projected Actual Emissions.*c of this Section and an explanation for why such amount was excluded, and any netting calculations, if applicable.

b. 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 information set out in Subparagraph R.6.a of this Section to the administrative authority.

c. 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 any emissions unit identified in Clause R.6.a.ii of this Section, and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five 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 at such emissions unit.

d. If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the administrative authority within 60 days after the end of each year during which records must be generated under

Subparagraph R.6.c of this Section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

e. If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the administrative authority if the annual emissions, in tons per year, from the project identified in Subparagraph R.6.a of this Section, exceed the baseline actual emissions, as documented and maintained in accordance with Clause R.6.a.iii of this Section, by a significant amount, as defined in Subsection B.*Significant* of this Section, for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained in accordance with Clause R.6.a.iii of this Section. Such report shall be submitted to the administrative authority within 60 days after the end of such year. The report shall contain the following:

i. the name, address, and telephone number of the major stationary source;

ii. the annual emissions as calculated in accordance with Subparagraph R.6.c of this Section; and

iii. 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).

7. The owner or operator of the source shall make the information required to be documented and maintained in accordance with Paragraph R.6 of this Section available for review upon a request for inspection by the administrative authority or the general public in accordance with the requirements contained in 40 CFR 70.4(b)(3)(viii).

8. Revisions to Projected Actual Emissions. For a project originally evaluated in accordance with Paragraph A.3 of this Section and determined not to result in a significant net emissions increase, if an owner or operator subsequently reevaluates projected actual emissions and determines that the project has resulted or will now result in a significant net emissions increase, the owner or operator shall:

a. 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

b. submit a revised PSD application within 180 days requesting that the original project be deemed a major modification.

S. Reserved.

T. Reserved.

U. Reserved.

V. Innovative Control Technology

1. An owner or operator of a proposed major stationary source or major modification may request the administrative authority in writing, no later than the close of the comment period under Subsection Q.2.e of this Section, to approve a system of innovative control technology.

2. The administrative authority may, with the consent of the governor of affected states, determine that the source or modification may employ a system of innovative control technology, if:

a. the proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

b. the owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Paragraph J.2 of this Section by a date specified by the administrative authority. Such date shall not be later than four years from the time of startup or seven years from permit issuance;

c. the source or modification would meet the requirements of Subsections J and K of this Section, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the administrative authority;

d. the source or modification would not, before the date specified by the administrative authority:

i. cause or contribute to a violation of an applicable national ambient air quality standard; or

ii. impact any area where an applicable increment is known to be violated;

e. the provisions of Subsection P of this Section, relating to Class I areas, have been satisfied with respect to all periods during the life of the source or modification;

f. all other applicable requirements including those for public participation have been met.

3. The administrative authority shall withdraw any approval to employ a system of innovative control technology made under this Subsection, if:

a. the proposed system fails by the specified date to achieve the required continuous emissions reduction rate;

b. the proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

c. the administrative authority decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

4. If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with Paragraph V.3 of this Section, the administrative authority may allow the source or modification up to an additional three years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

W. Permit Rescission

1. Any permit issued under this Section or a prior version of this Section shall remain in effect, unless and until it expires under Subsection R of this Section or is rescinded.

2. Any owner or operator of a stationary source or modification who holds a permit for the source or modification that was issued under 40 CFR 52.21 as in effect on July 30, 1987, or any earlier version of 40 CFR 52.21, may request that the administrative authority rescind the permit or a particular portion of the permit.

3. The administrative authority shall grant an application for rescission if the application shows that this Section, as it existed at the time the permit was issued, would not apply to the source or modification.

4. If the administrative authority rescinds a permit under this Subsection, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.

X. Reserved.

Y. Reserved.

Z. Reserved.

AA. Actuals PALs. The following provisions govern actuals PALs.

1. Applicability

a. The administrative authority may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements of this Subsection. The term "PAL" shall mean "actuals PAL" throughout this Subsection.

b. Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of this Subsection, and complies with the PAL permit:

i. is not a major modification for the PAL pollutant;

ii. does not have to be approved through the PSD program; and

iii. is not subject to the provisions in Paragraph R.4 of this Section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).

c. Except as provided under Clause AA.1.b.iii of this Section, a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

2. Definitions. For the purposes of this Subsection, the following definitions apply. When a term is not defined in this Paragraph, it shall have the meaning given in Subsection B of this Section or in the Clean Air Act.

a. *Actuals PAL*—a PAL for a major stationary source based on the *baseline actual emissions*, as defined in Subsection B of this Section, of all *emissions units*, as defined in Subsection B of this Section, at the source that emit or have the potential to emit the PAL pollutant.

b. *Allowable Emissions*—as defined in Subsection B of this Section, except for the following modifications.

i. The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

ii. An emissions unit's potential to emit shall be determined using the definition in Subsection B of this Section, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

c. *Major Emissions Unit*—

i. any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

ii. any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Clean Air Act for nonattainment areas. For example, in accordance with the definition of *major stationary source* in Section 182(c) of the Clean Air Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

d. *Plantwide Applicability Limitation* (PAL)—an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with this Subsection.

e. *PAL Effective Date*—generally, the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

f. *PAL Effective Period*—the period beginning with the PAL effective date and ending 10 years later.

g. *PAL Major Modification*—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, notwithstanding the definitions for *major modification* and *net emissions increase* in Subsection B of this Section.

h. *PAL Permit*—the major NSR permit, the minor NSR permit, or the state operating permit under a program that is approved into the State Implementation Plan or the Title V permit issued by the administrative authority that establishes a PAL for a major stationary source.

i. *PAL Pollutant*—the pollutant for which a PAL is established at a major stationary source.

j. *Significant Emissions Unit*—an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the *significant* level, as defined in Subsection B of this Section or in the Clean Air Act, whichever is lower, for that PAL pollutant, but less than the amount that would qualify the unit as a *major emissions unit* as defined in Subparagraph AA.2.c of this Section.

k. *Small Emissions Unit*—an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the *significant* level for that PAL pollutant, as defined in Subsection B of this Section or in the Clean Air Act, whichever is lower.

3. Permit Application Requirements. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the administrative authority for approval:

a. a list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit;

b. 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;

c. the calculation procedures that the major stationary 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 as required by Subparagraph AA.13.a of this Section.

4. General Requirements for Establishing PALs

a. The administrative authority is allowed to establish a PAL at a major stationary source, provided that at a minimum, the following requirements are met.

i. The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall 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 major stationary source owner or operator shall 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.

ii. The PAL shall be established in a PAL permit that meets the public participation requirements in Paragraph AA.5 of this Section.

iii. The PAL permit shall contain all the requirements of Paragraph AA.7 of this Section.

iv. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

v. Each PAL shall regulate emissions of only one pollutant.

vi. Each PAL shall have a PAL effective period of 10 years.

vii. The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in Paragraphs AA.12-14 of this Section for each emissions unit under the PAL through the PAL effective period.

b. At no time during or after the PAL effective period are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under 40 CFR 51.165(a)(3)(ii) 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.

5. Public Participation Requirements for PALs. PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with 40 CFR 51.160 and 51.161. This includes the requirement that the administrative authority provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The administrative authority must address all material comments before taking final action on the permit.

6. Setting the 10-Year Actuals PAL Level

a. Except as provided in Subparagraph AA.6.b of this Section, the actuals PAL level for a major stationary source shall be established as the sum of the *baseline actual emissions*, as defined in Subsection B of this Section, of the PAL pollutant for each emissions unit at the source, plus an amount equal to the applicable *significant* level for the PAL pollutant, as defined in Subsection B of this Section, or in the Clean Air Act, whichever is lower. When establishing the actuals 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. The administrative authority shall specify a reduced PAL level (in tons/yr) in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the administrative authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half 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.

b. 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 as specified in Subparagraph AA.6.a of this Section, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

7. Contents of the PAL Permit. The PAL permit shall contain, at a minimum, the following information:

a. the PAL pollutant and the applicable source-wide emission limitation in tons per year;

b. the PAL permit effective date and the expiration date of the PAL (PAL effective period);

c. specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with Paragraph AA.10 of this Section 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 an administrative authority;

d. a requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions;

e. a requirement that, once the PAL expires, the major stationary source is subject to the requirements of Paragraph AA.9 of this Section;

f. the calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by Subparagraph AA.13.a of this Section;

g. a requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Paragraph AA.12 of this Section;

h. a requirement to retain the records required under Paragraph AA.13 of this Section on site. Such records may be retained in an electronic format;

i. a requirement to submit the reports required under Paragraph AA.14 of this Section by the required deadlines;

j. any other requirements that the administrative authority deems necessary to implement and enforce the PAL.

8. PAL Effective Period and Reopening of the PAL Permit

a. PAL Effective Period. The administrative authority shall specify a PAL effective period of 10 years.

b. Reopening of the PAL Permit

i. During the PAL effective period, the administrative authority must reopen the PAL permit to:

(a). correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(b). reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under 40 CFR 51.165(a)(3)(ii); and

(c). revise the PAL to reflect an increase in the PAL as provided under Paragraph AA.11 of this Section.

ii. The administrative authority shall have discretion to reopen the PAL permit in order to:

(a). reduce the PAL to reflect newly applicable federal requirements (e.g., NSPS) with compliance dates after the PAL effective date;

(b). reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the state may impose on the major stationary source under the State Implementation Plan; and

(c). reduce the PAL if the administrative authority 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 air quality-related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

iii. Except for the permit reopening in Subclause AA.8.b.i.(a) of this Section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Paragraph AA.5 of this Section.

9. Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in Paragraph AA.10 of this Section shall expire at the end of the PAL effective period, and the following requirements shall apply.

a. 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.

i. Within the time frame specified for PAL renewals in Subparagraph AA.10.b of this Section, the major stationary source 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 the administrative authority, by distributing the PAL allowable emissions for the major stationary 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, as required under Subparagraph AA.10.e of this Section, such distribution shall be made as if the PAL had been adjusted.

ii. The administrative authority 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, as the administrative authority determines is appropriate.

b. Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The administrative authority 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.

c. Until the administrative authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under Clause AA.9.a.ii of this Section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

d. Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of *major modification* in Subsection B of this Section.

e. The major stationary source owner or operator 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 those emission limitations that had been established in accordance with Paragraph R.4 of this Section, but were eliminated by the PAL in accordance with the provisions in Clause AA.1.b.iii of this Section.

10. Renewal of a PAL

a. The administrative authority shall follow the procedures specified in Paragraph AA.5 of this Section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the administrative authority.

b. Application Deadline. A major stationary source owner or operator shall submit a timely application to the administrative authority to request renewal of a PAL. A timely application is one that is submitted at least six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source 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.

c. Application Requirements. The application to renew a PAL permit shall contain the following information:

i. the information required in Subparagraphs AA.3.a-c of this Section;

ii. a proposed PAL level;

iii. the sum of the potential to emit of all emissions units under the PAL, with supporting documentation;

iv. any other information the owner or operator wishes the administrative authority to consider in determining the appropriate level for renewing the PAL.

d. PAL Adjustment. In determining whether and how to adjust the PAL, the administrative authority shall consider the options outlined in Clauses AA.10.d.i and ii of this Section. However, in no case may any such adjustment fail to comply with Clause AA.10.d.iii of this Section.

i. If the emissions level calculated in accordance with Paragraph AA.6 of this Section is equal to or greater than 80 percent of the PAL level, the administrative authority may renew the PAL at the same level without considering the factors set forth in Clause AA.10.d.ii of this Section.

ii. The administrative authority may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more 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 the administrative authority in his or her written rationale.

iii. Notwithstanding Clauses AA.10.d.i and ii of this Section:

(a). if the potential to emit of the major stationary source is less than the PAL, the administrative authority shall adjust the PAL to a level no greater than the potential to emit of the source; and

(b). the administrative authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Paragraph AA.11 of this Section regarding increasing a PAL.

e. If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the administrative authority 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.

11. Increasing a PAL during the PAL Effective Period

a. The administrative authority may increase a PAL emission limitation only if the major stationary source complies with the following provisions.

i. The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

ii. As part of this application, the major stationary source owner or operator 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.

iii. The owner or operator shall obtain a major NSR permit for all emissions units identified in Clause AA.11.a.i of this Section, 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 process (e.g., BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

iv. 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.

b. The administrative authority 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 as determined in accordance with Clause AA.11.a.ii of this Section, plus the sum of the baseline actual emissions of the small emissions units.

c. The PAL permit shall be revised to reflect the increased PAL level in accordance with the public notice requirements of Paragraph AA.5 of this Section.

12. Monitoring Requirements for PALs

a. General Requirements

i. 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.

ii. The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in Clauses AA.12.b.i-iv of this Section and must be approved by the administrative authority.

iii. Notwithstanding Clause AA.12.a.ii of this Section, the owner or operator may also employ an alternative monitoring approach that meets the requirements of Clause AA.12.a.i of this Section if approved by the administrative authority.

iv. Failure to use a monitoring system that meets the requirements of this Paragraph renders the PAL invalid.

b. Minimum Performance Requirements for Approved Monitoring Approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in Subparagraphs AA.12.c-i of this Section:

i. mass balance calculations for activities using coatings or solvents;

ii. CEMS;

iii. CPMS or PEMS; and

iv. emission factors.

c. Mass Balance Calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

i. 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;

ii. 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

iii. 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 owner or operator shall use the highest value of the range to calculate the PAL pollutant emissions unless the administrative authority determines there is site-specific data or a site-specific monitoring program to support another content within the range.

d. CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

i. CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and

ii. CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

e. CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

i. 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

ii. each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the administrative authority, while the emissions unit is operating.

f. Emission Factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

i. all emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

ii. the emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

iii. 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 the administrative authority determines that testing is not required.

g. A source owner or operator 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.

h. Notwithstanding the requirements in Subparagraphs AA.12.c-g of this Section, 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, the administrative authority shall, at the time of permit issuance:

i. establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or

ii. 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.

i. Revalidation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the administrative authority. Such testing must occur at least once every five years after issuance of the PAL.

13. Recordkeeping Requirements

a. The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of Subsection AA of this Section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.

b. The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five years:

i. a copy of the PAL permit application and any applications for revisions to the PAL; and

ii. each annual certification of compliance in accordance with Title V of the Clean Air Act and the data relied on in certifying the compliance.

14. Reporting and Notification Requirements. The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the administrative authority in accordance with the applicable Title V operating permit program. The reports shall meet the following requirements.

a. Semiannual Report. The semiannual report shall be submitted to the administrative authority within 30 days of the end of each reporting period. This report shall contain the following information:

i. the identification of the owner or operator and the permit number;

ii. total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded in accordance with Subparagraph AA.13.a of this Section;

iii. all data relied upon, including but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions;

iv. a list of any emissions units modified or added to the major stationary source during the preceding 6-month period;

v. 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;

vi. 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, as provided by Subparagraph AA.12.g of this Section;

vii. a signed statement by the responsible official, as defined by the applicable Title V operating permit program, certifying the truth, accuracy, and completeness of the information provided in the report.

b. Deviation Report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted in accordance with 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable

program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:

i. the identification of the owner or operator and the permit number;

ii. the PAL requirement that experienced the deviation or that was exceeded;

iii. emissions resulting from the deviation or the exceedance; and

iv. a signed statement by the responsible official, as defined by the applicable Title V operating permit program, certifying the truth, accuracy, and completeness of the information provided in the report.

c. Revalidation Results. The owner or operator shall submit to the administrative authority the results of any revalidation test or method within three months after completion of such test or method.

15. Transition Requirements

a. No administrative authority may issue a PAL that does not comply with the requirements of this Subsection after the administrator has approved regulations incorporating these requirements into the State Implementation Plan.

b. The administrative authority may supersede any PAL that was established prior to the date of approval of the State Implementation Plan by the administrator with a PAL that complies with the requirements of this Subsection.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 16:613 (July 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:478 (May 1991), LR 21:170 (February 1995), LR 22:339 (May 1996), LR 23:1677 (December 1997), LR 24:654 (April 1998), LR 24:1284 (July 1998), repromulgated LR 25:259 (February 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2447 (November 2000), LR 27:2234 (December 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2437 (October 2005), LR 31:3135, 3156 (December 2005), LR 32:1600 (September 2006), LR 32:1843 (October 2006).

§511. Emission Reductions

A. 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. The permitting authority shall notify the owner or operator of a determination regarding such authorization within 30 days of receiving the notification. 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.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993).

§513. General Permits, Temporary Sources, and Relocation of Portable Facilities

A. General Permits

1. The permitting authority may issue a general permit intended to cover numerous similar sources or activities. General permits shall be issued in accordance with LAC 33:III.519 and, prior to issuance, shall undergo public notice and, if the general permit is intended to cover a *Part 70 source* as defined in LAC 33:III.502, review by affected states and EPA in accordance with LAC 33:III.531 and 533. Each general permit shall incorporate terms and conditions applicable to sources that would qualify for the general permit. Any general permit shall identify criteria by which sources may qualify for the general permit, and may provide for applications which deviate from the requirements of LAC 33:III.517.

2. The owner or operator of any source that would qualify for the general permit may apply for authorization to operate under the general permit. The application must include all information necessary to determine qualification for and to assure compliance with the general permit. The owner or operator of a *Part 70 source* as defined in LAC 33:III.502 shall publish a notice of the application in a newspaper of general circulation in the local area where the source is or would be located.

3. The permitting authority may approve an owner or operator's application for authorization to operate under the general permit without repeating the public participation procedures. Such an approval shall not be a final permit action for purposes of judicial review regarding the terms and conditions of the general permit.

4. Any source which is issued the general permit shall, notwithstanding a permit shield, be subject to enforcement action for operation without a permit if the source is later determined not to qualify for the general permit.

5. General permits shall not be issued for affected sources under the Acid Rain Program established pursuant to Title IV of the Clean Air Act.

6. General permits shall not be issued for new *major stationary sources* and *major modifications* as defined in LAC 33:III.504 or 509.

B. Temporary Sources

1. The permitting authority may issue a single permit under this Chapter establishing permit terms and conditions applicable to similar operations by the same source owner or operator at multiple locations. The operation must be temporary and involve at least one change of location during the term of the permit.

2. The owner or operator of any source which would qualify as a temporary source shall submit a complete permit application in accordance with LAC 33:III.517. The application may request a temporary source permit.

3. Permits for temporary sources shall include:

a. conditions that will assure compliance with all state and federally applicable requirements at all authorized locations; and

b. requirements that the owner or operator notify the permitting authority at least 10 days in advance of each change in location.

4. No affected source under the Acid Rain Program under Title IV of the Clean Air Act shall be permitted as a temporary source.

C. Relocation of Portable Facilities

1. The permitting authority may issue, on behalf of the department, a certificate of approval to relocate an asphalt plant or other transportable facility that is presently operating under a certificate of approval from the department provided the facility does not constitute a Part 70 source and would not constitute a Part 70 source upon relocation. Prior to issuance of any such certificate, the permitting authority shall receive adequate assurance from the petitioner that the following conditions are met:

a. compliance with all other regulations and zoning criteria at the new location;

b. the continued use of all pollution abatement devices and measures at the new location;

c. the continued use of fuel of the same sulfur content or less than that referenced on the approved permit; and

d. dispersion of emissions from the relocated source will not cause violation of ambient air standards at the new location.

2. In addition, a plot plan should be supplied to affirm that the distances to the property line at the new location are approximately equal to those reported on the approved permit application. This will be used to confirm that the dispersion estimate previously supplied is still valid.

3. Upon review and acceptance of the aforementioned data, the department will notify the owner or operator concerning the acceptability of the relocation.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2448 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:1855 (October 2006).

§515. Oil and Gas Wells and Pipelines Permitting Provisions

Notwithstanding any other time frames for permit review and issuance established under this Chapter, the following provisions shall apply to all applications for permits relating to oil and gas wells and pipelines.

A. Time Frames for Review and Issuance

1. Within 14 workdays after submittal of a permit application, the permitting authority shall issue notification of a completeness determination to the owner or operator. If written notice of completeness is not provided within 14 workdays after submittal, the application shall be deemed complete.

2. If the application is not deemed complete, the department shall notify the owner or operator in writing and provide a list of the application's specific deficiencies.

3. Within 60 workdays after notification to the owner or operator of a complete permit application or after the application has been deemed to be complete, a final decision to grant or deny the permit shall be issued.

4. In the event of a permit denial, the permitting authority shall provide written reasons for the decision to the owner or operator.

5. Any deadline established by this Section may be extended upon mutual agreement of the permitting authority and the owner or operator.

B. Additional Requirements

1. The application shall clearly and prominently indicate that the application is pertaining to an oil and gas well or pipeline.

2. The application shall indicate whether the owner or operator agrees to extend the deadlines established in Subsection A of this Section at the time of submittal of the application. A decision not to extend the deadlines at the time of submittal does not preclude the permitting authority and the owner or operator from reaching a mutual agreement to extend such deadlines at a later date.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2022 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993).

§517. Permit Applications and Submittal of Information

A. Timely Submittal

1. Any permit application pertaining to a new or modified source shall be submitted prior to commencement of construction, reconstruction, or modification of the source. Construction, reconstruction, or modification of any

source required to be permitted under this Chapter shall not commence prior to approval by the permitting authority.

2. For Part 70 sources, permit applications for an initial permit issued in accordance with LAC 33:III.507 shall be submitted by the date established for submittal in accordance with LAC 33:III.507.C. A copy of each permit application pertaining to a major Part 70 source shall be provided to EPA by the owner or operator at the time the application is submitted to the permitting authority.

3. For any source for which grandfathered status has expired due to a change in ownership, the permit application shall be submitted by a date specified by the permitting authority, which shall allow at least 90 days from the date of notification of the change in ownership pursuant to Subsection G of this Section.

B. Certification

1. Any application form, report, or compliance certification submitted under this Chapter shall contain certification by a responsible official of truth, accuracy, and completeness. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the application are true, accurate, and complete.

2. Any application pertaining to a Part 70 source shall include a compliance certification and provisions for future compliance certifications as follows:

a. a certification of compliance with all applicable requirements by a responsible official consistent with Paragraph B.1 of this Section and Section 114(a)(3) of the Clean Air Act;

b. a statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;

c. a schedule for submission of compliance certifications during the permit duration, to be submitted at least annually or more frequently if specified by the underlying federally applicable requirement or by the permitting authority; and

d. a statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Clean Air Act.

3. Any permit application for a major source, including Part 70 applications, shall be prepared by or under the supervision of a person properly qualified to perform engineering work as provided in the Louisiana Professional Engineers and Land Surveyors Registration Act. The application shall be certified by a professional engineer, as defined in the above named act, or by a responsible person authorized to act on behalf of the professional engineer. All other permit applications shall be certified by a responsible facility official or his/her designee.

C. Duty to Supplement or Correct. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

D. Contents of Application. Applications for permits shall be submitted in accordance with forms and guidance provided by the permitting authority. In addition, forms can be obtained through the department’s website. At a minimum, each permit application submitted under this Chapter shall contain the following:

1. identifying information, including company name, physical address and mailing address, facility name and address if different from the company, a map showing the location of the facility, owner's and operator's names and agent, and telephone number and name of plant manager or contact;

2. a description of the source's processes and products, including standard industrial classification code, and EPA source category of hazardous air pollutants if applicable;

3. information regarding emissions from the source of all regulated air pollutants, including:

a. the identity and location of each point of emissions;

b. the size and height of the outlets of such emissions;

c. the temperature of the emissions;

d. the rate of emissions of each pollutant, in tons per year and in such terms as are necessary to establish compliance consistent with applicable test methods;

e. the composition and description of the air pollutants being emitted from each point; and

f. the composition and description of fugitive emissions, including equipment leaks and nonpoint source emissions, as determined from test results or best available technical data;

4. identification and description of compliance monitoring devices or activities;

5. if the application pertains to a permit revision and/or a modification at the facility, a description of the proposed change and any resulting changes in emissions;

6. identification and description of pollution control equipment utilized or proposed to be utilized and any other methods which will be taken to minimize emissions of air pollutants, including the estimated efficiency of such equipment and methods;

7. information regarding fuels, fuel use, raw materials, production rates, and operating schedules;

8. information regarding any limitations on source operation or any applicable work practice standards;

9. calculations on which the information in the application is based, provided in sufficient detail to allow a determination of the appropriateness and accuracy of such calculations;

10. citation and description of all applicable Louisiana and federal air quality requirements and standards;

11. description of or reference to any applicable test methods for determining compliance with each applicable requirement or standard;

12. for any application pertaining to a major source of toxic air pollutants, information regarding the compliance history of sources owned or operated by the applicant, in accordance with LAC 33:III.5111;

13. for any application pertaining to a major source of toxic air pollutants, a demonstration that the source meets all applicable maximum achievable control technology (MACT) and ambient air standard requirements;

14. information regarding the ambient air impact of criteria pollutants as required for the source impact analysis pursuant to LAC 33:III.509.K, L, and M;

15. at the request of the permitting authority, a detailed analysis of ambient air impacts shall be provided. Any dispersion modeling performed to evaluate compliance with ambient air standards shall be conducted according to protocols approved by the permitting authority;

16. other information which is required by any applicable federal or Louisiana regulations, or which may be necessary to implement and enforce applicable requirements of the federal Clean Air Act or federal or Louisiana regulations, or which may be necessary to determine the applicability of such requirements;

17. any information needed to assess and collect permit application and annual maintenance fees owed in accordance with LAC 33:III.Chapter 2; and

18. such other data as may be necessary for a thorough evaluation of the source and existing or proposed activities.

E. Additional Application Requirements for Part 70 Sources. In addition to those elements listed under Subsection D of this Section, each application pertaining to a Part 70 source shall include the following:

1. a description of the compliance status of the source with all applicable requirements;

2. for applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements;

3. for applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis;

4. for applicable requirements with which the source is not in compliance at the time of permit application submittal, a narrative description of how the source will achieve compliance and a compliance schedule. The compliance schedule shall include an enforceable sequence of dates by which specific actions will occur at the source, leading to compliance with all applicable requirements. The compliance schedule shall include dates for submittal of certified progress reports no less frequently than every six months. The schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order or compliance order to which the source is subject. The schedule shall be supplemental to and shall not sanction noncompliance with the applicable requirements on which it is based;

5. for affected sources under the federal Acid Rain Program, the requirements of Paragraphs E.1-4 of this Section shall apply and be included in the acid rain portion of the compliance plan, except as specifically superseded by regulations promulgated under Title IV of the Clean Air Act with regard to the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations;

6. a listing and explanation of any proposed exemptions from otherwise applicable requirements;

7. if a permit shield is requested in accordance with LAC 33:III.507.I, an explicit request for the shield, listing those federally applicable requirements for which the shield is requested and the corresponding draft permit terms and conditions by which the owner or operator proposes to maintain compliance. A narrative summary of any applicability determinations pertaining to the shield, together with any relevant data or calculations, shall be included in the request; and

8. identification of any reasonably anticipated alternative operating scenarios for which the applicant is applying. Such identification shall include sufficient information to develop permit terms and conditions for each scenario, including source process and emissions data.

F. Confidential Information. Provisions for confidential information may be found in LAC 33:I.Chapter 5.

G. Change of ownership shall be done in accordance with LAC 33:I.Chapter 19.

H. Additional requirements for permits and transfer of ownership of permits are provided in LAC 33:I.1701. Requirements of LAC 33:I.1701 are not applicable to permit modifications, unless such modifications include or are limited to a change of ownership.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended LR 20:1375 (December 1994), amended by the Office of the Secretary, LR 22:344 (May 1996), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:405 (April 1997), LR 23:1677 (December 1997), amended by the Office of the Secretary, LR 25:661 (April 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2448 (November 2000), amended by the Office of Environmental Assessment, LR 30:2021 (September 2004),

amended by the Office of the Secretary, Legal Affairs Division, LR 31:2430 (October 2005).

§519. Permit Issuance Procedures for New Facilities, Initial Permits, Renewals and Significant Modifications

A. Completeness Review

1. Within 60 days of receipt of a permit application, the permitting authority shall review the application for completeness and shall:

a. notify the applicant in writing that the application is complete; or

b. notify the applicant in writing of any deficiencies.

2. The applicant shall submit any additional information requested by the date specified in such notice. Pursuant to LAC 33:I.Chapter 15, for any application pertaining to a new facility or to a substantial permit modification, the date specified for submittal shall be no later than 30 days from receipt of the notice of deficiency.

3. If the permitting authority fails to issue a notice of completeness or deficiency within 60 days from receipt of the application or receipt of additional information requested under Paragraph A.1 of this Section, the application shall be deemed complete.

4. Pursuant to LAC 33:I.Chapter 15, for any application pertaining to a new facility which will be a major source or to a substantial permit modification, the applicant shall publish a notice of the completeness determination in a major local newspaper.

B. Technical Review

1. If at any time during the review process of an application that has been determined or deemed to be complete the permitting authority determines that additional information is necessary to evaluate or take final action on the application, the permitting authority shall provide notice to the applicant and require a response within a reasonable specified time.

2. The applicant shall respond to the notice within the time specified. Such response shall contain all information requested by the permitting authority and required to complete the technical review.

C. Final Action

1. Prior to taking final action on a permit application, notice shall be provided to allow for review by the public and affected states where required by law or deemed appropriate in accordance with LAC 33:III.531.

2. Prior to taking final action on any permit application pertaining to a Part 70 source, notice shall be provided to allow for review by EPA where required by law or deemed appropriate in accordance with LAC 33:III.533.

3. Final action shall be taken on any application pertaining to a Part 70 source within 18 months of receipt of a complete application, except as provided under the time frames for issuance of initial Part 70 permits to existing sources under LAC 33:III.507 or as provided for the issuance of acid rain permits under LAC 33:III.505.

4. Notwithstanding the 18-month allowance in Paragraph C.3 of this Section, final action shall be taken on any application relating to a new facility or to a substantial permit modification, as defined in LAC 33:I.Chapter 15, within 410 days of receipt of the permit application.

5. In any case where the permitting authority has determined that any proposed new or modified source would prevent the attainment or maintenance of any state or national ambient air quality standard, would violate any applicable portion of the Louisiana State Implementation Plan, or would not result in compliance with all federally applicable requirements and all requirements and standards of LAC 33:III, Air Quality regulations, the permitting authority shall have the power to prevent construction, modification, or operation of such source and shall deny the permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2022 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended by the Office of Environmental Assessment, LR 30:2021 (September 2004).

§521. Administrative Amendments

A. Administrative Amendment Criteria. Administrative amendment procedures may be used to revise the permit for any change that would not violate any applicable requirement or standard and:

1. corrects typographical errors or errors in transcribing the proposed permit to the final version of the permit;

2. updates or corrects identifying information at the source;

3. 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:I.Chapter 19;

4. identifies 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, terms and conditions which have already undergone public notice as MACT for the facility, 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;

5. 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; or

6. 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 in this Subsection.

B. Administrative Amendment Procedures

1. For changes which qualify under Subsection A of this Section, the owner or operator of the source may submit a request for an administrative amendment to the permit. Such request shall include a listing of amendments being requested, an explanation of the reason for the request, and any verification needed by the permitting authority to determine the appropriateness of the amendment.

2. Within 60 days of receipt of the request, the permitting authority shall take final action on the request by doing one of the following:

a. incorporate the requested amendment and, for Part 70 sources, submit a copy of the amended permit to the administrator; or

b. deny the request.

3. Notwithstanding any other provisions of this Section, administrative amendments to the acid rain portion of a permit shall be made as specified in LAC 33:III.505.O.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended LR 20:1375 (December 1994), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2430 (October 2005).

§523. Procedures for Incorporating Test Results

A. Permit Amendments or Modifications. The owner or operator of any facility permitted under this Chapter shall request a permit amendment or modification to reflect the results of any testing required or approved by the permitting authority, if such testing demonstrates that the terms and conditions of the existing permit are inappropriate or inaccurate. The request, together with all information necessary to process such request, shall be submitted within 45 days of obtaining the relevant test results.

1. Administrative Amendments. Changes to incorporate test results may be incorporated into the permit as an administrative amendment if all of the following criteria are met:

a. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;

b. increases in permitted emissions will not exceed 5 tons per year for any regulated pollutant;

c. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III.Chapter 51 or under Section 112(g) of the Clean Air Act;

d. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment, and would not trigger the applicability of any federally applicable requirement;

e. changes in emissions would not qualify as a significant modification;

f. the request is submitted no later than 12 months after commencing operation; and

g. the permit contains a term which provides for the incorporation of test results by administrative amendment in accordance with this Paragraph A.1 of this Section.

2. Permit Modifications. Any change to incorporate test results which would not meet the criteria established in Paragraph A.1 of this Section shall be incorporated into the permit in accordance with the appropriate procedures for minor or significant modifications.

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.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993).

§525. Minor Modifications

A. Minor Modification Criteria

1. For any source which is not a Part 70 source or for any application for a state-only change at a Part 70 source, minor modification procedures may be utilized for any change which does not require public notice.

2. For any application at a Part 70 source which does not qualify as a state-only change, minor modification procedures may be utilized for any change or modification that:

a. would not violate any federally applicable requirement or standard or any applicable provisions of LAC 33:III, Air Quality Regulations;

b. would not constitute a Title I modification;

c. would not involve significant changes to existing monitoring, reporting, or recordkeeping requirements;

d. 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;

e. 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;

f. would not seek to establish or exceed an enforceable emissions cap assumed to establish minor source status or to avoid classification as a Title I modification; and

g. is not otherwise determined by the permitting authority to be a significant modification.

3. Notwithstanding Paragraph A.2 of this Section, minor permit modification procedures may be used for permit modifications incorporating 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 or in federally applicable requirements.

B. Minor Modification Procedures

1. Any application requesting a minor modification shall be submitted prior to making the proposed change at the source. The change shall not be made prior to approval by the permitting authority.

2. The application shall include those elements listed in LAC 33:III.517 and shall also include:

a. a listing of any new applicable requirements that will apply as a result of the change;

b. certification by a responsible official that the proposed modification meets the criteria listed in Subsection A of this Section and a request that minor modification procedures be used; and

c. for Part 70 sources, the owner or operator's suggested draft permit and completed forms for the permitting authority to use to notify affected states.

3. For any applications pertaining to a major Part 70 source, the owner or operator shall submit a copy of the application to the permitting authority and to the administrator concurrently.

4. For any applications pertaining to major Part 70 sources, the permitting authority shall notify any affected state within five working days of receipt of a complete minor modification application.

5. Within 90 days of receipt of a complete application under this Section pertaining to a Part 70 source, the permitting authority shall perform a technical review and shall do one of the following:

a. issue the revised permit incorporating the modification as drafted by the owner or operator of a Part 70 source;

b. write or revise the draft permit modification as appropriate and issue the revised permit (For Part 70 sources, the permitting authority shall submit a copy of the revised permit to the administrator.);

c. notify the applicant that the request does not qualify as a minor modification and must be processed as a significant modification; or

d. notify the applicant that the request is denied.

6. For any minor modification pertaining to a change which affects federally enforceable permit terms and conditions at a Part 70 source, the terms of the permit revision shall not be federally enforceable pursuant to 40 CFR Part 70 until after the required EPA 45-day review period has expired or until EPA has notified the permitting authority that EPA will not object to final issuance of the permit modification, whichever is first. If the permitting authority has issued approval of the modification prior to such time, the terms of the permit revision shall be enforceable upon approval by the permitting authority and consistent with the approved State Implementation Plan.

7. If at any time after approval by the permitting authority of a revised permit pertaining to a Part 70 source in accordance with minor modification procedures the administrator objects to the issuance of the permit revision, the objection shall be considered cause for reopening the permit in accordance with LAC 33:III.529.

8. The permit shield provisions of LAC 33:III.507.I shall not extend to minor permit modifications.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2022 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993).

§527. Significant Modifications

A. Significant Modification Criteria

1. Significant modification procedures shall be used for any permit revision needed to incorporate a change which does not qualify as an administrative amendment and does not qualify as a minor modification.

2. At a minimum, any change which meets the following criteria shall require significant modification procedures:

a. the change constitutes a *Title I modification*, as defined in LAC 33:III.502;

b. the change constitutes a significant change in existing monitoring terms and conditions; or

c. the change is a relaxation of reporting or recordkeeping permit terms and conditions.

B. Significant Modification Procedures

1. Any application requesting a significant modification shall be submitted prior to making the proposed change at the source. The change shall not be made prior to approval by the permitting authority.

2. The application shall include those elements listed in LAC 33:III.517.

3. Significant modification procedures shall be the same as the procedures for permit issuance pursuant to LAC 33:III.519.

4. Pursuant to LAC 33:I.Chapter 15, for any application pertaining to a substantial permit modification (as defined in LAC 33:I.Chapter 15), the applicant shall publish a notice of completeness determination in a major local newspaper once the application for permit revision is deemed complete.

5. For any significant modification pertaining to a major Part 70 source, the applicant shall provide a copy of the permit application (including the compliance plan) directly to the administrator, in accordance with LAC 33:III.533.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2022 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended LR 20:1375 (December 1994), amended by the Office of Environmental Assessment, LR 30:2021 (September 2004).

§529. Reopenings for Cause

A. Any permit issued under this Chapter may be reopened and revised by the permitting authority prior to the expiration of the permit if sufficient cause exists to warrant the reopening.

1. Sufficient cause shall include, but is not limited to:

a. a demonstration by any person, to the satisfaction of the permitting authority, that the permit contains a material mistake, that inaccurate statements were made in establishing the terms or conditions of the permit, or that the permit must be revised to assure compliance with any federally applicable requirement or any applicable provision of LAC 33:III, Air Quality Regulations; or

b. a demonstration by the owner or operator, to the satisfaction of the permitting authority, that reopening and reissuance of the permit will result in a benefit to the owner or operator and will not place an undue burden on the permitting authority.

2. Proceedings to reopen, revise, and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. When cause to reopen a permit is determined, the reopening shall be initiated and final action taken as expeditiously as practicable.

B. Any permit pertaining to a Part 70 source shall be reopened and revised under any of the following circumstances.

1. An additional federally applicable requirement is newly promulgated and is applicable to a major Part 70 source for which three or more years remain before the expiration of the permit, unless the effective date of the newly applicable requirement is later than the expiration date of the permit.

a. The owner or operator shall be provided at least 30 days notice of intent to reopen by the permitting authority, except that the permitting authority may provide notice of less than 30 days in the case of an emergency.

b. The reopening shall be completed and final action taken on the permit not later than 18 months after promulgation of the federally applicable requirement.

2. Additional requirements (including excess emissions requirements) become applicable to an affected source under the Acid Rain Program. However, upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit without requiring the procedures established by this Chapter for permit revisions or reopenings.

3. The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The permitting authority or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2023 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993).

§531. Public Notice and Affected State Notice

A. Public Notice

1. At the discretion of the permitting authority, public notice may be provided prior to issuance of any new or revised permit under this Chapter.

2. For applications pertaining to a Part 70 source, public notice shall be published by the permitting authority prior to the issuance of any permit which is:

a. the initial permit issued in accordance with a federally approved operating permit program pursuant to LAC 33:III.507;

b. a permit renewal as required pursuant to LAC 33:III.507.E;

c. a permit revision to incorporate a significant modification as defined pursuant to LAC 33:III.527.

3. Each public notice provided under Paragraph A.2 of this Section shall meet the following requirements.

a. The notice shall be given by advertisement in a newspaper in the local area where the source is located, in the official state journal, and by mail to persons included on the appropriate mailing list developed and maintained by the permitting authority.

b. Such advertisement shall identify the title and address of the permitting authority; the name and address of the permittee; the name and physical location of the affected facility; the activities involved in the permit action; the emissions change involved; the name or title, address, and telephone number of a DEQ employee from whom additional information may be obtained, including copies of the proposed permit, the application, and all supporting materials; a brief description of the appropriate comment procedures; and the time and place of any hearing that may be held with a statement of procedures to request a hearing.

c. The permitting authority shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days in advance of the hearing.

4. The permitting authority shall provide a statement that sets forth the legal and factual basis for the proposed permit conditions of any permit issued to a Part 70 source, including references to the applicable statutory or regulatory provisions. The permitting authority shall send this statement to any person who requests it and to EPA.

B. Affected State Notice, Federal Land Manager and Indian Governing Body Notice

1. Part 70 Sources

a. For each application pertaining to a major Part 70 source, the permitting authority shall provide notice of the proposed permit to each affected state on or before the date of public notice, or within five working days of receipt of a complete minor modification application.

b. The comment period for affected states shall expire at the close of the public comment period.

c. The permitting authority shall provide prompt notice in writing to the administrator and to any affected state of refusal by the permitting authority to accept any recommendations for the permit that the affected state submitted. The notice shall include the permitting authority's reasons for refusing any such recommendation. The permitting authority may refuse to accept any recommendations that are not based on federally applicable requirements.

2. Interstate Pollution. Each major proposed new or modified source subject to significant deterioration of air quality review or which may significantly contribute to levels of air pollution in excess of the national ambient air quality standards in a control region outside Louisiana shall provide written notice to all nearby states, the air pollution levels of which may be affected by such source, at least 60 days prior to the date on which commencement of construction is to be permitted by the administrative authority.

3. Notice of any proposed permit pertaining to a major stationary source or major modification under LAC 33:III.504, Nonattainment New Source Review Procedures, shall be provided to any affected federal land manager or Indian governing body.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended by the Office of the Secretary, Legal Affairs Division, LR 32:1841 (October 2006).

§533. EPA Notice, Review, and Objection

A. Applicability. The provisions of this Section apply to any permit application affecting federally applicable requirements at a Part 70 source after the effective date of LAC 33:III.507. Procedures restricting issuance of a permit under this Section are applicable only to the issuance of federal conditions of the permit and do not restrict DEQ authority to issue and enforce state conditions in accordance with the procedures of this Chapter.

B. Transmittal of Information

1. A copy of each permit application pertaining to a major Part 70 source shall be provided to EPA by the owner or operator at the time the application is submitted to the permitting authority.

2. A copy of each proposed permit pertaining to a major Part 70 source shall be provided to EPA by the permitting authority.

3. The permitting authority shall promptly provide to EPA notice of any intended changes to a proposed permit resulting from consideration of public comment or affected state comment. Prompt notice shall also be provided of any refusal by the permitting authority to accept all recommendations for the proposed permit that any affected state submitted during the affected state review period, together with reason for such refusal.

4. A copy of each final permit issued to a major Part 70 source shall be provided to EPA by the permitting authority.

5. The permitting authority shall keep for five years such records and submit to EPA such information as the administrator may reasonably require to ascertain whether the state program complies with the requirements of the Federal CAA and 40 CFR Part 70.

C. EPA Review

1. No permit pertaining to a major Part 70 source which is an initial permit under LAC 33:III.507 or a permit revision, renewal, or reopening affecting the federal

conditions of the existing permit shall be issued if the administrator objects to its issuance within 45 days of receipt of the notice and information provided pursuant to Paragraphs B.2 and 3 of this Section.

2. The permitting authority may issue any such permit described in Paragraph C.1 of this Section prior to the close of EPA's 45-day review period if the administrator first notifies the permitting authority that no objection will be made.

D. EPA Objection

1. The administrator may object to the issuance of any proposed permit pertaining to a major Part 70 source under any of the following circumstances:

a. the permit would not result in compliance with federally applicable requirements or with the requirements of the approved Louisiana Part 70 program or with 40 CFR Part 70;

b. the permitting authority or the owner or operator has not provided information regarding the permit in accordance with Subsection B of this Section;

c. the permitting authority failed to submit any information necessary to review adequately the proposed permit; or

d. the permitting authority failed to provide public notice where required pursuant to LAC 33:III.531.

2. Any objection by the administrator under this Subsection shall include a statement of reasons for the objection and a description of the terms and conditions which the permit must include to respond to the objection. The administrator will provide the owner or operator with a copy of the objection.

3. If the permitting authority fails, within 90 days after the date of an objection, to revise and submit a proposed permit in response to the objection, the administrator will issue or deny the permit.

E. Public Petitions to EPA

1. If the administrator does not object in writing under Subsection D of this Section, any person may petition the administrator to make such objection. Such petitions must be made within 60 days after the expiration of the administrator's 45-day review period.

2. Petitions under this Subsection shall be based only on objections that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such objections within the public comment period. A petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection.

3. If the administrator objects to the permit as a result of a petition filed under this Subsection and the permit has not yet been issued, the permitting authority shall not issue the permit until EPA's objection has been resolved.

4. If the permitting authority has issued a permit prior to receipt of an EPA objection under this Subsection, the administrator will modify, terminate, or revoke such permit, and the permitting authority may thereafter issue only a revised permit that satisfies EPA's objection.

5. In any case under this Subsection, the owner or operator will not be in violation of the requirement to have submitted a timely and complete application.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), amended LR 20:1376 (December 1994).

§551. Hazardous Air Pollutant (HAP) Control Technology Requirements for New Sources

A. Applicability. The provisions of this Section apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants after June 29, 1998. The provisions of this Section do not apply to major sources specifically regulated or exempted from regulation under a standard issued in accordance with Section 112(d), 112(h), or 112(j) of the Clean Air Act and incorporated in 40 CFR Part 63 or to major sources for which the owner or operator has received all necessary air quality permits for construction or reconstruction prior to June 29, 1998.

B. Definitions. The terms used in this Section have the meaning given to them in LAC 33:III.111 and 5103, the Clean Air Act, and 40 CFR Part 63, Subpart A except for those terms defined herein as follows.

Affected Source—the stationary source or group of stationary sources that, when fabricated (on-site), erected, or installed, meets the definition of *construct a major source* or the definition of *reconstruct a major source* contained in this Section.

Available Information—for the purposes of identifying control technology options for the affected source, information contained in the following information sources as of the date of approval of the MACT determination by the department:

a. a relevant proposed regulation, including all supporting information;

b. background information documents for a draft or proposed regulation;

c. data and information available for the Control Technology Center developed in accordance with Section 113 of the Clean Air Act;

d. data and information contained in the Aerometric Information Retrieval System, including information in the MACT database;

e. any additional information that can be expeditiously provided by the administrator; and

f. for the purpose of determinations by the department, any additional information provided by the

applicant or others and any additional information considered available by the department.

Construct a Major Source—

a. to fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources that is located within a contiguous area and under common control and that emits, or has the potential to emit, 10 tons per year of any HAP or 25 tons per year of any combination of HAPs; or

b. to fabricate, erect, or install at any developed site a new process or production unit that in and of itself emits, or has the potential to emit, 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, unless the process or production unit satisfies the following criteria:

i. all HAPs emitted by the process or production unit that would otherwise be controlled under the requirements of this Section are controlled by emission control equipment that was previously installed at the same site as the process or production unit;

ii. the department determines:

(a). within a period of five years prior to the fabrication, erection, or installation of the process or production unit, that the existing emission control equipment represents the best available control technology (BACT), lowest achievable emission rate (LAER) under 40 CFR Part 51 or 52, toxics-best available control technology (T-BACT), or MACT based on state air toxics rules for the category of pollutants that includes those HAPs to be emitted by the process or production unit; or

(b). that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, T-BACT, or state air toxic rule MACT determination);

iii. the department determines that the percent control efficiency for emissions of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

iv. the department provides notice and an opportunity for public comment concerning its determination that criteria in Clauses i-iii of Subparagraph b of this definition apply and concerning the continued adequacy of any prior BACT, LAER, T-BACT, or state air toxic rule MACT determination;

v. if any commentor has asserted that a prior BACT, LAER, T-BACT, or state air toxic rule MACT determination is no longer adequate, the department shall determine that the level of control required by that prior determination remains adequate; and

vi. any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the department are applicable requirements under Section 504(a) of the Clean Air Act either have been incorporated into any existing Title V permit for the affected facility or will be incorporated into such permit upon issuance.

Control Technology—measures, processes, methods, systems, or techniques to limit the emissions of HAPs through process changes, substitution of materials, or other modifications which:

a. reduce the quantity of, or eliminate emissions of, such pollutant 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) as provided in 42 U.S.C. 7412(h); or

e. are the combination of Subparagraphs a-d of this definition.

Electric Utility Steam Generating Units—any fossil fuel-fired combustion unit, of more than 25 megawatts, that serves a generator that produces electricity and supplies more than one-third of its potential electrical output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale.

Greenfield Site—a contiguous area under common control that is an undeveloped site.

Hazardous Air Pollutants—any air pollutants listed in or pursuant to Section 112(b) of the Clean Air Act.

Maximum Achievable Control Technology (MACT) Emission Limitation for New Sources—the emission limitation that is not less stringent that the emission limitation achieved in practice by the best controlled similar source and that reflects the maximum degree of reduction in emissions that the department, taking into consideration the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.

Process or Production Unit—any collection of structures and/or equipment that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one *process or production unit*.

Reconstruct a Major Source—the replacement of components at an existing process or production unit that in and of itself emits, or has that potential to emit, 10 tons per year of any HAP or 25 tons per year of any combination of HAPs whenever:

a. the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and

b. it is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under this Subsection.

Research and Development Activities—activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a de minimis manner.

Similar Source—a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

C. Exemptions and Prohibitions. The requirements of this Section do not apply to:

1. *electric utility steam generating units*, as defined in LAC 33:III.5103.A;

2. stationary sources that are within a source category that has been deleted from the source category list in accordance with Section 112(c)(9) of the Clean Air Act; and

3. *research and development activities*, as defined in Subsection B of this Section.

D. Source Obligation

1. No person may begin actual construction or reconstruction of a major source of hazardous air pollutants after June 29, 1998, unless the owner or operator obtains or revises a permit issued in accordance with Louisiana's Part 70 Program (LAC 33:III.507) and follows the administrative procedures of that program and:

a. the department has made a final and effective case-by-case determination in accordance with the provisions of this Section such that emissions from the affected source will be controlled to a level no less stringent than the MACT emission limitation for new sources; or

b. the major source in question is specifically regulated by or exempted from regulation under a standard issued in accordance with Section 112(d), 112(h), or 112(j) of the Clean Air Act and incorporated in 40 CFR Part 63.

2. The owner or operator may request approval of case-by-case MACT determinations for alternative operating scenarios. Approval of such data satisfies the requirements of this Section for each such scenario.

3. The MACT emission limitation and requirements established shall be effective as required by Subsection I of this Section, supported by information listed in Subsection E of this Section and consistent with principles established in Subsection E of this Section. The owner or operator shall comply with requirements in Subsections G and J of this Section, and with all applicable requirements in 40 CFR Part 63, Subpart A.

E. Principles of Case-by-Case MACT Determinations. The following general principles shall govern preparation of each permit application requiring a case-by-case MACT determination concerning construction or reconstruction of a major source and all subsequent review of and actions taken concerning such an application by the department:

1. the MACT emission limitation or MACT requirements recommended by the applicant and approved by the department shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source as determined by the department;

2. based upon available information, the MACT emission limitation and control technology (including any requirements under Paragraph E.3 of this Section) recommended by the applicant and approved by the department shall achieve the maximum degree of reduction in emissions of hazardous air pollutants that can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction, any non-air quality health and environmental impacts, and energy requirements associated with the emission reduction;

3. the applicant may recommend a specific design, equipment, work practice, operational standard, or a combination thereof. The department may approve such a standard based on these recommendations if the department specifically determines that it is not feasible to prescribe or enforce an emission limitation as defined herein; and

4. if the administrator has either proposed a relevant emission standard in accordance with Section 112(d) or 112(h) of the Clean Air Act or adopted a presumptive MACT determination for the source category that includes the constructed or reconstructed major source, then the MACT requirements applied to the affected source shall have considered those MACT emission limitations and requirements of the proposed standard or presumptive MACT determination.

F. Application Requirements for Case-by-Case MACT Determination

1. The application shall specify a control technology selected by the owner or operator that, if properly operated and maintained, will meet the MACT emission limitation or standard as determined by Subsection E of this Section.

2. In the event that an affected source would require additional control technology or a change in control technology, the application for a MACT determination shall contain the following information:

a. identifying information, including company name, physical address and mailing address, facility name and address, if different from the company, a map showing

the location of the facility, owner's and operator's names and agent, and telephone number and name of plant manager or contact;

b. a brief description of the major source to be constructed or reconstructed and identification of any listed source category or categories in which it is included;

c. the expected commencement date for the affected source;

d. the expected completion date for the affected source;

e. the anticipated date of start-up for the affected source;

f. the hazardous air pollutant emitted by the affected source and the estimated emission rate for each such hazardous air pollutant, to the extent this information is needed by the department to determine MACT;

g. any federally enforceable emission limitations applicable to the affected source;

h. the maximum and expected utilization of capacity of the affected source, to the extent this information is needed by the department to determine MACT;

i. the controlled emissions for the affected source in tons per year at expected and maximum utilization of capacity, to the extent this information is needed by the department to determine MACT;

j. a recommended emission limitation for the affected source consistent with the principles set forth in Subsection E of this Section;

k. the selected control technology to meet the recommended MACT emission limitation, including technical information on the design, operation, size, and estimated control efficiency of the control technology (and the manufacturer's name, address, telephone number, and relevant specifications and drawings, if requested by the department);

l. supporting documentation including identification of alternative control technologies considered by the applicant to meet the emission limitation, and analysis of cost and non-air quality health environmental impacts or energy requirements for the selected control technology; and

m. any other relevant information required in accordance with 40 CFR Part 63, Subpart A.

3. In the event that an affected source will be in compliance, upon start-up, with the case-by-case MACT provisions in accordance with this Section without a change in control technology, the application for a MACT determination shall also contain documentation of the control technology in place.

G. Compliance with MACT Determination. An owner or operator of an affected source that has obtained a MACT determination shall be deemed to be in compliance with Section 112(g)(2)(B) of the Clean Air Act only to the extent that the affected source is in compliance with all Part 70 permit requirements. Any violation of such requirements by the owner or operator shall be deemed by the department and by EPA to be a violation of the prohibition on construction or reconstruction in Section 112(g)(2)(B) for whatever period the owner or operator is determined to be in violation of such requirements, and shall subject the owner or operator to appropriate enforcement action under the Clean Air Act.

H. Requirement for Affected Source Subject to a Subsequently Promulgated MACT Standard or MACT Requirement

1. If the administrator promulgates an emission standard under Section 112(d) or 112(h) of the Clean Air Act or the department issues a determination under Section 112(j) of the federal Clean Air Act that is applicable to a stationary source or group of sources that would be deemed to be an affected source under this Section before the date that the owner or operator has obtained a final and legally effective MACT determination in accordance with this Section, the owner or operator of the source(s) shall comply with the promulgated standard or determination rather than any MACT determination in accordance with this Section and the owner or operator shall comply with the promulgated standard by the compliance date in the promulgated standard.

2. If the administrator promulgates an emission standard under Section 112(d) or 112(h) of the Clean Air Act or the department makes a determination under Section 112(j) of the Clean Air Act that is applicable to a stationary source or group of sources that was deemed to be an affected source under this Section and has been subject to a prior case-by-case MACT determination in accordance with this Section and the owner or operator obtained a final and legally effective case-by-case MACT determination prior to the promulgation date of such emission standard, then the department shall issue an initial operating permit that incorporates the emission standard or determination or revise the operating permit according to the reopening procedures in LAC 33:III.529, whichever is relevant, to incorporate the emission standard or determination.

a. The EPA may include in the emission standard established under Section 112(d) or 112(h) of the Clean Air Act a specific compliance date for those sources that have obtained a final and legally effective MACT determination in accordance with this Section and that have submitted the information required by this Section to the EPA before the close of the public comment period for the standards established under Section 112(d) of the Clean Air Act. Such date shall assure that the owner or operator shall comply with the promulgated standard as expeditiously as practicable, but not longer than eight years after such standard is promulgated. In that event, the department shall incorporate the applicable compliance date in the Part 70 permit.

b. If no compliance date has been established in the promulgated Section 112(d) or 112(h) standard or Section 112(j) determination of the Clean Air Act, for those sources

that have obtained a final and legally effective MACT determination in accordance with this Section, then the department shall establish a compliance date in the permit that assures that the owner or operator shall comply with the promulgated standard or determination as expeditiously as practicable, but not longer than eight years after such standard is promulgated or a Section 112(j) determination is made.

3. Notwithstanding the requirements of Paragraphs H.1 and 2 of this Section, if the administrator promulgates an emission standard under Section 112(d) or 112(h) of the Clean Air Act or the department issues a determination under Section 112(j) of the Clean Air Act that is applicable to a stationary source or group of sources that was deemed to be an affected source under this Section and that is the subject of a prior case-by-case MACT determination in accordance with this Section, and the level of control required by the emission standard issued under Section 112(d) or 112(h) or the determination issued under Section 112(j) is less stringent than the level of control required by any emission limitation or standard in the prior MACT determination, the department is not required to incorporate any less stringent terms of the promulgated standard in the Part 70 permit applicable to such source(s) and may in its discretion consider any more stringent provisions of the prior MACT determination to be applicable legal requirements when issuing or revising such an operating permit.

I. Effective Date of MACT Determination. The effective date of a MACT determination shall be the date of issuance of a Part 70 permit incorporating a MACT determination.

J. Compliance Date. On and after the date of start-up, an affected source that is subject to the requirements of this Section shall be in compliance with all applicable requirements specified in the MACT determination.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 24:913 (May 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2620 (December 2007).

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

§601. Purpose

A. This Chapter establishes the means of enabling stationary sources to identify and preserve or acquire emission reductions for New Source Review (NSR) offsets. The pollutants to which this Rule applies are nitrogen oxides (NO_x) and volatile organic compounds (VOC).

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:874 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:301 (February 2002).

§603. Applicability

A. Major stationary sources are subject to the provisions of this Chapter for the purpose of utilizing emission reductions as offsets in accordance with LAC 33:III.504. Minor stationary sources located in ozone nonattainment areas may submit ERC applications for purposes of banking. Sources located in EPA-designated ozone attainment areas may not participate in the emissions banking program. Any stationary point source at an affected facility is eligible to participate.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:874 (August 1994), amended LR 24:2239 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1622 (September 1999), LR 28:301 (February 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2068 (October 2007).

§605. Definitions

A. The terms used in this Chapter are defined in LAC 33:III.111 with the exception of those terms specifically defined as follows.

Actual Emissions—the actual rate of emissions of an air pollutant from a source operation, equipment, or control apparatus. *Actual emissions* shall be calculated using the actual operating hours, production rates, and types of materials used, processed, stored, or combusted during the baseline period. Acceptable methods for estimating the actual emissions may include, but are not limited to, any one or a combination of the following:

a. emission factors based on EPA's Compilation of Air Pollutant Emission Factors (AP-42) or other emission factors approved by the department, if better source specific data are not available;

b. fuel usage records, production records, purchase records, material balances, engineering calculations (approved by the department), source tests, waste disposal records, emission reports such as emission inventory reports, SARA Title III, or MACT compliance certifications.

Allowable Emissions—the emissions rate of a stationary point source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits that restrict the operating rate, hours of operations, or both) and the most stringent of the following:

a. an applicable standard set forth in 40 CFR Part 60, 61, or 63;

b. any applicable state implementation plan (SIP) emissions limitation, including those with a future compliance date;

c. applicable emission limitations specified as an enforceable permit condition, including best available

control technology (BACT) and lowest achievable emission rate (LAER) requirements, including those with a future compliance date; or

d. applicable acid rain SO_2 and NO_x control requirements as defined under Title IV of the 1990 Clean Air Act Amendments and subsequent regulations.

Bank—the repository for ERCs, including the ERC banking database.

Bankable Emission Reductions—reductions of NO_x or VOC that meet the provisions of this Chapter at the time of review and approval.

Banking—a system for quantifying, recording, storing, and preserving ERCs so that they may be used or transferred for use at a future date.

Banking Database—the department database that records all ERC deposits, withdrawals, transfers, and transactions.

Base Case Inventory—the aggregate point-source emissions inventory for either NO_x or VOC from the nine modeled parishes, as modeled for the 2005 Attainment Plan and Transport Demonstration SIP dated December 2001, which includes 1997 actual emissions from point sources, banked ERC and pending ERC applications where the emission reduction occurred between January 1, 1990 and December 31, 1997, and adjustments for growth. Separate inventories have been established for NO_x and VOC.

Base Line Inventory—the aggregate point-source emissions inventory for either NO_x or VOC from the nine modeled parishes associated with the 2005 Attainment Plan and Transport Demonstration SIP dated December 2001, which accounts for emission reductions modeled to demonstrate attainment of the 1-hour national ambient air quality standard (NAAQS) for ozone. Separate inventories have been established for NO_x and VOC.

Baseline Emissions—the level of emissions during the baseline period, as calculated in accordance with LAC 33:III.607.C.4, that occur prior to an emission reduction, considering all limitations required by applicable federal and state regulations, below which any additional reductions may be credited for use as offsets.

Baseline Period—the period of time over which the historical emissions of a source are averaged. In general, this 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.

Current Total Point-Source Emissions Inventory—the aggregate point-source emissions inventory for either NO_x or VOC from the nine modeled parishes compiled from Emission Inventory System (EIS) records and updated annually in accordance with LAC 33:III.919 plus any banked ERC and pending ERC applications originally included in the base case inventory that have not expired.

Emission Reductions—the decreases in emissions associated with a physical change or change in the method of operation at a facility.

Emission Reduction Credit (ERC)—an emission reduction approved by the department in accordance with the requirements of this Chapter that is surplus, enforceable, permanent, and quantifiable.

Emission Reduction Credit Certificate (ERC Certificate)—a document indicating possession of a defined quantity and type of ERCs and issued by the department to the owner(s) identified on the certificate.

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.

Modeled Parishes—the parishes of Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, West Baton Rouge, and West Feliciana.

Offset—a legally enforceable reduction, approved by the department, in the rate of actual emissions from an existing stationary point source, which is used to compensate for a significant net increase in emissions of NO_x or VOC from a new or modified stationary source in accordance with the requirements of LAC 33:III.504. To be valid, an *offset* must meet the definition of ERC.

Permanent—as applied to emission reductions, the method of achieving the reduced level of emissions is fixed or ongoing. For example, 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 can 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.

Stationary Point Source—any building, structure, facility, or installation that emits or may emit any air pollutant subject to regulation under the Clean Air Act. For purposes of this Chapter, *stationary point sources* shall include fugitive emissions.

Surplus—emission reductions that are voluntarily created for an emissions unit and have not been required by any state or federal law or regulation and are 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.

Transfer—the conveyance of an ERC from one entity to another. All banking transactions shall be recorded in the

ERC banking database and shown as debits and credits for the appropriate entity(ies).

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:874 (August 1994), LR 25:1622 (September 1999), LR 26:2448 (November 2000), LR 28:301 (February 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2068 (October 2007).

§607. Determination of Creditable Emission Reductions

A. Acceptable Methods of Creation. Methods of reducing emissions to receive credit under this Chapter include, but are not limited to, the following:

1. installation of add-on control equipment;

2. change in process(es);

3. 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 emission);

4. shutdown of emission units or stationary sources;

5. production curtailment(s); and

6. reductions in operating hours.

B. Criteria for ERC Approval

1. Emission reductions shall be recognized as ERCs only after the approval of the department has been obtained. The department shall approve emission reductions as ERCs that are determined to be *surplus*, *permanent*, *quantifiable*, and *enforceable*, as defined in LAC 33.III.605.

2. 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.

C. Procedures for Calculating the Surplus Emission Reduction. The following procedures shall be used in calculating the quantity of surplus air emission reductions. When considering NO_x reductions, only the NO_x inventory and ERC and pending ERC applications for NO_x will be considered. Conversely, when considering VOC reductions, only the VOC inventory and ERC and pending ERC applications for VOC will be considered.

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

2. Calculate actual emissions during the baseline period.

3. Calculate adjusted allowable emissions during the baseline period. 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.

4. Quantify baseline emissions as follows:

a. for stationary sources located in ozone nonattainment areas:

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

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

b. Reserved.

5. Calculate allowable emissions after the reductions occurred.

6. Calculate the surplus emission reduction by subtracting the allowable emissions after the reduction occurred from the baseline emissions.

D. Adjustments for Netting. Emission reductions used in a netting analysis (i.e., to determine 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.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:877 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1622 (September 1999), LR 28:302 (February 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 32:1601 (September 2006), LR 33:2068 (October 2007).

§613. ERC Bank Recordkeeping and Reporting Requirements

A. Recordkeeping Requirements. All records shall be maintained for the life of the ERC and shall be available, upon request, for inspection by the department. Amounts should be specified in tons per year.

1. For each approved ERC certificate or pending ERC application, each ERC owner shall maintain records of the following:

a. a complete description of all projects that generated or required use of ERCs;

b. ERC deposits applied for, but not yet approved (i.e., applications);

c. approved ERC deposits;

d. ERCs used as offsets;

e. ERCs that have expired;

f. ERCs transferred to another party;

g. adjustments to the ERC balance to account for new emission reduction requirements and netting in accordance with LAC 33.III.607;

h. the date of each transaction [for applications, the date on which the application was submitted; for deposits, the date the ERC Certificate was issued; for ERC used as offsets, the date on which the permit was issued that relied upon the ERC as offsets; for transfers, the date of sale; for adjustments, the date on which a regulation was promulgated that required, or would have required, all or a portion of the emission reductions that comprise the ERC or ERC application, or the date on which the permit was issued that relied upon a reduction (that was either banked as ERC or part of an ERC application) to "net out"]; and

i. the current ERC balance.

2. For each emission reduction that will be part of an ERC bank application or permit application for construction or modification that requires offsets, the ERC owner shall maintain records of the following:

a. the year(s) determined to be the baseline period;

b. actual emissions (TPY) before the start-up of the project as evaluated over the baseline period;

c. allowable emissions for the affected sources;

d. the date of the actual emissions decrease;

e. allowable emissions or proposed allowable emissions, as appropriate, after the project (TPY);

f. the emission change; and

g. any emission reductions that are required or would have been required by all applicable federal and state regulations promulgated before and after the emission reduction.

B. Reporting Requirements

1. All emission reduction applications must meet the timing restrictions set forth in LAC 33:III.615.A and B in order to be eligible for banking as ERCs.

2. An annual report summarizing all records required by Subsection A of this Section shall be submitted to the department by March 31 of each year. This submittal shall be certified as specified in Subsection C of this Section and submitted to the Office of Environmental Services in a format specified by the department.

C. Certification. A certifying statement signed by the *responsible official* as defined in LAC 33:III.502 shall accompany each ERC annual report to attest that the information contained in the report is true and accurate to the best knowledge of the certifying official. The certification shall include the full name, title, and signature of the certifying official and the date of signature.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:877 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1622 (September 1999), LR 26:486 (March 2000), LR 26:2449 (November 2000), LR 28:303 (February 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2437 (October 2005), LR 33:2068, 2083 (October 2007).

§615. Schedule for Submitting Applications

A. All applications for banking emission reductions shall be submitted by March 31 following the year in which the reductions occurred. ERC applications can be submitted in the form of an ERC bank application or as part of a permit application for construction or modification that requires offsets. Failure to apply for ERCs by March 31 will invalidate the emission reductions as offsets.

B. If a parish is redesignated as ozone nonattainment by the EPA, applications for banking ERCs in such parish must be submitted by March 31 of the year following the effective date of the EPA designation.

C. 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 ERCs concurrently with the review of the permit application.

D. The applicant shall speciate VOC according to individual compounds when applying to bank VOC reductions. Speciation of toxic air pollutants regulated in LAC 33:III.Chapter 51 is required.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:878 (August 1994), amended LR 21:681 (July 1995), amended by the Office of Environmental Assessment, Environmental Planning Division, LR

25:1623 (September 1999), LR 26:486 (March 2000), LR 28:304 (February 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2068 (October 2007).

§617. Procedures for Review and Approval of ERCs

A. The department's review and approval of an application for ERCs generally shall 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.

B. Preliminary Decision to Approve the ERC. Upon making a preliminary decision to approve any ERC, the department shall provide public notice of its decision. The public notice shall include the name and address of the applicant, the proposed quantity and type of emission reductions to be approved, an explanation of the department's initial assessment, the opportunity and time periods to submit written public comments concerning the application, and the name and address of the person to whom public comments and requests for public hearings should be sent. 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 ERCs.

C. ERC Certificates

1. Issuance of ERC Certificate. Upon conclusion of the 30-day comment period provided in Subsection B of this Section, 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(s). A copy of the ERC certificate shall be retained by the department, and the original shall be delivered to the owner(s). The issued ERC certificate shall be recorded in the banking database.

2. Upon issuance of a permit that relies upon the use of approved ERCs 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(s) shall be reviewed again in accordance with LAC 33:III.607 at the time a request is received to use the remaining portion.

3. Transfer of ERCs. 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. The banking database shall be adjusted accordingly.

D. Appeals. The owner(s) may appeal the department's decision following provisions specified in R.S. 30:2024.

E. Request for Recalculation of ERCs. 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 set forth in this Section.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:878 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:304 (February 2002).

§619. Emission Reduction Credit Bank

A. The department shall maintain a banking database that shall consist of a record of all information concerning applications, deposits, withdrawals, and transactions, as well as pertinent date(s) concerning such information. The current total point-source emissions inventory for both NO_x and VOC shall also be included. All data in the banking database shall be available to the public upon request.

B. ERC Certificates. Certificates shall be issued for approved ERCs. A record of each ERC certificate issued shall be retained by the department. Each ERC certificate shall, at minimum:

1. bear the date of issuance;

2. be signed by the permitting authority;

3. include the owner(s)' name(s) and address(es);

4. state the name of the stationary source where the emission reduction occurred;

5. indicate the method of ERC creation;

6. show the quantity of the ERC and type of pollutant; and

7. show when the emission reduction occurred.

C. Multiple ERC Certificates and Multiple Ownership. Single or multiple ERC certificates may be issued for a particular emission reduction project. At the owner(s)' request, multiple ERC certificates shall be issued for each owner's proportional share.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:879 (August 1994), amended by the Office of Environmental Assessment,

Environmental Planning Division, LR 26:2449 (November 2000), LR 28:305 (February 2002).

Chapter 7. Ambient Air Quality

§701. Purpose

A. General. It is hereby declared to be the public policy of the state to achieve and maintain such levels of air quality as will protect human health and safety, and to the greatest degree practicable prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state and facilitate the enjoyment of the natural attractions of the state.

B. Particulate Matter. The purpose of this Chapter is to maintain concentrations of particulate matter in the ambient air at levels which will not cause damage or injury to plant or animal life. In addition to health considerations, attainment of the standards will result in economic and aesthetic benefits such as increased visibility and reduced soiling and corrosion.

C. Sulfur Dioxide. It is the purpose of this Subsection to establish ambient air standards and regulations for the state for sulfur dioxide.

D. Carbon Monoxide. It is the purpose of this Subsection to establish ambient air quality standards for the state for carbon monoxide and to enumerate methods for measuring carbon monoxide concentration in the ambient air.

E. Reserved.

F. Atmospheric Oxidants. It is the purpose of this Subsection to establish ambient air quality standards for the state for atmospheric oxidants and to enumerate methods for measuring oxidant concentrations in the ambient air.

G. Nitrogen Oxides. It is the purpose of this Subsection to establish ambient air quality standards for the state for nitrogen oxides and to enumerate methods for measuring concentrations of nitrogen oxides in the ambient air.

H. Lead. The purpose of this Subsection is to maintain concentrations of lead in the ambient air at levels which will protect human health and safety, and to the greatest degree practicable, prevent injury or damage to plant and animal life and property.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:1081 (October 1995), amended by the Office of the Secretary, Legal Affairs Division, LR 34:433 (March 2008).

§703. Scope

A. This Chapter is applicable to all sources of particulate matter, sulfur dioxide, carbon monoxide, atmospheric oxidants, nitrogen oxides, and lead.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of the Secretary, Legal Affairs Division, LR 34:433 (March 2008).

§705. Standards

A. The standards of ambient air quality listed in LAC 33:III.711.A, Table 1 and 711.B, Table 1a define the limits of air contamination by particulates and gases, above which limits the ambient air is hereby declared to be unacceptable and requires air pollution control measures. Until additional pertinent information becomes available through surveillance and research with respect to the effects of the air contaminants listed in LAC 33:III.711.A, Table 1 and 711.B, Table 1a, the air quality limits listed in LAC 33:III.711.A, Tables 1 and 711.B, Table 1a shall apply in Louisiana. The limits stated include normal background levels of particulates and gases.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§707. Degradation of Ambient Air Having Higher Quality than Set Forth in These Sections Restricted

A. As of the effective date of these regulations all processes which currently result in higher ambient air quality than shown in LAC 33:III.711.A, Table 1 and 711.B, Table 1a shall be maintained at the higher process quality level or better unless it can be affirmatively demonstrated to the administrative authority that a change in quality is justifiable.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§709. Measurement of Concentrations—PM_{10}, $PM_{2.5}$, Sulfur Dioxide, Carbon Monoxide, Atmospheric Oxidants, Nitrogen Oxides, and Lead

A. PM_{10}, $PM_{2.5}$, sulfur dioxide, carbon monoxide, atmospheric oxidants, nitrogen oxides, and lead shall be measured by the methods listed in LAC 33:III.711.C, Table 2 or by such other equivalent methods approved by the department. The publications or their replacements listed in LAC 33:III.711.C, Table 2 are incorporated as part of these regulations by reference.

B. The sampling and analytical procedures employed and their numbers, duration and location of samples to be taken to measure ambient levels of air contaminants shall be consistent with obtaining accurate results which are statistically significant and representative of the conditions being evaluated.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), amended by the Office of the Secretary, Legal Affairs Division, LR 32:1601 (September 2006).

§711. Tables 1, 1a, 2—Air Quality

A. Table 1. Primary Ambient Air Quality Standards

Table 1. Primary Ambient Air Quality Standards		
Air Contaminant	**Maximum Permissible Concentration**	
PM_{10}	150 μg/m^3	(Maximum 24-hour concentration not to be exceeded more than once per year)
$PM_{2.5}$	15.0 μg/m^3	(Annual arithmetic mean)
	35 μg/m^3	24-hour
Sulfur Dioxide (SO_2)	80 μg/m^3	or 0.03 ppm (Annual arithmetic mean)
	365 μg/m^3	or 0.14 ppm (Maximum 24-hour concentration not to be exceeded more than once per year)
Carbon Monoxide (CO)	10,000 μg/m^3	or 9 ppm (Maximum 8-hour concentration not to be exceeded more than once per year)
	40,000 μg/m^3	or 35 ppm (Maximum 1-hour concentration not to be exceeded more than once per year)
Ozone	0.08 ppm daily maximum 8-hour average	The standard is met at an ambient air monitoring site when the 3-year average of the annual fourth highest daily maximum 8-hour average ozone concentrations is less than or equal to 0.08 ppm, as determined in accordance with 40 CFR 50, Appendix I.
Nitrogen Dioxide (NO_2)	100 μg/m^3	(0.05 ppm) (Annual arithmetic mean)
Lead	1.5 μg/m^3	(Maximum arithmetic mean averaged over a calendar quarter)

1. The contribution of any contaminant by a single source property shall be measured as the difference between the upwind level and the downwind level for the property, using methods approved by the administrative authority, or by the use of suitable engineering techniques such as source dispersion calculations.

2. National primary ambient air quality standards define levels of air quality that the Administrator of the Environmental Protection Agency judges to be necessary, with an adequate margin of safety, to protect the public health.

B. Table 1a. Secondary Ambient Air Quality Standards

Table 1a. Secondary Ambient Air Quality Standards		
Air Contaminant	**Maximum Permissible Concentration**	
PM_{10}	150 μg/m^3	(Maximum 24-hour concentration not to be exceeded more than once per year)
Sulfur Dioxide (SO_2)	1,300 μg/m^3	(Maximum 3-hour concentration not to be exceeded more than once per year)
$PM_{2.5}$	15.0 μg/m^3	(Annual arithmetic mean)
	35 μg/m^3	24-hour
Carbon Monoxide (CO)	10,000 μg/m^3	or 9 ppm (Maximum 8-hour concentration not to be exceeded more than once per year)
	40,000 μg/m^3	or 35 ppm (Maximum 1-hour concentration not to be exceeded more than once per year)
Ozone	0.08 ppm daily maximum 8-hour average	The standard is met at an ambient air monitoring site when the 3-year average of the annual fourth highest daily maximum 8-hour average ozone concentrations is less than or equal to 0.08 ppm, as determined in accordance with 40 CFR 50, Appendix I.
Nitrogen Dioxide (NO_2)	100 μg/m^3	(0.05 ppm) (Annual arithmetic mean)
Lead	1.5 μg/m^3	(Maximum arithmetic mean averaged over a calendar quarter)

1. The contribution of any contaminant by a single source property shall be measured as the difference between the upwind level and the downwind level for the property, using methods approved by the administrative authority, or by the use of suitable engineering techniques such as source-dispersion calculations.

2. National secondary ambient air quality standards define levels of air quality that the Administrator of the Environmental Protection Agency judges to be necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

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

Table 2. Ambient Air—Methods of Contaminant Measurement		
Air Contaminant	**Sampling Interval**	**Analytical Method**
PM_{10}	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix J.
$PM_{2.5}$	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix L.
Sulfur Dioxide	24 hours	Any method complying with reference method in Title 40, Code of Federal Regulations, Part 50, Appendix A.

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

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), amended by the Office of the Secretary, Legal Affairs Division, LR 32:1602 (September 2006), LR 34:433 (March 2008).

Chapter 9. General Regulations on Control of Emissions and Emission Standards

§901. Purpose

A. It is the purpose of these emission standards to set forth levels of air quality for the protection of public health and of public welfare from any known or anticipated adverse effects of air contaminants. These standards set forth a mechanism of achieving cleaner air and are not a permit for unnecessary degradation of air quality. Therefore, quality of emissions as of the effective date of these standards shall be maintained at the higher degree of quality unless it can be affirmatively demonstrated to the administrative authority that a change in quality is justifiable and will not be contrary to the purpose of these regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§903. Scope

A. The emission standards as presented below pertain to all sources emitting to the atmosphere of the state.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§905. Control Facilities to be Installed When Feasible

A. To aid in controlling the overall levels of air contaminants into the atmosphere, air pollution control facilities should be installed whenever practically, economically, and technologically feasible. When facilities have been installed on a property, they shall be used and diligently maintained in proper working order whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§909. Responsible Person to Have Test Made

A. The department may require any person responsible for the emission of air contaminants to make or have made tests to determine the emission of air contaminants from any source, whenever the department has reason to believe that an emission in excess of that allowed by these regulations is occurring. The department may specify testing methods to be used in accordance with good professional practice. The department may observe the testing. All tests shall be conducted by reputable, qualified personnel. The department shall be given a copy of the test results in writing and signed by the person responsible for the tests.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§911. Department May Make Tests

A. The department may conduct tests of emissions of air contaminants from any source. Upon request of the department the persons responsible for the source to be tested shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§913. New Sources to Provide Sampling Ports

A. New sources shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§915. Emission Monitoring Requirements

A. Applicability. Source categories listed in Appendix "P" to Title 40, Part 51, of the Code of Federal Regulations (40 CFR Part 51) are to install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants specified in the aforementioned appendix for the applicable source category. Sources affected by this Subsection shall complete the installation and performance tests of such equipment and begin monitoring and recording within 18 months after the effective date of this regulation.

B. Minimum Monitoring System Capability, Specifications, Data Reporting, Data Reduction. Affected sources must meet at least the minimum requirements as set forth in 40 CFR Part 51, Appendix "P," Paragraphs 2-5, unless such sources qualify for an exemption or alternative procedure contained therein.

C. Special Consideration. The administrative authority can approve, on a case by case basis, alternative monitoring requirements, different from those in LAC 33:III.915.B above, if the original requirements cannot be implemented by a source due to physical plant limitations or extreme economic burden, or if the original requirements would not provide for accurate emission determination, or if the affected facility is infrequently operated. Such physical limitation or economic burden may be determined to exist only if the petitioner receives the concurrence from the administrative authority.

D. Exemptions. Exemption from the requirement of LAC 33:III.915.A is hereby granted to any source which is subject to a new source performance standard promulgated in 40 CFR Part 60 and also to any source which is on a firm schedule for retirement within five years of the date of application of the monitoring requirement.

E. Circumvention. No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise violate these regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§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.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§918. Recordkeeping and Annual Reporting

A. Data for emissions reports shall be collected annually. These reports are to be submitted to the Office of Environmental Assessment by March 31 of each year (for the period January 1 to December 31 of the previous year) unless otherwise directed by the department. The report shall include all data applicable to the emissions source or sources as required under LAC 33:III.919.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:339 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2450 (November 2000), LR 29:2776 (December 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2438 (October 2005), LR 33:2083 (October 2007).

§919. Emissions Inventory

Emissions inventory data shall be submitted to the department on magnetic media in the format specified by the Office of Environmental Assessment. *Facilities* are defined as all emissions points under common control on contiguous property. *Emissions point* is defined as the source of emissions that should have a Source Classification Code (SCC). Detailed instructions are provided, on an annual basis, for completing and submitting emissions inventories. The state point source emissions inventory will be compiled from the emissions inventories submitted in accordance with this Section from the facilities that meet the criteria for applicability in Subsection A of this Section. The state area source, non-road and on-road mobile source, and biogenic emissions inventories are compiled by the department from data that may be requested from other federal, state, or local agencies or other private entities.

A. Applicability. The owner or operator of the following facilities shall submit annual emissions inventories to the Office of Environmental Assessment. The inventory shall include all air pollutants for which a National Ambient Air Quality Standard (NAAQS) has been issued and all NAAQS precursor pollutants.

1. Any facility located in the 8-hour ozone nonattainment parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge is required to report if the facility emits or has the potential to emit any one or more of the following:

a. 10 tons per year (TPY) of volatile organic compounds (VOC);

b. 25 TPY of nitrogen oxides (NO_x);

c. 100 TPY of carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter of less than 10 microns (PM_{10}), or particulate matter of less than 2.5 microns ($PM_{2.5}$); or

d. 5 TPY of lead (Pb).

2. Any facility located in the parish of Assumption, East Feliciana, Iberia, Pointe Coupee, Saint Helena, Saint James, Saint John the Baptist, Saint Martin, Tangipahoa, or West Feliciana (parishes that adjoin an 8-hour ozone nonattainment parish) is required to report if the facility emits or has the potential to emit any one or more of the following:

a. 50 TPY of VOC;

b. 100 TPY of NO_x, CO, SO_2, PM_{10}, or $PM_{2.5}$; or

c. 5 TPY of Pb.

3. Any facility located in an attainment parish is required to report if the facility emits or has the potential to emit any one or more of the following:

a. 100 TPY of VOC, NO_x, CO, SO_2, PM_{10}, or $PM_{2.5}$; or

b. 5 TPY of Pb.

4. Any facility in Louisiana defined as a major stationary source of hazardous air pollutants in Section 112(a)(1) of the Federal Clean Air Act (FCAA) or of toxic air pollutants in LAC 33:III.Chapter 51 is required to report.

5. Any facility in Louisiana that has a 40 CFR Part 70 (Title V) Operating Permit is required to report, regardless of emissions limits.

6. No facility classes or categories are exempted.

B. Types of Inventories

1. Annual Emissions Statement. Facilities as identified in Subsection A of this Section, shall submit an original Annual Emissions Statement (AES) and a duplicate for all criteria pollutants for which a NAAQS has been issued and for NAAQS precursor pollutants. Except as provided in Subparagraph B.2.d of this Section, the AES shall consist of an inventory of actual emissions and the allowable (permitted) emissions limits of VOC, NO_x, CO, SO_2, Pb, PM_{10}, $PM_{2.5}$, and ammonia, and an annual Certification Statement in accordance with Subparagraph B.5.a of this Section. The emissions inventory may be an initial emissions inventory for facilities submitting their first emissions inventory, or an annual emissions inventory update for facilities that have previously submitted an emissions inventory. Actual emissions shall be reported for all sources of emissions at a facility, including fugitive emissions, flash gas emissions, insignificant sources (as defined in LAC 33:III.501.B.5, Insignificant Activities List, A. Based on Size or Emission Rate), and excess emissions occurring during maintenance, start-ups, shutdowns, upsets, and downtime. For purposes of this Section, the term *actual emissions* is the calculation or estimate of the actual emissions of a pollutant, in accordance with Subsection C of this Section, for the calendar year or other period of time if requested by the department. *Excess emissions* are defined as emissions quantities greater than normal operations. Where there is an enforceable document, such as a permit, that establishes allowable levels, the AES shall include the allowable emissions level as identified in the permit Maximum Allowable Emissions Rate Table and the allowable tons per year.

2. Statewide Annual Emissions Inventory Update. After the initial submittal of an emissions inventory facilities as identified in Subsection A of this Section shall comply with the following requirements.

a. An update to the emissions inventory is required if there is a significant change in the values currently in the emissions reporting system for operating conditions including start-ups, shutdowns, or process changes at the source that results in an increase or reduction in annual emissions of an individual pollutant: VOC, NO_x, CO, SO_2, Pb, PM_{10}, $PM_{2.5}$, or ammonia. VOCs that are also toxic air pollutants shall be considered for the purpose of determining significant change. A *significant change* is defined as the lesser of the following:

i. a 5 percent increase or decrease in the total potential or actual emissions from the facility;

ii. a 50 ton per year increase or decrease in the total potential or actual emissions from the facility; or

iii. a 10 ton per year increase or decrease in the potential or actual emissions from any single emissions point (stack, vent, or fugitive).

b. An update to the emissions inventory is required if there is a cessation of all production processes and termination of operations at the facility.

c. An update to the minimum data submitted in accordance with Paragraph B.5 of this Section is required if there is any change.

d. Unless an update is required in accordance with Subparagraph B.2.a, b, or c of this Section, then only the Certification Statement is required for the annual submittal.

3. Ozone Nonattainment Area Requirement. Facilities in ozone nonattainment areas that meet the applicability in Paragraph A.1 of this Section shall submit an annual inventory. In addition to the minimum data requirements of Paragraph B.5 of this Section, the inventory shall consist of actual, annual emissions and typical weekday emissions that occur during the three-month period of greatest or most

frequent ozone exceedances. *Typical weekday emission*s are defined as an average daily emissions rate that is calculated for each week of the three-month period of greatest or most frequent ozone exceedances. The department will indicate in the annual instructions which three-month period has the greatest or most frequent ozone exceedances in each ozone nonattainment area.

4. Special Inventories. Upon request by the administrative authority, any facility subject to any Rule of the Environmental Quality regulations, LAC Title 33, shall file additional emissions data with the department. The request shall specify a reasonable time for response, which shall not be less than 60 days from receipt of the request.

5. Minimum Data Requirements. The minimum data requirements for the emissions inventory are listed below. Operating and process rate information are provided for information only, and do not constitute permit limits. Submittal of a report of excess emissions above allowable limits under this regulation does not pre-empt the need for compliance with LAC 33:III.Chapter 5 that requires a permit request to initiate or increase emissions, nor does it qualify as a notice of excess emissions. Format and submittal requirements will be published annually by the department. Any new or modified data requirements will be included in the annual requests for updates. Any substantive changes will be established in accordance with the Administrative Procedure Act. Except for the annual Certification Statement, the minimum data requirements apply to initial submittals only. Data requirements for updates require that only those data elements that have changed be submitted.

a. Certification Statement. A Certification Statement, required by Section 182(a)(3)(B) of the FCAA, shall be signed by a *responsible official* as defined in LAC 33:III.502.A, or a person designated by the responsible official, and shall accompany each emissions inventory to attest that the information contained in the inventory is true and accurate to the best knowledge of the certifying official. The Certification Statement shall include the full name, title, signature, date of signature, and telephone number of the certifying official.

b. Facility Identification Information. The facility identification information shall include:

i. full name, physical location, and mailing address of facility;

ii. UTM horizontal and vertical coordinates; and

iii. SIC code(s).

c. Operating Information. The operating information shall include:

i. percentage annual throughput by season. The four seasons will represent one calendar year. The first season, winter, will represent January, February, and December of the reporting year; spring will be March-May; summer will be June-August; and fall will be September-November;

ii. days per week during the normal operating schedule;

iii. hours per day during the normal operating schedule; and

iv. weeks per year during the normal operating schedule.

d. Process Rate Data. The process rate data shall include:

i. annual process rate (annual throughput). The SCC prescribes the units to be used with each SCC for annual fuel/process rate reporting;

ii. in nonattainment parishes, peak ozone season daily process rate. The SCC prescribes the units to be used with each SCC for peak ozone season daily process rate reporting. Peak ozone season daily process rate is an average of emissions from a daily operation during the peak ozone season months; and

iii. annual average heat, ash, and sulfur content and design capacity, where applicable.

e. Control Equipment Information. The control equipment information shall include:

i. current primary and secondary control equipment; and

ii. current control equipment efficiency (percent). The actual efficiency should reflect the total control efficiency from all control equipment and include downtime and maintenance degradation. If the actual control efficiency is unavailable, the design efficiency or the control efficiency limit imposed by a permit shall be used.

f. Emissions Information. The emissions information shall include:

i. estimated actual criteria pollutant and precursor emissions at the emissions point level, in tons per year, if applicable, for an annual emissions rate and pounds per day for a typical ozone season day. Actual emissions estimates must include all emissions, i.e., upsets, downtime, fugitive emissions, and insignificant sources;

ii. permitted criteria pollutant and precursor emissions at the emissions point level in tons per year and in pounds per hour;

iii. estimated emissions method;

iv. calendar year for the emissions; and

v. emissions factor (if emissions were calculated using an emissions factor).

g. Stack Parameters. The stack parameters shall include:

i. stack height;

ii. stack diameter;

iii. exit gas temperature;

iv. exit gas velocity; and

v. exit gas flow rate.

C. Calculations. Actual measurement with continuous emissions monitoring systems (CEMS) or approved stack testing shall be used for reporting of emissions from an emissions point when such data exists. In the absence of CEMS or stack test data, emissions shall be calculated using methods found in the most recent edition, as of December 31 of the current reporting year, of the Compilation of Air Pollution Emission Factors (AP-42), calculations published in engineering journals, and/or EPA or department-approved estimation methodologies.

D. Reporting Requirements. The annual emissions inventory shall be submitted to the department no later than March 31 for the previous calendar year unless otherwise directed.

E. Enforcement. The department reserves the right to initiate formal enforcement actions, under R.S. 30:2025, for failure to submit emissions inventories as required in this Section.

F. Fees. The annual emissions inventory will be used to assess the criteria pollutant annual fee as per LAC 33:III.223.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:184 (February 1993), repromulgated LR 19:485 (April 1993), amended LR 19:1418 (November 1993), LR 20:1101 (October 1994), LR 22:339 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2450 (November 2000), LR 29:2776 (December 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2438 (October 2005), LR 32:241 (February 2006), LR 33:2084 (October 2007).

§921. Stack Heights

This regulation applies to all stacks in existence and all dispersion techniques implemented since December 31, 1970.

A. Definitions. For the purpose of this Section, the terms below will have the meaning herein given.

Dispersion Technique—any technique which attempts to affect the concentration of a pollutant in the ambient air by:

1. using that portion of a stack which exceeds good engineering practice stack height;

2. varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

3. increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. LAC 33:III.921.A.*Dispersion Technique*.3 does not include:

a. the reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

b. the merging of exhaust gas streams where:

i. the source owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams;

ii. after July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of *dispersion techniques* shall apply only to the emission limitation for the pollutant affected by such change in operation; or

iii. before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the administrative authority shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the administrative authority shall deny credit for the effects of such merging in calculating the allowable emissions for the source;

c. smoke management in agricultural or silvicultural prescribed burning programs;

d. episodic restrictions on residential woodburning and open burning; or

e. techniques under LAC 33:III.921.A.*Dispersion Technique*.3, which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.

Emission Limitation and Emission Standard—a requirement established by the administrative authority or administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

Excessive Concentrations—is defined for the purpose of determining good engineering practice stack height under LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.3 and means:

1. for sources seeking credit for stack height exceeding that established under LAC 33:III.921.A.*Good*

Engineering Practice (GEP) Stack Height.2, a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to the prevention of significant deterioration program (PSD), an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and a greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this Section shall be prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the administrative authority, an alternative emission rate shall be established in consultation with the source owner or operator.

2. for sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.2, either:

a. a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects as provided in Paragraph 1 above, except that the emission rate specified by these regulations (or in the absence of such a limit, the actual emission rate) shall be used; or

b. the actual presence of a local nuisance caused by the existing stack, as determined by the administrative authority;

3. for sources seeking credit after January 12, 1979 for a stack height determined under LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.2 where the administrative authority requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by the equations in LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.2, a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

Good Engineering Practice (GEP) Stack Height—the greater of:

1. 65 meters, measured from the ground-level elevation at the base of the stack;

2.a.i. for stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required under state or federal regulations:

$$H_g = 2.5H$$

ii. provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

b.i. for all other stacks:

$$H_g = H + 1.5L$$

where:

H_g = good engineering practice stack height, measured from the ground-level elevation of the base of the stack;

H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack;

L = lesser dimension, height or projected width, of nearby structure(s);

ii. provided that EPA or the administrative authority may require the use of a field study or fluid model to verify GEP stack height for the source; or

3. the height demonstrated by a fluid model or a field study approved by EPA or the administrative authority, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures, or nearby terrain features.

Nearby—as used in LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height* of this Section is defined for a specific structure or terrain feature and:

1. for purposes of applying the formulae provided in LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.2 means that distance up to five times the lesser of the height or the width dimension of a structure, but not greater than 0.8 km (1/2 mile); and

2. for conducting the demonstrations under LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.3 means not greater than 0.8 km (1/2 mile), except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height (H_t) of the feature, not to exceed 2 miles if such feature achieves a height (H_t) 0.8 km from the stack that is at least 40 percent of the GEP stack height determined by the formulae provided in LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.2.b or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

Stack—any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

Stack in Existence—the owner or operator had:

1. begun, or caused to begin, a continuous program of physical on-site construction of the stack; or

2. entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.

B. Degree of Emission Limitation

1. The degree of emission limitation required of any source for control of any air pollutant must not be affected by so much of any source's stack height that exceeds good engineering practice (GEP) or by any other dispersion technique, except as provided herein. The administrative authority will notify the public of the availability of any stack height demonstration study and will provide opportunity for public hearing on it. This Section does not restrict, in any manner, the actual stack height of any source.

2. The provisions of LAC 33:III.921.B shall not apply to:

a. stack heights in existence, or dispersion techniques implemented prior to December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the Clean Air Act, which were constructed or reconstructed, or for which *major modifications*, as defined in LAC 33:III.509.B.*Major Modification*, were carried out after December 31, 1970; or

b. coal-fired steam electric generating units, subject to the provisions of Section 118 of the Clean Air Act, which commenced operation before July 1, 1957, and whose stacks were constructed under a construction contract awarded before February 8, 1974.

C. Review of New Sources and Modifications. The degree of emission limitation required of any source for control of any air pollutant must not be affected so much by any source's stack height that exceeds good engineering practice or by any other dispersion technique, except as provided in LAC 33:III.921.B. When the administrative authority proposes to issue a permit to a source based on a good engineering practice stack height that exceeds the height allowed by LAC 33:III.921.A.*Good Engineering Practice (GEP) Stack Height*.1 or 2, the administrative authority will notify the public of the availability of the demonstration study and will provide opportunity for public hearing on it. This Section does not restrict, in any manner, the actual stack height of any source.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§923. Maintenance of Pay

A. In the case of any source which uses a supplemental, or intermittent control for the purpose of meeting the requirements of an order under Section 119(d), or Section 119 (relating to primary nonferrous smelter orders) of the Federal Clean Air Act, the owner or operator of such source may not temporarily reduce the pay of any employee by reason of the use of such supplemental or intermittent or other dispersion dependent control system.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§925. Mass Emission Rate Control Plan

A. A facility may propose to the administrative authority a control plan for any pollutant that sets a mass emission rate equal to the sum of all sources within the facility or any combination of sources within the facility. The facility may control the emissions contained in the proposal any way it deems appropriate as long as the proposed mass emission rate is not violated. The facility will set emission rates for each proposed source within the facility that when accumulated will demonstrate compliance with the mass emission rate.

B. The administrative authority shall approve the use of the alternative emission reduction proposal if the facility can demonstrate that the proposal will not interfere with the attainment or maintenance of the ambient air quality standard for the pollutant for which the control plan is proposed.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§927. Notification Required (Unauthorized Discharges)

A. The unauthorized discharge of any air pollutant into the atmosphere shall be reported in accordance with the provisions of LAC 33:I.Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Written reports pursuant to LAC 33:I.3925 must be submitted to the department. Timely and appropriate follow-up reports should be submitted detailing methods and procedures to be used to prevent similar atmospheric releases.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2025(J).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of the Secretary, LR 19:1022 (August 1993).

§929. Violation of Emission Regulations Cannot Be Authorized

A. The standards of ambient air quality listed in Tables 1 and 1a define the limits of air contamination by particulates

and gases. No person or group of persons shall allow particulate matter or gases to become airborne in amounts which cause the ambient air quality standards to be exceeded. The limits stated include normal background levels of particulates and gases.

B. Nothing in any other part or section of these regulations shall in any manner be construed as authorizing or legalizing emissions in such manner as prohibited by these regulations. For example, compliance with ambient air quality standards does not authorize emissions in excess of emission limitations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

Chapter 11. Control of Emissions of Smoke

§1101. Control of Air Pollution from Smoke

A. Purpose. It is the purpose of this regulation to establish emission standards on smoke.

B. Control of Smoke. The emission of smoke from any combustion unit (other than a flare, as described in LAC 33:III.1105 below) or from any type of burning in a combustion unit (other than a flare), including the incineration of industrial, commercial, institutional and municipal wastes, shall be controlled so that the shade or appearance of the emission is not darker than 20 percent average opacity as to obscure vision to a degree equivalent to the above (see LAC 33:III.1503.D.2, Table 4) except that emitted during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal and rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:1081 (October 1995).

§1103. Impairment of Visibility on Public Roads Prohibited

A. The emissions of smoke which passes onto or across a public road and creates a traffic hazard by *impairment of visibility* as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition is prohibited.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§1105. Smoke from Flaring Shall Not Exceed 20 Percent Opacity

A. The emission of smoke from a flare or other similar device used for burning in connection with pressure valve releases for control over process upsets shall be controlled so that the shade or appearance of the emission does not exceed 20 percent opacity (LAC 33:III.1503.D.2, Table 4) for a combined total of six hours in any 10 consecutive days. If it appears the emergency cannot be controlled in six hours, SPOC shall be notified by the emitter in accordance with LAC 33:I.3923 as soon as possible after the start of the upset period. Such notification does not imply the administrative authority will automatically grant an exemption to the source(s) of excessive emissions.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 25:656 (April 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2450 (November 2000), LR 30:1671 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2438 (October 2005), LR 33:2084 (October 2007).

§1107. Exemptions

A. Exemptions from the provisions of LAC 33:III.1105 may be granted by the administrative authority during start-up and shutdown periods if the flaring was not the result of failure to maintain or repair equipment. A report in writing, explaining the conditions and duration of the start-up or shutdown and listing the steps necessary to remedy, prevent, and limit the excess emission, shall be submitted to SPOC within seven calendar days of the occurrence. In addition, the flaring must be minimized and no ambient air quality standard may be jeopardized.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2451 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2438 (October 2005), LR 33:2084 (October 2007).

§1109. Control of Air Pollution from Outdoor Burning

A. Purpose. It is the purpose of this Section to control outdoor burning of waste or other combustible material.

B. Outdoor Burning Prohibited. No person shall cause or allow the outdoor burning of waste material or other combustible material on any property owned by him or under his control except as provided in Subsections C and D of this Section.

C. Statutory Exceptions. The following activities are not subject to the prohibition created in Subsection B of this Section:

1. the burning of leaves, grass, twigs, branches, and vines by a private property owner on his own property for noncommercial purposes in parishes with a population of 300,000 or less, provided the property owner attends the burning of yard waste at all times. This exception shall not apply in the parish of East Baton Rouge;

2. the burning of trees, brush, grass, or other vegetable matter in any parish having a population of 90,000 or less, provided the location of the burning is not within the territorial limits of a city or town or adjacent to a city or town in such proximity that the ambient air of the city or town will be affected by smoke from the burning;

3. the burning of trees, branches, limbs, or other wood as a bonfire that is specifically authorized by ordinance in the parishes of St. James, St. John the Baptist, or St. Charles;

4. the burning of agricultural by-products in the fields in connection with the planting, harvesting, or processing of agricultural products;

5. the controlled burning of cotton gin agricultural wastes in connection with cotton gin operations;

6. the controlled burning in connection with timber stand management; and

7. the controlled burning of pasture land or marshland in connection with trapping or livestock production.

D. Exceptions to Prohibition against Outdoor Burning. Outdoor burning of waste material or other combustible material may be conducted in the situations enumerated below if no public nuisance is or will be created and if the burning is not prohibited by and is conducted in compliance with other applicable laws and with regulations and orders of governmental entities having jurisdiction, including air control regulations and orders. The authority to conduct outdoor burning under this regulation does not exempt or excuse the person responsible from the consequences of or the damages or injuries resulting from the burning:

1. outdoor burning in connection with the preparation of food;

2. campfires and fires used solely for recreational purposes or for ceremonial occasions;

3. outdoor burning in a rural park or rural recreation area of trees, brush, grass, and other vegetable matter for game management purposes in accordance with practices acceptable to Louisiana Parks and Recreation Commission and Louisiana Wildlife and Fisheries Commission;

4. small fires, by tradesmen and contractors, in such activities as street repair, installation or repair of sewer, water, electric, telephone mains, and services;

5. the operation of contrivances using open flames such as welding torches, blow torches, portable heaters, and other flame making devices;

6. outdoor burning, in other than rural park or rural recreation area, of trees, brush, grass, and other vegetable matter from such area in land clearing and right-of-way maintenance operations if the following conditions are met:

a. prevailing winds at the time of the burning must be away from any city or town, the ambient air of which may be affected by smoke from the burning;

b. the location of the burning must be at least 1,000 feet (305 meters) from any dwelling other than a dwelling or structure located on the property on which the burning is conducted;

c. care must be used to minimize the amount of dirt on the material being burned;

d. heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth which produce unreasonable amounts of smoke may not be burned; nor may these substances be used to start a fire;

e. the burning may be conducted only between the hours of 8 a.m. and 5 p.m. Piles of combustible material should be of such size to allow complete reduction in this time interval; and

f. the burning must be controlled so that a traffic hazard as prohibited by Subsection E of this Section is not created;

7. fire purposely set as a part of an organized program of drills for the training of fire fighting personnel or for testing fire fighting materials or equipment if the following conditions are met:

a. the duration of the burning held to the minimum required for such purposes;

b. the burning is conducted only between the hours of 8 a.m. and 5 p.m.; and

c. the burning is controlled so that a traffic hazard as prohibited by Subsection E of this Section is not created;

8. outdoor burning of waste hydrocarbon products (from petroleum exploration, development or production operations, natural gas processing, such as, but not limited to, basic sediments, oil produced in testing an oil well, and paraffin) may be conducted at the site of origin when it is not practicable to transport the waste products for sale or reclamation, or to dispose of them lawfully in some other manner. In addition, hydrocarbons spilled or lost from pipeline breaks or other transport failure which cannot practicably be recovered or be disposed of lawfully in some other manner may be outdoor burned at the site where the spill occurred or at another appropriate place due to safety considerations. Except when the immediate or continuous burning of hydrocarbon spills is reasonably necessary to abate or eliminate an existing or imminent threat of injury to human life or significant damage to property, the outdoor burning shall be conducted under the following conditions:

a. the location of the burning must not be within or adjacent to a city or town or in such proximity thereto that the ambient air of the city or town may be affected by smoke from the burning;

b. the burning is conducted only between the hours of 8 a.m. and 5 p.m.; and

c. the burning is controlled so that a traffic hazard as prohibited by Subsection E of this Section is not created; and

9. special situations approvable for exemption by the administrative authority prior to initiation of burning operation, as follows:

a. outdoor burning of explosives, pyrophoric, or any other materials where there is no practicable or safe method of disposal;

b. experimental burning for purposes of data gathering and research; and

c. nonrecurring unusual circumstances or any condition not covered above.

E. Traffic Hazards Prohibited. The emission of smoke, suspended particulate matter or uncombined water or any air contaminants or combinations thereof which passes onto or across a public road and creates a traffic hazard by *impairment of visibility*, as defined in LAC 33:III.111, or intensifies an existing traffic hazard condition is prohibited.

F. Exclusion from Application of This Section. Outdoor burning pursuant to and in compliance with the terms of a variance granted by the administrative authority is excluded from the application of this Section.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:1081 (October 1995), LR 24:652 (April 1998).

§1111. Exclusion

Any person claiming exclusion from the application of this Section under this provision shall apply to the administrative authority for exclusion in accordance with R.S. 30:2056 of the act. The applicant shall furnish such information as the administrative authority may reasonably require to enable it to make a determination. The administrative authority may make such determination and apply such conditions as may be appropriate to the activity in question. A person granted an exclusion under this provision may be required to furnish the administrative authority with plans satisfactory to the administrative authority for implementing any reasonable control measures which may be developed or which otherwise become available.

A. Variance. Emissions of smoke pursuant to and in compliance with the terms of a variance granted by the administrative authority.

B. Unpopulated Areas. Emissions of smoke from an activity when the following conditions are met.

1. The source of the emissions is in a relatively unpopulated area of the state.

2. The administrative authority determines it is not technically practicable nor economically reasonable to eliminate the emissions.

C. Water Vapor. Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of LAC 33:III.1101.B of this regulation, LAC 33:III.1101.B will not apply. In addition, emissions already less than that allowed by LAC 33:III.1313.C of these regulations shall be considered by the administrative authority for exemption from the above stated opacity limitation.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

Chapter 13. Emission Standards for Particulate Matter (Including Standards for Some Specific Facilities)

Subchapter A. General

§1301. Emission Standards for Particulate Matter

A. Purpose. The purpose of this Section shall be to limit the quantity of particulate matter emitted.

B. Scope. This Section applies to any operation, process, or activity from which particulate matter is emitted except the wood pulping industry, the primary aluminum industry (horizontal stud Soderberg and prebake processes), and the burning of fuel for indirect heating in which the products of combustion do not come into direct contact with process materials.

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

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

§1303. Provisions Governing Specific Activities

A. Toxic Substances. Substances which are by nature toxic to human or animal life or vegetation may be controlled to more restrictive levels than is required for particulate matter in general.

B. Impairment of Visibility. The emissions which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:1081 (October 1995).

§1305. Control of Fugitive Emissions

A. All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. These precautions shall include but shall not be limited to the following:

1. use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;

3. installation and use of dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. open-bodied trucks transporting materials likely to give rise to airborne dust shall be covered at all times when in motion;

5. conducting agricultural practices such as tilling of land, application of fertilizers and insecticides in such a manner as to prevent dust from becoming airborne;

6. paving roadways and maintaining the roadways in a clean condition;

7. the prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or other means.

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

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

§1307. Degradation of Existing Quality Restricted

A. Emissions whose quality as of the effective date of these regulations is higher than the standards set forth in LAC 33:III.1321, Table 3 and LAC 33:III.1311.B shall be maintained at the higher quality unless it can be affirmatively demonstrated to the department that a change in quality is justifiable and will not be contrary to the guidelines as set forth by these regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§1309. Measurement of Concentrations

A. Method. The methods listed in LAC 33:III.1503.D.2, Table 4 or such equivalent methods as may be approved by the department shall be utilized to determine particulate concentrations in stack gases.

B. Calibration Required. Measurement equipment shall be periodically calibrated to comply with minimal American Bureau of Standards Criteria.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§1311. Emission Limits

A. The process weight rate per hour referred to in this Section shall be based upon the normal operation maximum capacity of the equipment and if such normal maximum capacity should be increased by process or equipment changes, the new normal maximum capacity shall be used as the process weight in determining the allowable emissions.

B. No person shall cause, suffer, allow, or permit the emission of particulate matter to the atmosphere from any process or process equipment in excess of the amount shown in LAC 33:III.1321, Table 3 for the process weight rate allocated to such source. The rate of emission shall be the total of all emission points from the source.

C. The emission of particulate matter from any source other than sources covered under Subsection D of this Section shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity (see LAC 33:III.1503.D.2, Table 4); except the emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

D. Fluid Catalytic Cracking Units. No owner or operator shall discharge or cause the discharge into the atmosphere from any new or existing fluid catalytic cracking unit catalyst regenerator gases exhibiting greater than 30 percent opacity, except for one six-minute average opacity reading in any one-hour period.

E. Emissions already less than that allowed by the process weight rate limitation (LAC 33:III.1321, Table 3) will be considered by the administrative authority for exemption from the above state opacity limitation.

F. When the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this Section, this Section will not apply.

G. Variances. 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 or consider a change in these regulations upon such conditions and with such time limitations as it may prescribe for prevention, control or abatement of air pollution in harmony with the intent of the act. No variance may permit or authorize the maintenance of a nuisance or a danger to public health or safety.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR

14:348 (June 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:720 (June 1997).

Subchapter B. Reserved

Subchapter C. Fuel Burning Equipment

§1313. Emissions from Fuel Burning Equipment

A. Purpose. The purpose of this Subchapter shall be to limit the quantity of particulate matter emitted from fuel burning equipment.

B. Scope. This Subchapter applies to fuel burning installations utilized for the primary purpose of producing steam, hot water, hot air or other indirect heating of liquids, gases, or solids where the products of combustion do not have direct contact with process materials. Fuel includes coal, coke, lignite, coke breeze, fuel oil, wood, or other fuels. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

C. Limitations. No person shall cause, suffer, allow or permit the emission of particulate matter to the atmosphere from any fuel burning equipment in excess of 0.6 pounds per 10^6 Btu of heat input.

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

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

§1315. More Stringent Requirements May Be Prescribed If Particulates Are Toxic

A. The department may prescribe air quality control requirements that are more restrictive and more extensive than provided for in LAC 33:III.1313.C and 1311 if the particulate matter emitted is toxic, or a deleterious substance which may affect human health or well-being or which would cause significant damage to animal or plant life.

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

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

§1317. Exclusions

A. When Variance Is Granted. The following matters are excluded from the application of this Subchapter: Emissions of particulate matter pursuant to and in compliance with the terms of a variance granted by the administrative authority.

B. Applicant Shall Furnish Required Information to the Department of Environmental Quality. Any person claiming exclusion from the application of this Subchapter under this provision shall apply to the administrative authority for exclusion in accordance with R.S. 30:2056. The applicant shall furnish such information as the administrative authority may reasonably require to enable it to make a determination. The administrative authority may make such determination and apply such conditions as may be appropriate to the activity in question. A person granted an exclusion under this provision may be required to furnish the administrative authority with plans satisfactory to the administrative authority for implementing any reasonable control measures which may be developed or which may otherwise become available.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

Subchapter D. Reserved

Subchapter E. Leadened Particulate Matter

§1321. Emission Standards for Leadened Particulate Matter

A. All regulations outlined in LAC 33:III.1301 to 1311 regarding particulate matter also apply to particulate emissions that have any lead component.

Table 3
Allowable Rate of Emissions Based on Process Weight Rate

Process Wgt. Rate		Rate of Emissions
Lbs./Hr.	Tons/Hr.	Lbs./Hr.
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1,000	0.50	2.58
1,500	0.75	3.38
2,000	1.00	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96
4,000	2.00	6.52
5,000	2.50	7.58
6,000	3.00	8.56
7,000	3.50	9.49
8,000	4.00	10.4
9,000	4.50	11.2
10,000	5.00	12.0
12,000	6.00	13.6
16,000	8.00	16.5
18,000	9.00	17.9
20,000	10.00	19.2
30,000	15.00	25.2
40,000	20.00	30.5
50,000	25.00	35.4
60,000	30.00	40.0
70,000	35.00	41.3
80,000	40.00	42.5
90,000	45.00	43.6
100,000	50.00	44.6
120,000	60.00	46.3
140,000	70.00	47.8
160,000	80.00	49.0
200,000	100.00	51.2
1,000,000	500.00	69.0

Table 3 Allowable Rate of Emissions Based on Process Weight Rate		
Process Wgt. Rate		Rate of Emissions
Lbs./Hr.	Tons/Hr.	Lbs./Hr.
2,000,000	1,000.00	77.6
6,000,000	3,000.00	92.7

Interpolation of the data in this table for process weight rates up to 60,000 pounds/hour (lbs/hr) shall be accomplished by use of the equation:

$$E = 4.10(P)^{0.67},$$

and interpolation and extrapolation of the data for process weight rates in excess of 60,000 pounds/hour (lbs/hr) shall be accomplished by use of the equation:

$$E = 55.0(P)^{0.11} - 40$$

where:

E = rate of emission in pounds/hour (lbs/hr) and P equals process weight rate in tons/hour.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

Subchapter F. Abrasive Blasting

§1323. Emissions from Abrasive Blasting

A. Purpose. The purpose of this Subchapter is to reduce particulate matter emissions from facilities that engage in abrasive blasting.

B. Scope. This Subchapter applies to any facility or contractor in the state that engages in or contracts to provide on-site abrasive blasting and that is classified under a Standard Industrial Classification (SIC) Code beginning with 34, 35, or 37 or under SIC Code 1622 or 1721.

C. Compliance. Compliance with these regulations does not eliminate the requirement to comply with any other state or federal regulation or any specific condition of a permit granted by the department.

1. Any new facility that is constructed after promulgation of these regulations shall comply with all of the requirements of this Subchapter before operation may commence.

2. Existing affected facilities shall comply with all of the requirements of this Subchapter as soon as practicable, but no later than one year after promulgation of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:822 (May 2007).

§1325. Definitions

A. Terms used in this Subchapter are defined in LAC 33:III.111 with the exception of the terms specifically defined below.

Abrasive Blasting—the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

Abrasive Blasting Equipment—any equipment utilized in abrasive blasting operations.

Abrasive Material (Abrasives, Abrasive Media)—any material used in abrasive blasting operations including, but not limited to, sand, slag, steel shot/grit, garnet, CO_2, or walnut shells.

Emission Control Equipment—any device or contrivance, operating procedure, or abatement scheme, including, but not limited to, filters, ventilation systems, shrouds, or best management practices, that prevents or reduces the emission of air contaminants from blasting operations.

Enclose—to place tarps, shrouds, or a solid structure on all sides and above an area used for abrasive blasting, or to fully surround a structure to be blasted.

Hydroblasting—abrasive blasting using high-pressure liquid as the propelling force or as the active cleaning agent.

Indoor Abrasive Blasting—abrasive blasting conducted inside of a permanent building equipped with a particulate matter collection system.

Nuisance—any condition of the ambient air beyond the property line of the emission source that is offensive to the senses, or that causes or constitutes an obstruction to the free use of property, so as to unreasonably interfere with the comfortable enjoyment of life or property. In determining whether or not a nuisance exists, the department may consider factors including, but not limited to, the following:

a. the frequency of the emission;

b. the duration of the emission;

c. the intensity and offensiveness of the emission;

d. the number of persons impacted;

e. the extent and character of the detriment to the complainant; and

f. the source's ability to prevent or avoid harm.

Shade Factor—for shrouds, the percent of area impermeable to particles 100 grit or greater, or to sunlight.

Shroud or *Tarp*—a device that is designed to enclose or surround the blasting activity to minimize the atmospheric dispersion of fine particulates and direct that material to a confined area for subsequent removal and disposal.

Surround—to place tarps, shrouds, or a solid structure on all sides of an area used for abrasive blasting.

Wet Abrasive Blasting—abrasive blasting with the addition of water to the air abrasive stream.

Vacuum Blasting—abrasive blasting in which a seal is maintained between the assembly and the blasting surface, thereby allowing the spent abrasive, surface material, and dust to be immediately collected by a vacuum device,

equipped with a high efficiency (at least 95 percent) particulate filtration system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:822 (May 2007).

§1327. Blasting Operations

A. Abrasive Materials and Methods

1. Material derived from hazardous, toxic, medical, and/or municipal waste is prohibited from use as abrasive material.

2. Abrasives shall contain less than 10 percent (by weight) of fines that would pass through a No. 80 sieve as documented by the supplier. If supplier documentation is not provided for weight percent of fines in abrasive material, samples shall be taken according to ASTM standard ASTM D 75-87, reapproved 1992, before initial use.

3. Abrasives shall not be reused for abrasive blasting unless they meet the requirements of Paragraph A.2 of this Section.

B. The following abrasives and blasting methods are exempt from the provisions of Paragraph A.2 of this Section and LAC 33:III.1329.A and F and LAC 33:III.1333.A.4-5:

1. abrasive blasting using iron or steel shot/grit;

2. abrasive blasting using CO_2;

3. hydroblasting or wet abrasive blasting;

4. vacuum blasting; and

5. abrasive blasting using other abrasives, as approved by the department on a case-by-case basis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:822 (May 2007).

§1329. Performance Standard

A. Affected facilities shall either:

1. fully enclose the item, or surround the structure, to be blasted; or

2. prepare and implement a best management practices (BMP) plan as described in LAC 33:III.1331.

B. Blast cabinet exhaust shall be re-circulated to the cabinet or vented to emission control equipment.

C. If tarps are used to confine emissions due to abrasive blasting, the tarps shall:

1. have overlapping seams to prevent leakage of particulate matter;

2. have a shade factor of 80 percent or greater; and

3. be repaired prior to use if any single tear greater than 1 foot in length is present or if tears greater than 6 inches in length each are present.

D. If blasting is performed in a permanent building with a particulate matter collection system, the collection system shall be exhausted through effective control equipment with a particulate matter outlet grain loading of 0.05 gr/dscf or less, as documented by the control equipment manufacturer or demonstrated by performance testing.

E. When abrasive blasting is performed over waters of the state, blasting material or visible floating solids shall be prevented from reaching waters of the state or minimized to the maximum extent possible as specified in the facility and/or activity BMP or in accordance with the LPDES permit program.

F. Abrasive blasting activities shall not create a nuisance.

G. The facility shall maintain stockpiles of new and/or spent abrasive material in a manner that will minimize fugitive airborne emissions. Measures to minimize emissions shall include, but not be limited to, the following:

1. covering stockpiled material;

2. wetting stockpiled material; or

3. keeping stockpiled material in containers.

H. All emission control equipment shall be used and diligently maintained in proper working order according to the manufacturer's specifications whenever any emissions are being generated that can be controlled by the facility, even if the ambient air quality standards in affected areas are not exceeded.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:823 (May 2007).

§1331. Best Management Practices (BMP) Plans

A. Facilities that decide to use a BMP plan to comply with this Subchapter shall comply with all the requirements of this Section.

B. A complete copy of the BMP plan shall be kept at the facility and be made available to authorized representatives of the department upon request. Plans need not be submitted to the department unless requested by an authorized representative of the department.

C. Each facility shall have a designated person who is accountable for the implementation and effectiveness of the BMP plan.

D. Amendment of BMP Plan

1. After review of the plan, the department may require the owner/operator of the facility to amend the plan if the plan does not prevent nuisances and/or adverse off-site impacts.

2. The plan shall be amended whenever physical or operational modification of the facility renders the existing plan inadequate. The amendment shall be implemented prior to or concurrent with the facility modification.

E. Periodic Review of BMP Plan. The owner/operator of a facility shall review the plan every three years to determine if the plan adequately reduces nuisances and adverse off-site impacts. If it is determined that the plan is not adequate, the plan shall be amended within 90 days of the review to include more effective emission prevention and control technology.

F. Contents of BMP Plan. The BMP plan shall be prepared in accordance with sound engineering practices and must be site-specific. The plan information shall be presented in the following sequence:

1. the name, mailing address, and location of the facility;

2. the name of the operator of the facility;

3. the date and year of initial facility operation;

4. a description of the facility, including an indication of any nearby recreational areas, residences, or other structures not owned or used solely by the facility, and their distances and directions from the facility;

5. a description of any nearby waters of the state that may be affected, their distances and directions from the facility, and how emissions to those waters will be prevented or minimized;

6. a statement of the facility's procedures for preventing nuisances and/or adverse off-site impacts, including a description of any emission control equipment;

7. a statement of the facility's capability and procedures for taking corrective actions and/or countermeasures when nuisances and/or adverse off-site impacts occur;

8. written procedures for self-monitoring and self-inspection of the facility;

9. personnel training records as required by this Subchapter; and

10. signatures of responsible officials.

G. Provisions for personnel training shall be included in the BMP plan as follows.

1. Any employee and/or contractor conducting abrasive blasting shall be trained on proper abrasive blasting methods, proper handling of abrasive and spent material and floatable solids, the facility's plan, and good housekeeping practices for the facility.

2. Employees and contractors shall receive training pertaining to the plan at least once a year or when significant changes are made to the plan that affect their activities.

3. Employees, contractors, and customer representatives shall be instructed not to dispose of abrasive, spent, or floatable materials to air and water bodies or to drains, drainage channels, or trenches that lead to water bodies.

4. Contractors shall be notified of and required to perform in accordance with the provisions of the plan applicable to activities related to their contract.

H. Inspections and Records

1. The BMP plan shall be reviewed every three years to ensure that the plan meets the requirements of this Subchapter. Records of this review shall be signed or initialed by the person conducting the review, and an appropriate supervisor or the facility designee, and shall be retained for a minimum of three years.

2. In addition to other recordkeeping and reporting requirements of this Section, the following records should be maintained on the facility premises:

a. self-inspection reports prepared in accordance with Paragraph F.8 of this Section;

b. documentation of employee and contractor training, including dates, subjects, and hours of training and a list of attendees with signatures.

I. Verification by the Department. Facilities to which this Subchapter applies may be inspected by an authorized representative of the department to ensure implementation and adequacy of the facility's BMP plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:823 (May 2007).

§1333. Recordkeeping and Reporting

A. The facility owner/operator shall maintain the following records on the facility premises at all times, and present them to an authorized representative of the department upon request:

1. permit application approval records and the facility's permit to construct/operate, where applicable;

2. a description of the type of *emission control equipment*, as defined in LAC 33:III.1325, employed at the facility;

3. descriptions and diagrams showing the locations of blasting operations on-site;

4. a monthly record of abrasive material usage, including:

a. for new material, weight percent of fines in abrasive material *per* the manufacturer;

b. if abrasive material is being reused, weight percent of fines as determined by sampling. For the purpose of determining weight percent of fines in abrasive material, samples shall be taken according to ASTM standard ASTM D 75-87, reapproved 1992;

5. applicable results, and data derived from results, of containment, ventilation, air, soil, fines, and other monitoring activities;

6. records of how spent material is handled, recycled, reused, or disposed of, including the names of, and any manifests or receipts from, any off-site facilities that accept the spent material; and

7. for abrasive blasting that is performed outside of a full enclosure or a blast cabinet, the following:

a. visual observations of particulate matter emissions, recorded at commencement of, and prior to ending of, operations less than four hours in duration, and every four hours for operations greater than four hours in duration;

b. observations of wind direction, recorded simultaneously with the observations required in Subparagraph A.7.a of this Section;

c. a daily record of actual operating times when such blasting is performed, based on a 24-hour clock.

B. Records required by this Subchapter or any BMP plan used to attain compliance with this Subchapter shall be maintained on a 36-month rolling basis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:824 (May 2007).

Chapter 14. Conformity

Subchapter A. Determining Conformity of General Federal Actions to State or Federal Implementation Plans

§1401. Purpose

A. The purpose of this Subchapter is to implement 40 CFR Part 51, Subpart W to fulfill requirements of Section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.), with respect to the conformity of general federal actions to the applicable state implementation plan(s) (SIPs). This rule sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such actions to the applicable SIPs.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1268 (November 1994).

§1402. Scope

A. The conformity provisions of this Subchapter shall apply in all criteria pollutant nonattainment and maintenance areas and shall apply to all federal action as defined and required in this Subchapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1268 (November 1994).

§1403. Prohibition

A. No department, agency, or instrumentality of the federal government shall engage in, support in any way, provide financial assistance for, license, permit, or approve any activity which does not conform to an applicable implementation plan.

B. A federal agency must make a determination that a federal action conforms to the applicable implementation plan in accordance with the requirements of this Subchapter before the action is taken.

C. Subsection B of this Section does not include federal actions where conditions in either Paragraph C.1 or 2 of this Section are met:

1. a National Environmental Policy Act (NEPA) analysis was completed as evidenced by a final environmental assessment (EA), environmental impact statement (EIS), or finding of no significant impact (FONSI) that was prepared prior to January 31, 1994; or

2. prior to January 31, 1994, an EA was commenced or a contract was awarded to develop the specific environmental analysis; sufficient environmental analysis is completed by March 15, 1994, so that the federal agency may determine that the federal action is in conformity with the specific requirements and the purposes of the applicable SIP in accordance with the federal agency's affirmative obligation under Section 176(c) of the CAA; and a written determination of conformity under Section 176(c) of the CAA has been made as of March 15, 1994, by the federal agency responsible for the federal action.

D. Notwithstanding any provision of this Subchapter, a determination that an action is exempt, is in conformance, or is presumed to conform with the applicable implementation plan does not exempt the action from any other requirements of the applicable implementation plan, the NEPA, the CAA, or any facility reporting, testing, monitoring, permitting, and fee requirements of LAC 33:III.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1268 (November 1994).

§1404. Definitions

A. Terms used, but not defined in this part, shall have the meaning given them by the CAA and LAC 33:III, in that order of priority.

Affected Federal Land Manager—the federal agency or the federal official charged with direct responsibility for management of an area designated as Class I under 42 U.S.C. 7472 of the CAA that is located within 100 km of the proposed federal action.

Applicable Implementation Plan or *Applicable SIP*—the portion(s) of the Louisiana SIP or most recent revision thereof, which has been approved under Section 110 of the CAA, or promulgated under Section 110(c) of the CAA (federal implementation plan), or promulgated or approved pursuant to regulations promulgated under Section 301(d) of the CAA and which implements the relevant requirements of the CAA.

Areawide Air Quality Modeling Analysis—an assessment on a scale that includes the entire nonattainment or maintenance area which uses an air quality dispersion model to determine the effects of emissions on air quality.

CAA—Clean Air Act as amended, 1990.

Cause or Contribute to a New Violation—a federal action that:

a. causes a new violation of a national ambient air quality standard (NAAQS) at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard during the future period in question if the federal action were not taken; or

b. contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation.

Caused By (as used in the terms *direct emissions* and *indirect emissions*)—emissions that would not otherwise occur in the absence of the federal action.

Criteria Pollutant or *Standard*—any pollutant for which there is established a NAAQS at 40 CFR Part 50.

Department—the Department of Environmental Quality.

Direct Emissions—those emissions of a criteria pollutant or its precursors that are caused or initiated by the federal action and occur at the same time and place as the action.

Emergency—a situation where extremely quick action on the part of the federal agencies involved is needed to respond to a crisis and where the timing of such federal activities makes it impractical to meet the requirements of this rule, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts, and military mobilizations.

Emission Offsets—measures which reduce emissions and are quantifiable, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable under both state and federal law, and permanent within the time frame specified by the applicable SIP.

Emissions Budgets—those portions of the total allowable emissions defined in the applicable implementation plan for a certain period for the purpose of meeting reasonable further progress milestones or demonstrating attainment or maintenance, for any criteria pollutant or its precursors, allocated by the applicable implementation plan to mobile sources, stationary sources, area sources, or any class source or subcategory source established within those projected emissions inventories.

Emissions That a Federal Agency Has a Continuing Program Responsibility for—emissions that are specifically caused by an agency carrying out its authorities, but does not include emissions that occur due to subsequent activities, unless such activities are required by the federal agency; and where an agency, in performing its normal program responsibilities, takes actions itself or imposes conditions that result in air pollutant emissions by a nonfederal entity taking subsequent actions.

Facility—all emission points, and fugitive, area, and mobile emission sources under common control on contiguous property.

Federal Action—any activity engaged in by a department, agency, or instrumentality of the federal government, or any activity that a department, agency, or instrumentality of the federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.). Where the *federal action* is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval.

Federal Agency—a federal department, agency, or instrumentality of the federal government.

Increase the Frequency or Severity of Any Existing Violation of Any Standard in Any Area—to cause a nonattainment area to exceed a standard more often or to cause a violation at a greater concentration than previously existed and/or would otherwise exist during the future period in question, if the project were not implemented.

Indirect Emissions—those emissions of a criteria pollutant or its precursors that:

a. are caused by the federal action, but may occur later in time and/or may be farther removed in distance from the action itself, but are still reasonably foreseeable; and

b. the federal agency can practicably control and will maintain control over due to a continuing program responsibility of the federal agency, including:

i. on-site traffic activity and traffic to and from a proposed facility which is related to increases or other changes in the scale or timing of operations of such facility;

ii. emissions related to the activities of employees of contractors or federal employees;

iii. emissions offsets related to employee commutation and similar programs to increase average vehicle occupancy imposed on all employers of a certain size in the locality;

iv. emissions related to the use of federal facilities under lease or temporary permit; and

v. emissions related to the activities of contractors or leaseholders that may be addressed by provisions that are usual and customary for contracts or leases or are within the scope of contractual protection of the interests of the United States.

Local Air Quality Modeling Analysis—an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area (including, for example, congested roadway intersections and highways or transit terminals) which uses an air quality dispersion model to determine the effects of emissions on air quality.

Maintenance Area—an area with a maintenance plan approved under Section 175(a) of the CAA.

Maintenance Plan—a revision to the applicable SIP which meets the requirements of Section 175(a) of the CAA.

Metropolitan Planning Organization (MPO)—that organization designated as being responsible, together with the state, for conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607.

Milestone—an emissions level and the date on which it is required to be achieved under Sections 182(g)(1) and 189(c)(1) of the CAA.

National Ambient Air Quality Standards (NAAQS)—those standards established pursuant to Section 109 of the CAA, including standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone, particulate matter (PM_{10}), and sulfur dioxide (SO_2).

NEPA—the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.).

Nonattainment Area (NAA)—a geographic area of the United States designated as nonattainment under Section 107 of the CAA and described in 40 CFR Part 81.

Precursors of a Criteria Pollutant—

a. for ozone: nitrogen oxides (NO_x), unless an area is exempted from NO_x requirements under Section 182(f) of the CAA, and volatile organic compounds (VOC); and

b. for PM_{10}: those pollutants described in the PM_{10} nonattainment area applicable SIP as significant contributors to the PM_{10} levels.

Reasonably Foreseeable Emissions—projected future indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known to the extent that the impact of such emissions can be determined; and the emissions are quantifiable, as described and documented by the federal agency based on its own information and after reviewing any information presented to the federal agency.

Regional Water and/or Wastewater Project—includes construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area.

Regionally Significant Action—a federal action for which the direct and indirect emissions of any pollutant represent 10 percent or more of a nonattainment or maintenance area's emissions inventory for that pollutant.

Total of Direct and Indirect Emissions—the sum of direct and indirect emissions increases and decreases of criteria pollutant and precursor caused by federal action, inclusive of all emissions known or reasonably foreseeable at the time the emissions level is calculated (i.e., the net emissions considering all direct and indirect emissions). Emissions which are exempt or presumed to conform under LAC 33:III.1405.C, D, E, or F, except as provided in LAC 33:III.1405.J, are not subject to the requirements of LAC 33:III.1410 and are not included in the net emissions from federal action which must be determined in conformity with the applicable SIP emissions budget. Segmentation of projects for determining emissions presumed to conform actions, and for conformity analyses is not permitted.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1269 (November 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2451 (November 2000).

§1405. Applicability

A. Conformity determinations for federal actions related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must meet the procedures and criteria of LAC 33:III.Chapter 14.Subchapter B, in lieu of the procedures set forth in this Subchapter.

B. For federal actions not covered by Subsection A of this Section, a conformity determination under this Subchapter is required for each criteria pollutant where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a federal action would equal or exceed any of the rates in Paragraph B.1 or 2 of this Section. Emissions from federal actions must be determined using methods described in LAC 33:III.1411.

1. The following rates apply in nonattainment areas (NAAs).

Criteria Pollutants	Tons/Year
Ozone (VOCs or NO_x)	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other ozone NAAs outside an ozone transport region	100
Marginal and moderate NAAs inside an ozone transport region	
VOC	50
NO_x	100
Carbon Monoxide	
All NAAs	100
SO_2 or NO_2	

Criteria Pollutants	Tons/Year
All NAAs	100
PM_{10}	
Moderate NAAs	100
Serious NAAs	70
Pb	
All NAAs	25

2. The following rates apply in maintenance areas.

Criteria Pollutants	Tons/Year
Ozone (NO_x), SO_2 or NO_2	
All Maintenance Areas	100
Ozone (VOCs)	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon Monoxide	
All maintenance areas	100
PM_{10}	
All maintenance areas	100
Pb	
All maintenance areas	25

C. The requirements of this Subchapter shall not apply to:

1. actions where the total of direct and indirect emissions are below the emissions levels specified in Subsection B of this Section;

2. the following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:

a. judicial and legislative proceedings;

b. continuing and recurring activities, such as permit renewals, where activities conducted will be similar in scope and operation to activities currently being conducted;

c. rulemaking and policy development and issuance;

d. routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities;

e. civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel;

f. administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties, and fees;

g. routine, recurring transportation of material and personnel;

h. routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and/or for repair or overhaul;

i. maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site;

j. actions, with respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands, such as the following examples: relocation of personnel; disposition of federally-owned existing structures, properties, facilities, and lands; rent subsidies, operation and maintenance cost subsidies; the exercise of receivership or conservatorship authority; and assistance in purchasing structures;

k. granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted;

l. planning, studies, and provision of technical assistance;

m. routine operation of facilities, mobile assets, and equipment;

n. transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer;

o. designation of empowerment zones, enterprise communities, or viticultural areas;

p. actions by any of the federal banking agencies or the federal reserve banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency, or instrumentality of the United States;

q. actions by the Board of Governors of the federal reserve system or any federal reserve bank to effect monetary or exchange rate policy;

r. actions that implement a foreign affairs function of the United States;

s. actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and where the federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties;

t. transfers of real property, including land, facilities, and related personal property from a federal entity to another federal entity and assignments of real property,

including land, facilities, and related personal property from a federal entity to another federal entity for subsequent deeding to eligible applicants; and

u. actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States;

3. the following actions where the emissions are not reasonably foreseeable:

a. initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level; and

b. electric power marketing activities that involve the acquisition, sale, and transmission of electric energy; and

4. individual actions which implement a decision to conduct or carry out a program that has been found to conform to the applicable implementation plan, such as prescribed burning actions which are consistent with a conforming land management plan that has been found to conform to the applicable implementation plan.

D. Notwithstanding the other requirements of this Subchapter, a conformity determination is not required for the following federal actions (or portion thereof):

1. the portion of an action that includes major new or modified stationary sources that require a permit under the new source review (NSR) program (Section 173 of the CAA) or the prevention of significant deterioration (PSD) program (Title I, Part C of the CAA);

2. actions in response to emergencies or natural disasters such as hurricanes, earthquakes, etc., which are commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of Subsection E of this Section;

3. research, investigations, studies, demonstrations, or training where no environmental detriment is incurred and/or the particular action furthers air quality research, as determined by the department primarily responsible for the applicable SIP;

4. alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (e.g., hush houses for aircraft engines and scrubbers for air emissions); and

5. direct emissions from remedial and removal actions carried out under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated regulations to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.

E. Federal actions which are part of a continuing response to an emergency or disaster under Paragraph D.2 of this Section and which are to be taken more than six months after the commencement of the response to the emergency or disaster under Paragraph D.2 of this Section are exempt from the requirements of this Subchapter only if:

1. the federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional six months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests, and foreign policy commitments; or

2. for actions which are to be taken after those actions covered by Paragraph E.1 of this Section, the federal agency makes a new determination as provided in Paragraph E.1 of this Section.

F. Notwithstanding other requirements of this Subchapter, actions specified by individual federal agencies that have met the criteria set forth in either Paragraph G.1, 2, or 3 of this Section and when the procedures set forth in Subsection H of this Section have been met are presumed to conform, except as provided in Subsection J of this Section.

G. The federal agency must meet the criteria for establishing classes of action that are presumed to conform by fulfilling the requirements set forth in either Paragraph G.1 or 2 of this Section. Federal agencies, in accordance with Paragraph G.1 or 2 of this Section, may establish classes of action as presumed to conform and not subject to the requirements of LAC 33:III.1410; and may in accordance with Paragraph G.3 of this Section, specify future individual actions as presumed to conform when the individual actions are similar in design and scope to the type of activity upon which the class of action was established.

1. The federal agency must demonstrate, using methods consistent with these regulations that the total of direct and indirect emissions from the class of action which would be presumed to conform would not:

a. cause or contribute to any new violation of any standard in any area;

b. interfere with provisions in the applicable SIP for maintenance of any standard;

c. increase the frequency or severity of any existing violation of any standard in any area; or

d. delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including, where applicable, emission levels specified in the applicable SIP for purposes of:

i. a demonstration of reasonable further progress;

ii. a demonstration of attainment; or

iii. a maintenance plan.

2. The federal agency must provide documentation that the total of direct and indirect emissions from such future actions would be below the emission rates for a conformity determination that are established in Subsection B of this Section based, for example, on actions similar in design and scope taken over recent years.

3. Future individual actions which are specified by an individual federal agency as presumed to conform based on that action being similar in design and scope to a presumed to conform class of action established in accordance with Paragraph G.1 or 2 of this Section are subject to the requirements of Subsections H and J of this Section, and must operate at or below the emissions levels established in the associated class of action presumed to conform.

H. In addition to meeting the criteria for establishing presumed to conform actions set forth in Paragraph G.1, 2 or 3 of this Section, the following procedures must also be complied with to presume that actions will conform:

1. the federal agency must identify, through publication in the *Federal Register*, its list of proposed actions that are presumed to conform and the analyses, assumptions, emission factors, and criteria used as the basis for the presumptions;

2. the federal agency must give direct notice of proposed presumed to conform actions and the basis for the presumptions to the EPA Region 6 Office, the department, local air quality agencies and, where applicable, the MPO; and provide at least 30 days prior to publishing the final list of such actions for the agencies notified and the public to comment on the list of proposed actions presumed to conform;

3. the federal agency must document its response to all the comments received and make the comments, response, and final list of actions available to the public upon request; and

4. the federal agency must publish the final list of such actions in the *Federal Register*.

I. Notwithstanding the other requirements of this Subchapter, when the total of direct and indirect emissions of any pollutant from a federal action does not equal or exceed the rates specified in Subsection B of this Section, and the federal action is regionally significant, the requirements of LAC 33:III.1403 and 1407-1412 shall apply.

J. Where an action otherwise presumed to conform under Subsection F of this Section is a regionally significant action or does not, in fact, meet one of the criteria in Paragraph G.1 of this Section, that action shall not be presumed to conform and the requirements of LAC 33:III.1403 and 1407-1412 shall apply for the federal action.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1270 (November 1994), amended LR 23:720 (June 1997).

§1406. Conformity Analysis

A. Any federal department, agency, or instrumentality of the federal government taking an action subject to this Subchapter must make its own conformity determination consistent with the requirements of this Subchapter. In making its conformity determination, a federal agency must consider comments from any interested parties. Where multiple federal agencies have jurisdiction for various aspects of a project, a federal agency may choose to adopt the analysis of another federal agency (to the extent the proposed action and impacts analyzed are the same as the project for which a conformity determination is required) or develop its own analysis in order to make its conformity determination. Any analysis adopted must include all known facility emissions associated with the action.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1273 (November 1994).

§1407. Reporting Requirements

A. A federal agency making a conformity determination under LAC 33:III.1410 must provide to the department, the EPA Region 6 Office, local air quality agencies and, where applicable, affected federal land managers, and the MPO a direct notice 30 days prior to final adoption of the conformity determination, which describes the proposed action and the federal agency's draft conformity determination on the action in sufficient detail to demonstrate that criteria and procedures required in LAC 33:III.1410-1412 are applied.

B. A federal agency must give direct notification to the department, the EPA Region 6 Office, local air quality agencies and, where applicable, affected federal land managers, and the MPO within 30 days after making a final conformity determination under LAC 33:III.1410.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1273 (November 1994).

§1408. Public Participation

A. Upon request by any person regarding a specific federal action, a federal agency must make available for review its draft conformity determination under LAC 33:III.1410 with supporting materials which describe the analytical methods, assumptions, and conclusions relied upon in making the applicability analysis and draft conformity determination.

B. A federal agency must make public its draft conformity determination under LAC 33:III.1410 by placing a notice by prominent advertisement in the official state journal (daily newspaper so designated) and by providing 30 days for written public comment prior to taking any formal action on the draft determination. This comment period may be concurrent with any other public involvement, such as occurs in the NEPA process.

C. A federal agency must document its response to all the comments received on its draft conformity determination under LAC 33:III.1410 and make the comments and responses available, upon request by any person regarding a specific federal action, within 30 days of the final conformity determination.

D. A federal agency must make public its final conformity determination under LAC 33:III.1410 for a federal action by placing a notice by prominent advertisement in the official state journal (a daily newspaper so designated) within 30 days of the final conformity determination.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1273 (November 1994).

§1409. Frequency of Conformity Determinations

A. The conformity status of a federal action automatically lapses five years from the date its final conformity determination is reported under LAC 33:III.1407, unless the federal action has been completed or a continuous program has been commenced to implement that federal action within a reasonable time.

B. Ongoing federal activities at a given site showing continuous progress are not new actions and do not require periodic redetermination so long as the emissions associated with such activities are within the scope of the final conformity determination reported under LAC 33:III.1407.

C. A new conformity determination is required if, after the conformity determination is made, the federal action is changed so that there is an increase in the total of direct and indirect emissions and the new net emissions are above the levels in LAC 33:III.1405.B.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1274 (November 1994).

§1410. Criteria for Determining Conformity of General Federal Actions

A. An action required under LAC 33:III.1405 to have a conformity determination for a specific pollutant will be determined to conform to the applicable SIP if, for each pollutant that equals or exceeds the rates in LAC 33:III.1405.B or otherwise requires a conformity determination due to the total of direct and indirect emissions from the action, the action meets the requirements of Subsection C of this Section and meets any of the following requirements:

1. for any criteria pollutant, the total of direct and indirect emissions from the action are specifically identified and accounted for in the applicable SIP's attainment or maintenance demonstration;

2. for ozone or nitrogen dioxide, the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area through a revision to the applicable SIP or a measure similarly enforceable under state and federal law that effects emission offsets so that there is no net increase in emissions of that pollutant;

3. for any criteria pollutant, except ozone and nitrogen dioxide, the total of direct and indirect emissions from the action meet the requirements:

a. specified in Subsection B of this Section, based on areawide air quality modeling analysis and local air quality modeling analysis; or

b. meet the requirements of Paragraph A.5 of this Section and, for local air quality modeling analysis, the requirement of Subsection B of this Section;

4. for CO or PM_{10}:

a. where the department determines that an areawide air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in Subsection B of this Section based on local air quality modeling analysis; or

b. where the department determines that an areawide air quality modeling analysis is appropriate and that a local air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in Subsection B of this Section based on areawide modeling or meet the requirements of Paragraph A.5 of this Section; or

5. for ozone or nitrogen dioxide and for purposes of Subparagraphs A.3.b and 4.b of this Section, each portion of the action or the action as a whole meets any of the following requirements:

a. where EPA has approved a revision to an area's attainment or maintenance demonstration after 1990 and the department makes a determination as provided in Clause A.5.a.i of this Section or where the state makes a commitment as provided in Clause A.5.a.ii of this Section:

i. the total of direct and indirect emissions from the action (or portion thereof) is determined and documented by the department to result in a level of emissions that, together with all other emissions in the nonattainment or maintenance area, would not exceed the emissions budgets specified in the applicable SIP. As a matter of policy, should the department make such determination or commitment, the federal agency must provide to the Office of Environmental Assessment information on all known projects or other actions that may affect air quality or emissions in any area to which this rule is applicable, regardless of whether such project or action is determined to be subject to this rule under LAC 33:III.1405. The department may charge the federal agency requesting such determination a reasonable fee based on the number of manhours required to perform and document the determination; or

ii. the total of direct and indirect emissions from the action (or portion thereof) is determined by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would exceed an emissions budget specified in the applicable SIP and the governor or the governor's designee for SIP actions makes a written commitment to EPA which includes the following:

(a). a specific schedule for adoption and submittal of a SIP revision which provides that the needed emission offsets would be achieved prior to the time emissions from the federal action would occur;

(b). identification of specific measures for incorporation into the SIP which would result in a level of emissions which, together with all other emissions in the nonattainment or maintenance area would not exceed any emissions budget specified in the applicable SIP;

(c). a demonstration that all existing applicable SIP requirements are being implemented in the area for the pollutants affected by the federal action and that local authority to implement additional requirements has been fully pursued;

(d). a determination that the responsible federal agencies have required all reasonable mitigation measures associated with their action, such as mitigation measures available through the SIP regulating banking of emission credits; and

(e). written documentation including all air quality analyses supporting the conformity determination;

iii. where a federal agency made a conformity determination based on a state commitment under Clause A.5.a.ii of this Section, such a state commitment is automatically deemed a call for a SIP revision by EPA under Section 110(k)(5) of the CAA, effective on the date of the federal conformity determination and requiring response within 18 months or any shorter time within which the state commits to revise the applicable SIP;

b. the action (or portion thereof), as determined by the MPO, is specifically included in a current transportation plan and transportation improvement program which have been found to conform to the applicable SIP under LAC 33:III.Chapter 14.Subchapter B, or 40 CFR Part 93, Subpart A;

c. emissions from the action (or portion thereof) are fully offset within the same nonattainment or maintenance area through a revision to the applicable SIP or an equally enforceable measure that effects emission offsets equal to or greater than the total of direct and indirect emissions from the action so that there is no net increase in emissions of that pollutant;

d. where EPA has not approved a revision to the relevant SIP attainment or maintenance demonstration since 1990, the total of direct and indirect emissions from the action for the future years [described in LAC 33:III.1411.D] do not increase emissions with respect to the baseline emissions and the baseline emissions:

i. reflect the historical activity levels that occurred in the geographic area affected by the proposed federal action during:

(a). calendar year 1990;

(b). the calendar year that is the basis for the classification (or, where the classification is based on multiple years, the year that is most representative in terms of the level of activity associated with emissions), if a classification is promulgated in 40 CFR Part 81; or

(c). the year of the baseline inventory in the applicable PM_{10} SIP;

ii. are the total of direct and indirect emissions calculated for the future years [described in LAC 33:III.1411.D] using the historic activity levels [described in Clause A.5.d.i of this Section] and appropriate emission factors for the future years; or

e. where the action involves regional water and/or wastewater projects, such projects are sized to meet only the needs of population projections that are in the applicable SIP.

B. The areawide and/or local air quality modeling analyses must:

1. meet the requirements in LAC 33:III.1411; and

2. show that the action does not:

a. cause or contribute to any new violation of any standard in any area; or

b. increase the frequency or severity of any existing violation of any standard in any area.

C. Notwithstanding any other requirements of this Section, an action subject to this Subchapter may not be determined to conform to the applicable SIP unless the total of direct and indirect emissions from the action is in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP, such as elements identified as part of the reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements.

D. Any analyses required under this Section must be completed and any mitigation requirements necessary for a finding of conformity must be identified and committed to in compliance with LAC 33:III.1412.B and F before the determination of conformity is made.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1274 (November 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2451 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2438 (October 2005), LR 33:2084 (October 2007).

§1411. Procedures for Conformity Determinations of General Federal Actions

A. The analyses required under this Subchapter must be based on the latest planning assumptions.

1. All planning assumptions must be derived from the estimates of population, employment, travel, and congestion most recently approved by the MPO or state agency authorized to make such estimates where available.

2. Any revisions to these estimates used as part of the conformity determination, including projected shifts in geographic location or level of population, employment, travel, and congestion, must be approved by the MPO or state agency authorized to make such estimates for the area.

B. The analyses required under this Subchapter must be based on the latest and most accurate emission estimation techniques available as described below, unless such techniques are inappropriate. If such techniques are inappropriate and written approval of the EPA regional administrator is obtained for any modification or substitution, they may be modified or another technique substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program.

1. For motor vehicle emissions, the most current version of the motor vehicle emissions model specified by EPA and available for use in the preparation or revision of SIPs in the state must be used for the conformity analysis as specified below:

a. the EPA must publish in the *Federal Register* a notice of availability of any new motor vehicle emissions model; and

b. a grace period of three months shall apply during which the motor vehicle emissions model previously specified by EPA as the most current version may be used. Conformity analyses for which the analysis was begun during the grace period or no more than three years before the *Federal Register* notice of availability of the latest emission model may continue to use the previous version of the model specified by EPA.

2. For nonmotor vehicle sources, including stationary and area source emissions, the latest emission factors specified by EPA in the "Compilation of Air Pollutant Emission Factors (AP-42)" must be used for the conformity analysis unless more accurate emission data are available, such as actual stack test data from stationary sources which are part of the conformity analysis.

C. The air quality modeling analyses required under this Subchapter must be based on the applicable air quality models, data bases, and other requirements specified in the most recent version of the "Guideline on Air Quality Models (Revised)" (1986), including supplements (EPA publication Number 450/2-78-027R), unless:

1. the guideline techniques are inappropriate, in which case the model may be modified or another model substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program; and

2. written approval of the EPA regional administrator is obtained for any modification or substitution.

D. The analyses required under this Subchapter, except LAC 33:III.1410.A.1, must be based on the total of direct and indirect emissions from the action and must reflect emission scenarios that are expected to occur under each of the following cases:

1. the CAA-mandated attainment year or, if applicable, the farthest year for which emissions are projected in the maintenance plan;

2. the year during which the total of direct and indirect emissions from the action is expected to be the greatest on an annual basis; and

3. any year for which the applicable SIP specifies an emissions budget.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1275 (November 1994).

§1412. Mitigation of Air Quality Impacts

A. Any measures that are intended to mitigate air quality impacts must be identified [including the identification and quantification of all emission offsets claimed] and the process for implementation [including any necessary funding of such measures and tracking of such emission reductions] and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation.

B. Prior to determining that a federal action is in conformity, the federal agency making the conformity determination must obtain written commitments to mitigate from the appropriate persons or agencies who will implement mitigation measures which are identified as conditions for making conformity determinations, including mitigation measures that the federal agency making the conformity determination must itself implement as a condition for making the conformity determination. Such written commitment shall describe such mitigation measures and the nature of the commitment in a manner consistent with Subsection A of this Section.

C. Persons or agencies voluntarily committing to mitigation measures to facilitate positive conformity determinations must comply with the obligations of such commitments.

D. In instances where the federal agency is licensing, permitting, or otherwise approving the action of another governmental or private entity, approval by the federal agency must be conditioned on the committing entity meeting the mitigation measures set forth in the conformity determination as provided in Subsection A of this Section.

E. When necessary because of changed circumstances and if permissible by the state and federal law regulating the original mitigation, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination in accordance with LAC 33:III.1410-1412. Any proposed change in the mitigation measures is subject to the reporting requirements of LAC 33:III.1407 and the public participation requirements of LAC 33:III.1408.

F. Written commitments to mitigation measures must be obtained prior to a positive conformity determination and such commitments must be fulfilled.

G. After the department revises its SIP to adopt its general conformity rules and EPA approves that SIP revision, any agreements, including mitigation measures, necessary for a conformity determination will be both state and federally enforceable. Enforceability through the applicable SIP will apply to all persons who agree to mitigate direct and indirect emissions associated with a federal action for a conformity determination.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1276 (November 1994).

§1413. Departmental Review

A. When notified by the federal agency of action that would be presumed to conform or when notified of a proposed conformity determination, the department will review documentation, clarify information, and provide written comments as appropriate to ensure accountability of federal actions.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1276 (November 1994).

§1414. Enforcement Provisions

A. Any person(s) regulated by this Subchapter, including any person(s) who voluntarily commit to mitigate measures for emissions offsets to federal actions and who fail to comply with the requirements of this Subchapter shall be subject to enforcement provisions under R.S. 30:2025.

B. Failure to comply with any requirement of this Subchapter shall be subject to enforcement under the provisions of R.S. 30:2025.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1276 (November 1994).

§1415. Savings Provision

A. The federal conformity rules under 40 CFR Part 93, Subpart A establish the conformity criteria and procedures necessary to meet the requirements of the CAA, Section 176(c), until such time that this conformity implementation plan revision is approved by EPA. Following EPA approval of this revision to the applicable implementation plan (or a portion thereof), the approved (or approved portion of) state criteria and procedures would govern conformity determinations; and the federal conformity regulations contained in 40 CFR Part 93 would apply only for the portion, if any, of the state's conformity provisions that is not approved by EPA.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1276 (November 1994).

Subchapter B. Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded, or Approved under Title 23 U.S.C. or the Federal Transit Act

§1431. Purpose

A. The purpose of this regulation is to implement Section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.), the related requirements of 23 U.S.C. 109(j), and regulations under 40 *Code of Federal Regulations* (CFR) Part 93, Subpart A with respect to the conformity of transportation plans, programs, and projects that are developed, funded, or approved by the United States Department of Transportation (DOT) and by metropolitan planning organizations (MPOs) or other recipients of funds under Title 23 U.S.C. or the Federal Transit Laws (49 U.S.C Chapter 53). This regulation sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such activities to applicable implementation plans developed according to Section 110 and Part D of the CAA.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1278 (November 1994), amended LR 24:1684 (September 1998).

§1432. Incorporation by Reference

A. 40 CFR Part 93, Subpart A, July 1, 2005, is hereby incorporated by reference with the exclusion of Section 105.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 24:1280 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 29:697 (May 2003), LR 30:1009 (May 2004), amended by the Office of Environmental Assessment, LR 31:640 (March 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 32:808 (May 2006).

§1434. Consultation

A. Pursuant to 40 CFR 93.105 interagency consultation (federal, state, and local) shall be undertaken before making conformity determinations and before adopting applicable State Implementation Plan (SIP) revisions.

B. Interagency Consultation: General Procedures

1. Representatives of the MPOs, DEQ, and the state and local transportation agencies shall collectively undertake an interagency consultation process in accordance with this

Section with local or regional representatives of EPA, FHWA, and FTA on the development of the applicable implementation plan, the list of TCMs in the applicable implementation plan, the unified planning work program under Title 23 CFR Section 450.314, the transportation plan (TP), the TIP, any revisions to the preceding documents, and associated conformity determinations required by this regulation.

2. For the purposes of regular consultation, the affected agencies shall include:

a. DEQ (Louisiana Department of Environmental Quality);

b. DOTD (Louisiana Department of Transportation and Development);

c. EPA Region 6 (Environmental Protection Agency);

d. FHWA Region 6 (Federal Highway Administration);

e. FHWA Louisiana Division Office;

f. FTA (Federal Transit Administration);

g. local publicly-owned transit agencies in nonattainment or maintenance areas; and

h. MPOs (Metropolitan Planning Organizations) in nonattainment or maintenance areas.

3. The MPO, as the lead transportation planning agency, shall have the primary responsibility in the designated nonattainment or maintenance metropolitan area for developing the TP, the TIP, and project-level technical analyses by employing travel-demand modeling techniques, acquiring all necessary data, and coordinating these activities with agencies specified in Paragraph B.2 of this Section. The MPO shall work in consultation with DOTD and local publicly-owned transit agencies in developing these documents. The MPO shall be responsible for providing written notification of all regularly scheduled meetings concerning transportation and related air quality issues to each of the agencies specified in Paragraph B.2 of this Section. Notification shall be not less than seven calendar days prior to the meeting and any scheduling changes shall be coordinated in a timely manner. When the MPO is not the lead transportation planning agency, DOTD shall have the same responsibilities as the MPO in fulfilling all applicable provisions of the consultative process and transportation conformity determinations.

4. The MPO shall notify each agency in Paragraph B.2 of this Section of all transportation planning activities for nonfederal projects that are regionally significant and therefore need to be included in regional emissions analysis when estimating emissions from mobile sources in nonattainment and maintenance areas.

5. DEQ, as air quality lead agency, shall have primary responsibility for developing transportation-related SIPs, air quality modeling demonstrations, emissions inventories, and related activities. Transportation-related SIPs shall be prepared by DEQ with the assistance of the agencies specified in Paragraph B.2 of this Section. DEQ shall distribute documents to all agencies specified in Paragraph B.2 for review and comment. DEQ shall schedule public hearings to receive public comment on transportation-related SIPs. Comments and responses to comments shall be included in applicable SIP submittals to EPA.

6. For purposes of regular consultation, organizational representation shall be defined as follows:

a. *MPO*—executive director or designee;

b. *DEQ*—secretary of the Department of Environmental Quality, or designee;

c. *DOTD*—assistant secretary of the Office of Planning and Programming, or designee;

d. *FHWA*—division administrator or designee;

e. *FTA*—director, Office of Program Development or designee;

f. *EPA*—regional administrator or designee; and

g. *Local Publicly-Owned Transit Agencies*—general manager or designee.

7. Before adoption and approval of conformity analyses prepared for plans, Transportation Improvement Plans (TIPs), and projects, the Metropolitan Planning Organization (MPO) and/or Department of Transportation and Development (DOTD) shall distribute a final draft of the documents, including supporting technical materials, to the consulting agencies for review and comments. Lead agencies shall respond to significant comments made by the consulting agencies on plans, TIPs, projects, or SIPs in writing within 30 working days. Comments and responses to comments shall be distributed for review by all agencies identified in Paragraph B.2 of this Section. Following resolution of all significant issues, final documents shall be revised accordingly and submitted to the designated lead agency for formal adoption and approval.

8. Meetings of the group of agencies as a whole (as found in Paragraph B.6 of this Section) shall convene for the specific purpose of considering issues with regard to the conformity of TPs, TIPs, and projects with the transportation conformity SIP. The frequency of these meetings shall be determined jointly by the specified transportation and air quality lead agencies. Agencies shall meet on a regular basis, at least quarterly, unless the lead agencies decide there is a need for an earlier meeting or, alternatively, that there is no need for the regularly scheduled meeting. If the comments and issues on draft documents are substantial and warrant a group meeting, the lead agency may schedule a meeting where consultation with all agencies concerned can be accomplished simultaneously for the resolution of comments and issues. Meeting agendas are the responsibility of the designated lead agency.

9. Where TCMs are to be included in applicable SIPs in urbanized nonattainment or maintenance areas, a list of TCMs shall be selected and developed by the MPO in

cooperation with other agencies specified in Paragraph B.2. This list of TCMs shall be distributed to all cooperating agencies by DEQ after its review and consultation with the MPO. The list of TCMs shall be made available for inspection or copying for all interested persons and agencies.

C. Interagency Consultation: Specific Procedures

1. An interagency consultation process in accordance with Subsection B of this Section involving the MPO, state and local air quality and transportation agencies, EPA, and DOT shall be undertaken for the following:

a. DEQ, in cooperation with the MPO and/or DOTD, shall evaluate and choose a model(s) and associated methods and assumptions to be used in hot-spot analyses and regional emissions analyses. Prior to final selection, DEQ shall consult with the agencies specified in Paragraph B.2 of this Section;

b. for purposes of regional emissions analysis, the MPO shall actively consult with the agencies in Paragraph B.2 of this Section to determine which minor arterials and other transportation projects should be considered regionally significant (in addition to those functionally classified as principal arterial or higher or fixed guideway systems or extensions that offer an alternative to regional highway travel) and which projects should be considered to have a significant change in design concept and scope from the transportation plan or TIP. The MPO shall consider the views of each agency that comments or responds in writing prior to any final action on these issues. If the MPO receives no comments within 30 days, the MPO may assume consensus by the agencies specified in Paragraph B.2 of this Section;

c. the MPO shall submit a list of exempt projects to agencies specified in Paragraph B.2 of this Section to evaluate whether projects otherwise exempted from meeting the requirements of 40 CFR Part 93, Subpart A (see Sections 93.126 and 127, as incorporated by reference in LAC 33.III.1432) should be treated as nonexempt in cases where potential adverse emissions impacts may exist for any reason. The MPO shall allow 30 days for comments;

d. the MPO and/or DOTD, in consultation with the agencies in Paragraph B.2 of this Section, shall make a determination, as required by 40 CFR 93.113(c)(1)(as incorporated by reference in LAC 33:III.1432), whether past obstacles to implementation of TCMs that are behind the schedule established in the applicable implementation plan have been identified and are being overcome and whether state and local agencies with influence over approvals or funding for TCMs are giving highest priority to approval or funding for TCMs. This process shall also consider whether delays in TCM implementation necessitate revisions to the applicable implementation plan to remove TCMs or substitute TCMs or other emission reduction measures;

e. the MPO and/or DOTD, in consultation with the agencies in Paragraph B.2 of this Section, shall identify, as required by 40 CFR 93.123(b)(as incorporated by reference in LAC 33:III.1432), projects located at sites in PM_{10} nonattainment areas that have vehicle and roadway emission and dispersion characteristics that are essentially identical to those at sites which have violations verified by monitoring and, therefore, require quantitative PM_{10} hot-spot analysis;

f. the MPO shall notify the agencies specified in Paragraph B.2 of this Section of transportation plan or TIP revisions or amendments which merely add or delete exempt projects listed in 40 CFR 93.126 or 93.127 (as incorporated by reference in LAC 33:III.1432), and allow a 30-day comment period; and

g. DOTD, in consultation with the agencies specified in Paragraph B.2 of this Section, shall cooperatively choose the appropriate conformity test(s) and methodologies for use in isolated rural nonattainment and maintenance areas, as required by 40 CFR 93.109(g)(2)(iii).

2. An interagency consultation process in accordance with Subsection B of this Section involving the MPO and state and local air quality and transportation agencies shall be undertaken for the following:

a. DEQ, in cooperation with the MPO and DOTD, shall evaluate events that will trigger new conformity determinations in addition to those triggering events established in 40 CFR 93.104 (as incorporated by reference in LAC 33:III.1432). DEQ may require a new conformity determination in the event of any unforeseen circumstances; and

b. the MPOs shall share cooperatively the responsibilities of conducting conformity determinations on transportation activities which cross the borders of two or more MPOs' nonattainment or maintenance areas. The MPOs will enter into a memorandum of agreement which will define the effective boundary and the respective responsibilities for each MPO for regional emissions analysis. Adjacent MPOs of nonattainment or maintenance areas shall share information concerning air quality modeling assumptions and emission rates that affect both areas.

3. For the purposes of determining the conformity of all projects outside the metropolitan planning area, but within the nonattainment or maintenance area, the MPO shall enter into a memorandum of agreement involving the MPO and DOTD for cooperative planning and analysis of projects.

4. The MPO, in accordance with Subsection B of this Section and with the cooperation of DOTD and local transportation agencies and recipients of funds designated under Title 23 U.S.C. or the Federal Transit Laws, shall coordinate and ensure that plans for construction of regionally significant projects that are not FHWA/FTA projects including projects for which alternate locations, design concept and scope, or the no-build option are still being considered, as well as all those by recipients of funds designated under Title 23 U.S.C. or the Federal Transit Laws, are disclosed to the MPO on a regular basis and ensure that any changes to those plans are immediately disclosed. The sponsors of non-FHWA/FTA projects and

recipients of funds designated under Title 23 U.S.C. or the Federal Transit Laws shall disclose to the MPO on a regular basis significant projects and their status.

5. The MPO, in accordance with Subsection B and Paragraph C.4 of this Section, and other recipients of funds designated under Title 23 U.S.C. or the Federal Transit Laws, shall cooperatively assume the location and design concept and scope of projects that are disclosed to the MPO as required by Paragraph C.4 of this Section, but whose sponsors have not yet decided these features in sufficient detail to perform the regional emissions analysis according to the requirements of 40 CFR 93.122 (as incorporated by reference in LAC 33:III.1432).

6. The MPO, in accordance with Subsection B of this Section, shall notify DEQ, DOTD, and local transportation agencies and shall seek their input for the design, schedule, and funding of research and data collection efforts and regional transportation model development by the MPO (e.g., household/travel transportation surveys).

7. Within 15 days subsequent to approval and adoption of final documents, including TPs, TIPs, conformity approvals, applicable implementation plans and implementation plan revisions, the lead agency; that is, either DEQ, the MPO or DOTD, shall provide copies of such documents and supporting information to all agencies specified in Paragraph B.2 of this Section.

D. Resolving Conflicts

1. Any conflicts among state agencies or between state agencies and an MPO shall be remanded to the governor if the conflict cannot be resolved by the heads of the involved agencies.

2. In the event that the MPO or DOTD determines that every effort has been made to address DEQ concerns and no further progress is possible, the MPO or DOTD shall notify the secretary of DEQ in writing to this effect. This Section of the regulation shall be cited by the MPO or DOTD in any notification of a conflict which may require action by the governor.

3. DEQ has 14 calendar days from the date of receipt of notification as required in Paragraph D.2 of this Section to appeal any decision or action under this regulation to the governor. If DEQ appeals to the governor, the final conformity determination must have the concurrence of the governor. DEQ must provide notice of any appeal under this Subsection to the MPO and DOTD. If DEQ does not appeal to the governor within 14 days, the MPO or DOTD (in the absence of an MPO) may proceed with the final conformity determination or action.

4. The governor may delegate the role of hearing any such appeal under this Subsection, but not to the head or staff of DEQ, DOTD, a state transportation commission or board, or an MPO.

E. Public Consultation Procedures. Consistent with the requirements of 23 CFR 450.316(b), relating to public involvement, affected agencies making conformity determinations on transportation plans, programs, and projects shall establish a proactive public involvement process that provides opportunity for public review and comment. This process shall, at a minimum, provide reasonable public access to technical and policy information considered by the agency at the beginning of the public comment period and before taking formal action on conformity determinations for all TPs and TIPs. Any charges imposed for public inspection and copying of conformity-related materials shall be consistent with the fee schedule contained in 49 CFR 7.95. In addition, any such agency must specifically address in writing any public comments claiming that known plans for a regionally significant project that is not receiving FHWA or FTA funding or approval have not been properly reflected in the emissions analysis supporting a proposed conformity finding for a transportation plan or TIP. Any such agency shall also provide opportunity for public involvement in conformity determinations for projects where otherwise required by law.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1278 (November 1994), repromulgated LR 24:1280 (July 1998), amended LR 24:1684 (September 1998), repromulgated LR 24:1925 (October 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2451 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2085 (October 2007).

Chapter 15. Emission Standards for Sulfur Dioxide

§1501. Degradation of Existing Emission Quality Restricted

A. Emissions whose quality as of the effective date of these regulations is higher than the standards set forth herein shall be maintained at the higher quality unless it can be affirmatively demonstrated to the department that a change in quality is justifiable and will not be contrary to the purpose of these regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), repromulgated by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:374 (April 1992).

§1502. Applicability

A. The provisions of this Chapter are applicable to the following sources:

1. new or existing sulfuric acid production units;

2. new or existing sulfur recovery plants; and

3. all other single point sources that emit or have the potential to emit 5 tons per year or more of sulfur dioxide into the atmosphere.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 33:1011 (June 2007).

§1503. Emission Limitations and Compliance

A. Sulfuric Acid Plants—New and Existing. The emissions of sulfur dioxide and acid mist from new sulfuric acid production units that commence construction or modification after August 17, 1971, shall be limited to that specified in 40 CFR 60.82 and 60.83, as incorporated by reference in LAC 33:III.Chapter 30, i.e., 4.0 pounds of SO_2/ton of 100 percent H_2SO_4 (2 kilograms/metric ton) and 0.15 pounds of sulfuric acid mist/ton of 100 percent H_2SO_4 (.075 kilograms/metric ton), respectively (three-hour averages). Emissions from existing units shall be limited as follows:

1. SO_2—not more than 2000 ppm by volume (three-hour average);

2. sulfuric acid mist—not more than 0.5 pounds/ton of 100 percent H_2SO_4 (0.25 kilograms/metric ton) (three-hour average).

B. Sulfur Recovery Plants—New and Existing. The emission of sulfur oxides calculated as sulfur dioxide from a new sulfur recovery plant that commences construction or modification after October 4, 1976, shall be limited to that specified in 40 CFR 60.104(a)(2), as incorporated by reference in LAC 33:III.Chapter 30. The emission of sulfur oxides calculated as sulfur dioxide from an existing plant shall be limited to a sulfur dioxide concentration of not more than 1,300 ppm by volume (three-hour average).

C. All Other Sources—New and Existing. No person shall discharge gases from the subject sources that contain concentrations of SO_2 in excess of 2,000 parts per million (ppm) by volume at standard conditions (three-hour average), or any applicable Federal NSPS or NESHAP emission limitation, whichever is more stringent. Single point sources that emit or have the potential to emit less than 250 tons per year of sulfur compounds measured as sulfur dioxide may be exempted from the 2,000 ppm(v) limitation by the administrative authority.

D. Compliance

1. The methods listed in Table 4 or any such equivalent method as may be approved by the administrative authority* shall be used to determine compliance with the appropriate emission limitations set forth in Subsections A-C of this Section. These methods shall be used for the following:

a. initial compliance determinations; and

b. any additional compliance determinations as requested by the administrative authority.

2. Measurement equipment shall be periodically calibrated to comply with minimal American Bureau of Standards criteria.

3. The data collected from a sulfur dioxide continuous emission monitoring system (CEMS) may be used to determine initial compliance with the sulfur dioxide emission limitations of this Section.

4. As used in this Section a *three-hour average* means the average emissions for any three consecutive one-hour periods (each commencing on the hour), provided that the number of three-hour periods during which the SO_2 limitation is exceeded is not greater than the number of one-hour periods during which the SO_2 limitation is exceeded.

Table 4
Emissions—Methods of Contaminant Measurement

Emission	Analytical Method
Particulate	1. Methods 1, 2, 3, 4, 5 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) or §60.8 of 40 CFR Part 60 as incorporated by reference at LAC 33:III.3003.
Sulfur Oxides	1. Seidman, Analytical Chemistry Volume 30, page 1680 (1958), "Determination of Sulfur Oxides in Stack Gases." 2. Shell Development Company method for the Determination of Sulfur Dioxide and Sulfur Trioxide PHS 999 AP-13 Appendix B, pages 85-87, "Atmospheric Emissions Sulfuric Acid Manufacturing Processes." 3. Reich Test for Sulfur Dioxide, "Atmospheric Emissions from Sulfuric Acid Manufacturing Process" PHS 999 AP-13 Appendix B, pages 76-80. 4. The Modified Monsanto Company Method, "Atmospheric Emissions from Sulfuric Acid Manufacturing Process" PHS 999 AP-13, Appendix B, pages 61-67. 5. Test Methods 1, 2, 3, 4, 6C, and 8 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), or §60.8 of 40 CFR Part 60 as incorporated by reference at LAC 33:III.3003.
Oxides of Nitrogen	1. Test Methods 1, 2, 3, 4, and 7E (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), or §60.8 of 40 CFR Part 60 as incorporated by reference at LAC 33:III.3003.
Visible Emissions	1. Method 9 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003). 2. Method 22 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).
Total Fluoride	1. Methods 1, 2, 3, 13A and 13B (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).
Total Reduced Sulfur (TRS)	1. Method 16 (40 CFR Part 60, Appendix A or §60.8 of 40 CFR Part 60 as incorporated by reference at LAC 33:III.3003). 2. Coulometric titration by method specified in NCASI Atmospheric Quality Improvement Technical Bulletin Number 91 (January 1978).
Sulfuric Acid Mist	1. Test methods 1, 2, 3, 4, 6, and 8 (40 CFR Part 60, Appendix A or §60.8 of 40 CFR Part 60 as incorporated by reference at LAC 33:III.3003).

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:374 (April 1992), LR 22:1212 (December 1996), LR 23:1677 (December 1997), LR 24:1284 (July 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1011 (June 2007).

§1505. Variances

A. If 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 upon such conditions and with such time limitations as it may prescribe for prevention, control or abatement of air pollution in harmony with the intent of the act. No variance may permit or authorize the maintenance of a nuisance, or a danger to public health or safety.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:375 (April 1992).

§1507. Exceptions

A. Start-Up Provisions

1. A four-hour (continuous) start-up exemption from the emission limitations of LAC 33:III.1503.A will be authorized by the administrative authority for facilities not subject to 40 CFR 60.82 and 60.83, as incorporated by reference in LAC 33:III.Chapter 30, that have been shut down.

a. A written report explaining the conditions and duration of the start-up and listing the steps necessary to remedy, prevent, and limit the excess emissions shall be submitted to SPOC within seven calendar days of the occurrence.

b. The report shall be signed by a responsible official, who shall certify:

i. that the excess emissions were not the result of failure to operate, maintain, or repair equipment in a manner consistent with good engineering practice;

ii. that the excess emissions were not due to error resulting from careless operations;

iii. that the excess emissions were not the result of failure to follow written procedures;

iv. that actions were taken to minimize the duration and magnitude of the excess emissions; and

v. that no ambient air quality standard was jeopardized.

c. All necessary data required to support the certifying statements shall be recorded and retained on-site and made available to department personnel upon request.

2. This provision is applicable to infrequent start-ups only. Before the exemption can be granted the administrative authority must determine the excess emissions were not the result of failure to maintain or repair equipment. In addition the duration of excess emission must be minimized and no ambient air quality standard may be jeopardized.

B. On-Line Operating Adjustments

1. A four-hour (continuous) exemption from emission limitations of LAC 33:III.1503.A will be extended by the administrative authority to facilities not subject to 40 CFR 60.82 and 60.83, as incorporated by reference in LAC 33:III.Chapter 30, where upsets have caused excessive emissions and on-line operating changes will eliminate a temporary condition.

a. A written report explaining the conditions and duration of the upset and listing the steps necessary to remedy, prevent, and limit the excess emissions shall be submitted to SPOC within seven calendar days of the occurrence.

b. The report shall be signed by a responsible official, who shall certify:

i. that the excess emissions were not the result of failure to operate, maintain, or repair equipment in a manner consistent with good engineering practice;

ii. that the excess emissions were not due to error resulting from careless operations;

iii. that the excess emissions were not the result of failure to follow written procedures;

iv. that actions were taken to minimize the duration and magnitude of the excess emissions; and

v. that no ambient air quality standard was jeopardized.

c. All necessary data required to support the certifying statements shall be recorded and retained on-site and made available to department personnel upon request.

2. This provision is applicable to infrequent on-line adjustments only. Before the exemption can be granted the administrative authority must determine the excess emissions were not the result of failure to maintain or repair equipment. In addition, the duration of excess emissions must be minimized and no ambient air quality standard may be jeopardized.

C. Bubble Concept. The administrative authority* may exempt a source from the emission limitations of LAC 33:III.1503 if the owner or operator demonstrates that a *bubble concept* will be applied as defined in LAC 33:III.111.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:375 (April 1992), LR 23:1678 (December 1997), LR 24:1284 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2451 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR

31:2439 (October 2005), LR 33:1011 (June 2007), LR 33:2085 (October 2007).

§1509. Reduced Sulfur Compounds (New and Existing Sources)

A. All refinery process gas streams or any other process gas stream that contains sulfur compounds measured as hydrogen sulfide shall be controlled by flaring or combustion. Units emitting less than 10 tons per year as hydrogen sulfide, or a concentration less than 400 ppmv hydrogen sulfide, may be exempted from this Section by the administrative authority unless a more stringent federal or state requirement is applicable.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:375 (April 1992), LR 24:2241 (December 1998), amended by the Office of Environmental Assessment, LR 31:1062 (May 2005).

§1511. Continuous Emissions Monitoring

A. Except as provided in Subsections C and D of this Section, the owner or operator of any facility subject to the sulfur dioxide emission limitations of this Chapter shall install, calibrate, maintain, and operate a measurement system or systems, installed in accordance with the manufacturers instructions, for continuously monitoring sulfur dioxide concentrations in the effluent of each process subject to this Chapter. *Continuous monitoring* is defined as sampling and recording of at least one measurement in each 15-minute period from the effluent of each affected process or the emission control system serving each affected process.

B. These measurement systems shall be certified according to the performance specifications in Performance Specification 2 (40 CFR Part 60, Appendix B as incorporated by reference at LAC 33:III.3003) and quality assured by the procedures in 40 CFR Part 60, Appendix F.

C. As an alternative to continuous monitoring of sulfur dioxide emissions the administrative authority* may approve demonstration of compliance as follows.

1. For combustion units that burn fuel gas or refinery gas, calculate sulfur dioxide emissions by continuously monitoring the fuel hydrogen sulfide content and fuel consumption rate.

2. For any single point source that burns or decomposes sulfur-containing fuel and/or feedstock, calculate sulfur dioxide emissions by monitoring the fuel and/or feedstock consumption rate and determining input sulfur as follows.

a. For fuel supplied from a bulk storage tank, values for input sulfur shall be determined on each occasion that the fuel is transferred to the storage tank from any other source. Fuel consumption rates shall be monitored continuously.

b. For feedstock or any other method of supplying fuel, values for input sulfur shall be determined daily. Fuel consumption rates shall be monitored continuously.

3. As an alternative to Paragraphs C.1 and 2 of this Section, the owner or operator may develop custom schedules and methods for determination of sulfur dioxide emissions based on the design and operation of the emissions unit and characteristics of the feedstock or fuel supply. These custom schedules must be substantiated by data and approved by the administrative authority prior to implementation.

D. The administrative authority shall not require continuous monitoring for:

1. flares;

2. single point sources that have the potential to emit less than 100 tpy of sulfur dioxide;

3. single point sources identified in 40 CFR Part 51, Appendix P; and

4. single point sources subject to the provisions of 40 CFR Part 75–Continuous Emission Monitoring.

E. For sulfuric acid plants, the production rate of H_2SO_4 shall be monitored daily.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:375 (April 1992), amended LR 22:1212 (December 1996), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1012 (June 2007).

§1513. Recordkeeping and Reporting

A. Except as provided in Subsections B-D of this Section, the owner or operator of any facility subject to the provisions of this Chapter shall record and retain at the site for at least two years the data required to demonstrate compliance with this Chapter. All emissions data shall be recorded in the units of the applicable standard using the averaging time of the applicable standard, as follows.

1. CEMS data shall be recorded continuously.

2. Initial and additional compliance determination data shall be recorded upon each occurrence. A report showing the results of any such test shall be submitted no later than 90 days after the completion of the test.

3. For sulfuric acid plants, the production rate of H_2SO_4 shall be recorded daily.

B. The owner or operator of any single point source approved for alternative emissions monitoring in accordance with LAC 33:III.1511.C shall record the appropriate data required to demonstrate compliance as follows.

1. For sources that burn fuel gas or refinery gas in multiple combustion units, maintain continuous records of the fuel hydrogen sulfide content and the fuel consumption rate.

2. For emissions units that burn or decompose sulfur-containing fuel and/or feedstock, maintain continuous records of the fuel and/or feedstock consumption rate and a record of the input sulfur at the following frequencies.

a. For fuel supplied from a bulk storage tank, values for input sulfur shall be recorded on each occasion that the fuel is transferred to the storage tank from any other source.

b. For feedstock or any other method of supplying fuel, values for input sulfur shall be recorded daily.

3. For an emissions unit with an approved custom schedule, the fuel and/or feedstock consumption rate and input sulfur shall be recorded according to the custom schedule approved by the administrative authority in accordance with LAC 33:III.1511.C.3.

C. The owner or operator of any emissions unit that is not subject to the emissions limitations of this Chapter shall record and retain at the site sufficient data to show annual potential sulfur dioxide emissions from the emissions unit.

D. Compliance with the recordkeeping requirements of 40 CFR Part 75–Continuous Emission Monitoring shall satisfy the recordkeeping provisions of this Section.

E. All compliance data shall be made available to a representative of the department or the U.S. EPA on request. When applicable, compliance data shall be reported to the department annually in accordance with LAC 33:III.918. In addition, quarterly reports of three-hour excess emissions and reports of emergency conditions in accordance with LAC 33:I.Chapter 39 shall be made.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:376 (April 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1671 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1013 (June 2007).

Chapter 17. Control of Emissions of Carbon Monoxide (New Sources)

Subchapter A. General

§1701. Degradation of Existing Emission Quality Restricted

A. Emissions whose quality as of the effective date of these regulations is higher than the standards set forth herein shall be maintained at the higher quality unless it can be affirmatively demonstrated to the department that a change in quality is justifiable and will not be contrary to the purpose of these regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Qualilty Division, LR 13:741 (December 1987).

Subchapter B. Ferrous Metal Emissions

§1703. Ferrous Metal Emissions

A. No person shall emit the carbon monoxide gases generated during the operation of a gray iron cupola, blast furnace or basic oxygen steel furnace unless they are burned in a direct-flame afterburner or are controlled by other means as may be approved by the administrative authority.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Qualilty Division, LR 13:741 (December 1987).

Subchapter C. Petroleum Refinery Emissions

§1705. Petroleum Refinery Emissions

A. No person shall emit the carbon monoxide waste gas stream from any catalyst regeneration of a petroleum cracking system, petroleum fluid coker, or other petroleum process into the atmosphere unless the waste gas stream is burned in a direct flame afterburner or boiler or is controlled by other means as may be approved by the administrative authority.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Qualilty Division, LR 13:741 (December 1987).

Chapter 21. Control of Emission of Organic Compounds

Subchapter A. General

§2101. Compliance Schedules

A. All facilities affected by the regulations in this Chapter shall be in compliance as soon as practicable but in no event later than one year after becoming an affected facility, except for facilities affected by a different compliance schedule specified in an individual Section of this Chapter.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:959 (November 1990).

§2103. Storage of Volatile Organic Compounds

A. No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 250 gallons (950 liters) and up to 40,000 gallons (151,400 liters) nominal capacity any volatile organic compound, having a maximum true vapor pressure of 1.5 psia or greater at storage conditions, unless such tank, reservoir, or other container is

designed and equipped with a submerged fill pipe or a *vapor loss control system*, as defined in Subsection E of this Section, or is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

B. No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 40,000 gallons (151,400 liters) nominal capacity any volatile organic compound having a maximum true vapor pressure of 1.5 psia or greater at storage conditions unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere or is designed and equipped with a submerged fill pipe and one or more of the vapor loss control devices described in Subsections C, D, and E of this Section.

C. Internal Floating Roof. An internal floating roof consists of a pontoon type roof, double deck type roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place. If the organic compounds have a vapor pressure of 11.0 psia or greater under actual storage conditions, the requirements of Subsection F of this Section shall supersede the requirements of this Subsection. In the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, the following additional requirements apply.

1. The closure seal shall consist of either:

a. a liquid mounted seal consisting of a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;

b. a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof; or

c. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

2. Each opening in the internal floating roof (except rim space vents and automatic bleeder vents) shall be provided with a projection below the liquid surface. In addition, each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) shall be provided with a cover equipped with a gasket. Automatic bleeder vents and rim space vents shall be gasketed and ladder wells shall be equipped with a sliding cover.

3. If the internal floating roof does not meet the specifications of this rule, then the specifications shall be met at the earlier of either the next scheduled maintenance turnaround (when deinventorying and degassing occurs) or December 1, 2005. Any request for an extension beyond December 1, 2005, shall be examined on a case-by-case basis and must be approved by the administrative authority*.

D. External Floating Roof. An external floating roof consists of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. In the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, the primary closure seal shall consist of a liquid mounted seal or a mechanical shoe seal, as defined in Subparagraphs C.1.a and b of this Section. Installation of the primary and secondary seals in these parishes shall be within the same time requirements as stipulated in Paragraph C.3 of this Section.

1. A secondary seal is not required if:

a. the tank is a welded tank storing a VOC with a vapor pressure at storage conditions less than 4.0 psia and is also equipped with a liquid mounted seal, a mechanical shoe seal, or a seal deemed equivalent by the administrative authority*;

b. the storage vessels are external floating roof tanks having nominal storage capacities of 420,000 gallons (1,589,900 liters) or less used to store produced crude oil or condensate prior to lease custody transfer;

c. a mechanical shoe seal is used in a welded tank which also has a secondary seal from the top of the shoe seal to the tank wall (i.e., a shoe-mounted secondary);

d. an alternate seal or seals can be used in lieu of the primary and secondary seals required herein provided the resulting emission is not greater than that which would have resulted if the primary and secondary seals were installed. The equivalency demonstration will be made to the satisfaction of the administrative authority*.

2. The seal closure devices required in LAC 33:III.2103.D shall:

a. have no visible holes, tears, or other openings in the seal(s) or seal(s) fabric;

b. be intact and uniformly in place around the circumference of the floating roof and the tank wall;

c. not have gap areas, of gaps exceeding 1/8 inch (0.32 cm) in width between the secondary seal and the tank wall, in excess of 1.0 in^2 per foot of tank diameter (6.5 cm^2 per 0.3m);

d. not have gap areas, of gaps exceeding 1/8 inch (0.32 cm) in width between the primary seal and the tank wall, in excess of 10.0 in^2 per foot of tank diameter (65 cm^2 per 0.3m);

e. the secondary seals shall be visually inspected at least semiannually. The secondary seal gap measurements shall be made annually at any tank level provided the roof is off its legs. The primary seal gap measurements shall be made every five years at any tank level provided the roof is off its legs. Conditions not up to standards described in LAC 33:III.2103.D.2 shall be recorded along with date(s) that the standards are not met and the administrative authority shall be notified within seven days. To avoid noncompliance with this Section, repairs necessary to be in compliance must be initiated within seven working days of recognition of defective conditions by ordering appropriate parts. Repairs shall be completed within three months of the ordering of the repair parts. However, if it can be demonstrated that additional time for repair is needed, the administrative authority may extend this deadline.

3. Requirements for Covering Openings. All openings in the external floating roof, except for automatic bleeder vents, rim space vent, and leg sleeves, are to provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents must be closed at all times except when the roof is floated off or landed on the roof leg supports. Rim vents must be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Any emergency roof drain must be equipped with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. In the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Point Coupee, and West Baton Rouge, all covers, seals, lids, automatic bleeder vents, and rim space vents are to be gasketed.

4. Requirements for Guide Poles and Stilling Well Systems. Emissions from guide pole systems must be controlled for external floating roof storage tanks with a capacity greater than 40,000 gallons (approximately 151 m^3) and which store a liquid having a total vapor pressure of 1.5 psia or greater. The requirements of this Paragraph shall only apply in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge.

a. Controls for nonslotted guide poles and stilling wells shall include pole wiper and gasketing between the well and sliding cover. Controls for slotted guide poles shall include a float with wiper, pole wiper, and gasketing between the well and sliding cover. The description of the method of control and supporting calculations based upon the Addendum to American Petroleum Institute Publication Number 2517, Evaporative Loss from External Floating Roof Tanks, (dated May 1994) shall be submitted to the Office of Environmental Assessment for approval prior to installation.

b. Alternate methods of controls are acceptable if demonstrated to be equivalent to the controls in Subparagraph D.4.a of this Section. The administrative authority* must approve alternate methods of control.

c. Installation of controls required by Paragraph D.4 of this Section shall be required by November 15, 1996. Requests for extension of the November 15, 1996, compliance date will be considered on a case-by-case basis for situations which require the tank to be removed from service to install the controls and must be approved by the administrative authority*.

d. Control systems required by Paragraph D.4 of this Section shall be inspected semiannually for rips, tears, visible gaps in the pole or float wiper, and/or missing sliding cover gaskets. Any rips, tears, visible gaps in the pole or float wiper, and/or missing sliding cover gaskets shall be repaired in accordance with this Paragraph in order to avoid noncompliance. Repairs must be initiated by ordering appropriate parts within seven working days after a defect listed in this Subparagraph is identified. Repairs shall be completed within three months of the ordering of the repair parts. However, if it can be demonstrated that additional time for repair is needed, the administrative authority may extend this deadline.

E. Vapor Loss Control System. A vapor loss control system consists of a gathering system capable of collecting the volatile organic compound (VOC) vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

1. The vapor loss control system shall reduce inlet emissions of total volatile organic compounds by 95 percent or greater.

2. Notwithstanding Paragraph E.1 of this Section, if the vapor loss control system was installed on or before December 31, 1992, then the vapor loss control system shall reduce inlet emissions of total volatile organic compounds by 90 percent or greater.

3. The specifications and requirements in Paragraph E.1 or 2 of this Section do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of the vapor loss control system, during which the vapor loss control system does not meet the specifications of Paragraph E.1 or 2 of this Section, as applicable, shall not exceed 240 hours per year.

F. No person shall place, store or hold in any stationary tank, reservoir or other container of more than 40,000 gallons (151,400 liters) nominal capacity any volatile organic compound having a true vapor pressure of 11 psia or greater at storage conditions unless such tank, reservoir or other container is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere or is designed and equipped with a submerged

fill pipe and vapor loss control system in accordance with LAC 33:III.2103.E.

G. Exemptions. The provisions of this Section (e.g., LAC 33:III.2103) do not apply to:

1. existing and new storage tanks, located in any parish other than the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, used for crude oil or condensate and having a nominal storage capacity of less than 420,000 gallons (1,589,900 liters) unless such new tanks are subject to New Source Performance Standards;

2. tanks 420,000 gallons (1,589,900 liters) or greater, located in any parish other than the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, used to store produced crude oil or condensate prior to lease custody transfer unless such tanks are subject to New Source Performance Standards;

3. existing and new storage tanks in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge that are used for crude oil or condensate prior to lease custody transfer and that have a nominal storage capacity of less than 420,000 gallons (1,589,900 liters) unless such new tanks are subject to New Source Performance Standards;

4. JP-4 fuels stored in horizontal underground tanks;

5. with regard to the requirements of Paragraph C.1 of this Section, any storage tank that is used for less than two weeks in the calendar year, provided that the tank is empty and liquid-free when not in use; and

6. with regard to the submerged fill pipe provisions of Subsection A of this Section, tanks, drums, or other containers storing pyrophoric catalyst at the Vistalon Production Facility of ExxonMobil Chemical Company's Baton Rouge Chemical Plant.

H. Compliance Tests

1. Floating Roofs. The seal gap area shall be determined by measuring the length and width of the gaps around the entire circumference of the seal. A 1/8 inch (0.32 cm) uniform diameter probe shall be used for measuring gaps. Only gaps greater than or equal to 1/8 inch (0.32 cm) shall be used in computing the gap area. The area of the gaps shall be accumulated to determine compliance with LAC 33:III.2103.D.2.c and d. Compliance with the other provisions specified in LAC 33:III.2103.D.2.a and b and D.4 may be determined by visual inspection.

2. Add-On Control Devices. The following test methods shall be used, where appropriate to measure control device compliance:

a. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates, as necessary;

b. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for measuring gaseous organic compound emissions by gas chromatographic analysis;

c. Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile organic compound leaks;

d. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon;

e. additional performance test procedures, or equivalent test methods, approved by the administrative authority*.

3. Vapor Pressure. The maximum true vapor pressure is determined based upon the highest expected calendar-month average of the storage temperature. The true vapor pressure shall be determined from one of the following methods:

a. from available data on the Reid vapor pressure;

b. by ASTM Test Methods D323, D4953, or D5190 for the measurement of Reid vapor pressure, and adjusted for actual storage temperature using the nomographs contained in API Bulletin 2517;

c. from standard reference texts;

d. determined by ASTM Test Method D2879 or D5191; or

e. by another method approved by the administrative authority*.

I. Monitoring/Recordkeeping/Reporting. The owner/operator of any storage facility shall maintain records to verify compliance with or exemption from LAC 33:III.2103. The records shall be maintained for at least two years and will include, but not be limited to, the following:

1. the results of inspections required by LAC 33:III.2103.D.2.e and D.4 shall be recorded;

2. for vapor loss control systems (LAC 33:III.2103.E) the following information shall be recorded:

a. daily measurements of the exhaust gas temperature immediately downstream of a direct-flame incinerator;

b. daily measurements of the inlet and outlet gas temperature of a chiller, or catalytic incinerator;

c. results of monitoring outlet VOC concentration of carbon adsorption bed to detect breakthrough;

3. the date and reason for any maintenance and repair of the applicable control devices and the estimated quantity and duration of volatile organic compound emissions during such activities;

4. the results of any testing conducted in accordance with the provisions specified in LAC 33:III.2103.H;

5. records of the type(s) of VOC stored and the average monthly true vapor pressure of the stored liquid for

any storage vessel with an external floating roof that is exempt from the requirements for a secondary seal and is used to store VOCs with a true vapor pressure greater than 1.0 psia; and

6. records of the type(s) of VOC stored and the length of time stored for any storage tank exempted under Paragraph G.5 of this Section;

7. records of planned routine maintenance performed on the vapor loss control system, including the duration of each time the vapor loss control system does not meet the specifications of Paragraph E.1 or 2 of this Section, as applicable, due to the planned routine maintenance. Such records shall include the information specified as follows:

a. the first time of day and date the requirements of Subsection E of this Section were not met, at the beginning of the planned routine maintenance; and

b. the first time of day and date the requirements of Subsection E of this Section were met, at the conclusion of the planned routine maintenance.

J. The facility shall provide notice of any use of a storage tank exempted under Paragraph G.5 of this Section. The notice shall be provided to the Office of Environmental Compliance in the manner identified in LAC 33:I.3923.A in advance, if possible, but no later than 24 hours after the tank starts filling.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 15:1065 (December 1989), repromulgated LR 16:27 (January 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:360 (April 1991), LR 18:1121 (October 1992), LR 20:1376 (December 1994), LR 21:1223 (November 1995), repromulgated LR 21:1333 (December 1995), amended LR 22:453 (June 1996), LR 22:1212 (December 1996), LR 24:20 (January 1998), LR 24:2242 (December 1998), LR 25:657 (April 1999), LR 25:852 (May 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2452 (November 2000), LR 28:1763 (August 2002), LR 30:1671 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2439 (October 2005), LR 33:447 (March 2007), LR 33:2085 (October 2007).

§2104. Crude Oil and Condensate

A. Applicability. This Section applies to any oil and gas production facility (SIC Code 1311), natural gas processing plant (SIC Code 1321), or natural gas transmission facility (SIC Code 4922) that has a potential to emit 25 Tons per Year (TPY) or more of flash gas to the atmosphere in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; 50 TPY or more of flash gas to the atmosphere in the parish of Calcasieu; or 100 TPY or more of flash gas to the atmosphere in any other parish.

B. Definitions

Flash Gas—VOC emissions from depressurization of crude oil or condensate when it is transferred from a higher pressure to a lower pressure tank, reservoir, or other container. *Flash gas* emitted to the atmosphere from tanks, reservoirs, process vessels, separators, or other process equipment is subject to this Section. Emissions from sampling and maintenance activities are not included.

C. Control Requirements. Any facility to which this Section is applicable under Subsection A of this Section shall install a vapor recovery system. The vapor recovery system shall direct vapors to a fuel gas system, a sales gas system, an underground gas injection system, or a control device.

1. For facilities in any parish with a potential to emit 250 tons or more per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent.

2. For facilities in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge with a potential to emit less than 250 tons per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent or reduced to a potential to emit of less than 25 TPY by means of a federally enforceable permit revision that permanently restricts production, hours of operation, and/or capacity utilization or other equivalent control and requires the maintenance of records to demonstrate compliance with the permit restrictions.

3. For facilities in the parish of Calcasieu with a potential to emit less than 250 tons per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent or reduced to a potential to emit of less than 50 TPY by means of a federally enforceable permit revision that permanently restricts production, hours of operation, and/or capacity utilization or other equivalent control and requires the maintenance of records to demonstrate compliance with the permit restrictions.

4. For facilities in parishes other than Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, and West Baton Rouge with a potential to emit less than 250 tons per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent or reduced to a potential to emit of less than 100 TPY by means of a federally enforceable permit revision that permanently restricts production, hours of operation, and/or capacity utilization or other equivalent control and requires the maintenance of records to demonstrate compliance with the permit restrictions.

D. Exemptions. The following are exempt from the requirements of this Section:

1. facilities that are required by the NESHAP for oil and natural gas production (40 CFR Part 63 Subpart HH) to install controls for flash gas emissions;

2. tanks that have installed controls to comply with requirements of the New Source Performance Standards for storage vessels for petroleum liquid; and

3. temporary tanks associated with well testing operations for a period of up to 90 days following initial production from that well.

E. Compliance Schedule. For equipment located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, compliance shall be achieved as soon as practicable, but no later than September 1, 1998. For equipment located in the parish of Calcasieu with a potential to emit less than 100 TPY, compliance shall be achieved as soon as practicable, but no later than August 20, 2003. For all other facilities compliance shall be achieved as soon as practicable, but no later than May 1, 1999. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

F. Test Methods

1. Flares. Flares will be considered in compliance with Subsection C of this Section if the heat content of the gas is above 300 Btu/scf and the flare is equipped with an automatic flare relighting device, is equipped with a heat sensing device, or is visually checked daily to detect the presence of a flame.

2. Other Control Devices. The following test methods shall be used, where appropriate, to measure control device compliance. A fuel gas system, a sales gas system, or an underground injection system shall not be subject to this testing requirement:

a. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference in LAC 33:III.3003) for determining flow rates, as necessary;

b. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference in LAC 33:III.3003) for measuring gaseous organic compound emissions by gas chromatographic analysis;

c. Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference in LAC 33:III.3003) for determination of volatile organic compound leaks;

d. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference in LAC 33:III.3003) for determining total gaseous nonmethane organic emissions, such as carbon; and

e. additional performance test procedures, or equivalent test methods, approved by the administrative authority.

G. Monitoring/Recordkeeping/Reporting. The owner/operator of any oil and gas production facility shall maintain records to verify compliance with or exemption from this Section. The records shall be maintained on the premises, or at an alternative location approved by the administrative authority, for at least five years and will include, but not be limited to, the following:

1. the potential to emit flash gas from emission points that vent to the atmosphere, determined by using generally acceptable engineering calculation techniques or test methods. The method of calculation or testing must be approved by the administrative authority;

2. the following information for control devices required under Subsection C of this Section:

a. for flares:

i. the heat content of the gas;

ii. documentation of daily visual observations to detect the presence of a flame, if required by Paragraph F.1 of this Section; and

iii. documentation of any failure to make a daily observation, including the mitigating circumstances, such as severe weather;

b. for other control devices:

i. daily measurements of the inlet and outlet gas temperature of a chiller or catalytic incinerator; or

ii. results of monitoring outlet VOC concentration of carbon adsorption bed to detect breakthrough;

3. the date and reason for any maintenance and repair of the applicable vapor recovery system and the estimated quantity and duration of volatile organic compound emissions during such activities. This requirement applies to vapors directed to a fuel gas system, sales gas system, underground gas injection system, control device, or any other system used to comply with Subsection C of this Section;

4. the results of any testing conducted in accordance with the provisions specified in Subsection F of this Section; and

5. all operating parameters required to verify the validity of the flash gas emissions as calculated in Paragraph G.1 of this Section.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1497 (November 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:1764 (August 2002), LR 30:745 (April 2004).

§2107. Volatile Organic Compounds—Loading

A. Applicability

1. The following loading facilities for volatile organic compounds having a true vapor pressure at loading conditions of 1.5 psia (10.3 kPa) or greater must comply with the requirements of Subsections B-F of this Section when servicing tanks, trucks or trailers which have individual capacities in excess of 200 gallons (760 liters):

a. 20,000 gallons (75,700 liters) or more throughput per day (averaged over any 30-day period), for operations (all facilities on premises) for which construction commenced after May 20, 1979; or

b. 40,000 gallons (151,400 liters) or more throughput per day (averaged over any 30-day period), for operations (all facilities on premises) for which construction commenced prior to May 20, 1979.

2. Once a facility is subject to this Section, it must remain in compliance with the requirements of Subsections B-F of this Section, even during periods in which its throughput is below the applicability levels.

B. Control Requirements. The facility must be equipped with a vapor collection system properly installed, and in good working order. The vapor collection system shall consist of, at a minimum, a vapor return line which returns to the VOC dispensing vessel or to a disposal system all vapors displaced during loading. In the event a disposal system is used, it shall have a destruction/removal efficiency as referenced at Subsection E of this Section (demonstrated to the satisfaction of the Louisiana Department of Environmental Quality) of no less than 90 percent. Examples of vapor disposal systems include but are not limited to incinerators, flares, carbon adsorbers or chillers. Provisions must be made to prevent spills during the attachment and disconnection of filling lines or arms. Loading and vapor lines must be equipped with fittings which close automatically when disconnected, or must be equipped to permit residual VOC in the loading line to discharge into a collection system or disposal or recycling system.

C. Monitoring. No liquid or gaseous leaks shall exist during loading or unloading operations. Inspection for visible liquid leaks, visible fumes, or significant odors resulting from VOC dispensing operations shall be conducted by the owner or operator of the VOC loading facility or the owner or operator of the tank, truck, or trailer. VOC loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

D. Recordkeeping. The owner or operator of any VOC loading facility shall maintain the following information on the premises for at least two years and shall make such information available to representatives of the Louisiana Department of Environmental Quality upon request:

1. a daily record of the total throughput of VOC loaded at the facility; and

2. for VOC loading operations subject to the requirements of this Section:

a. a daily record of the number of delivery vessels loaded at the facility and the quantity and type of VOC loaded to each delivery vessel;

b. a record of any leaks found at the facility in accordance with the provisions specified in Subsection C of this Section and the corrective action taken;

c. a record of the results of any testing conducted at the facility in accordance with the provisions specified in Subsection E of this Section.

3. For vapor disposal systems, the following information shall be recorded:

a. daily measurements of the exhaust gas temperature immediately downstream of a direct-flame incinerator;

b. daily measurements of the inlet and outlet temperature of a chiller or catalytic incinerator; and

c. breakthrough of VOCs in a carbon adsorption unit.

4. The date and reason for any maintenance and repair of the applicable control devices and the estimated quantity and duration of volatile organic compound emissions during such activities shall be recorded.

E. Test Methods. Compliance with Subsection B of this Section shall be determined by applying the following test methods, as appropriate:

1. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates, as necessary;

2. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining gaseous organic compounds emissions by gas chromatography;

3. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous non-methane organic emissions as carbon;

4. Test Method 25A or 25B (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous organic concentration using flame ionization or nondispersive infrared analysis; and

5. flaring devices which shall be designed and operated according to 40 CFR 60.18.

F. Exemptions. This Section does not apply to (a) crude or condensate loading facilities, (b) ship and barge loading operations, and (c) gasoline loading facilities which are regulated under Subchapter F.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:116 (February 1990), amended by the Office of Air Quality and Radiation Protection, LR 17:360 (April 1991), LR 22:1212 (December 1996), LR 24:20 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:1442 (July 2000).

§2108. Marine Vapor Recovery

A. Applicability. An affected facility is any marine loading operation serving ships and/or barges loading crude oil, gasoline, or volatile organic compounds (VOC) with an uncontrolled emission of 25 tons per year (TPY) or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, or 100 TPY or greater of VOC in any other parish. Emissions from VOC with a true vapor pressure of less than 1.5 psia at the loading temperature of the liquid are exempt from the control requirements of this Section.

B. Definitions. Terms used in this Section are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined below as follows.

Barge—a tank barge which is a tank vessel not equipped with means of self-propulsion especially constructed or converted to carry liquid bulk cargo in tanks.

Crude Oil—a natural hydrocarbon mixture, that is, petroleum in its unrefined state.

Gasoline—any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines.

Ship—a tankship which is a tank vessel self-propelled by power especially constructed or converted to carry liquid bulk cargo in tanks.

C. On or after the date specified in LAC 33:III.2108.D:

1. each affected facility shall be equipped with a vapor collection system designed to collect the organic compounds vapors displaced from ships and/or barges during loading;

2. affected facilities shall collect and process the vapors by a recovery and/or destruction system such that uncontrolled emissions are reduced by at least 90 percent by weight;

3. unless exempted under Subsection A of this Section, affected facilities' emissions to the atmosphere caused by the loading of crude oil, gasoline, or volatile organic compounds into ships and/or barges are not to exceed the following:

a. for barge loading of gasoline—70 mg of total organic compounds per liter of VOCs loaded (0.6 pounds/1,000 gallons);

b. for barge loading of crude oil or other VOCs—30 mg of total organic compounds per liter of VOCs loaded (0.25 pounds/1,000 gallons);

c. for ship loading of gasoline—30 mg/liter of VOCs loaded (0.25 pounds/1,000 gallons);

d. for ship loading of crude oil or other VOCs—12 mg/liter of VOCs loaded (0.1 pounds/1,000 gallons);

4. alternate procedures to those described in LAC 33:III.2108.C.1, C.2 and C.3 may be used provided:

a. the procedure results in at least a 90 percent by weight reduction in uncontrolled emissions; and

b. the administrative authority has granted approval of the installation prior to any commencement of construction;

5. the owner or operator of the affected facility shall act to assure that loadings are made only into ships and/or barges equipped with vapor collection equipment that is compatible with the affected facility's vapor collection system;

6. the owner or operator of the affected facility shall act to assure that the vapor collection and disposal system is properly connected to the ships and/or barges before any loading is done.

D.1. For loadings of gasoline and other VOCs, except crude oil, each affected facility shall be in compliance with the provisions of this Section as expeditiously as practicable but no later than December 31, 1991. After December 31, 1991, an affected facility shall only be permitted to exceed the emissions to the atmosphere set forth in LAC 33:III.2108.C.3 caused by the loading into ships or barges of gasoline and other VOCs except crude oil if:

a. the barge or ship is not equipped with vapor collection equipment;

b. the last internal inspection of the ship or barge listed on its Certificate of Inspection was prior to July 23, 1990; and

c. the loading which results in the excess emissions occurs before May 1, 1994.

2. For crude oil loadings, each affected facility shall be in compliance with the provisions of this Section as expeditiously as practicable but no later than May 1, 1992. After May 1, 1992, an affected facility shall only be permitted to exceed the emissions to the atmosphere set forth in LAC 33:III.2108.C.3 caused by the loading into ships or barges of crude oil if:

a. the barge or ship is not equipped with vapor collection equipment;

b. the last internal inspection of the ship or barge listed on its Certificate of Inspection was prior to July 23, 1990;

c. the loading which results in the excess emissions occurs before May 1, 1994.

3. Any request for an extension of the compliance dates will be considered on a case-by-case basis in response to a written request to the administrative authority and in accordance with LAC 33:III.2119.

4. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

E. Test Methods and Procedure

1. For the purpose of determining compliance with the mass emission limitations of LAC 33:III.2108.C.3 the following reference methods shall be used:

a. for the determination of volume at the exhaust vent:

i. Method 2B (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for combustion vapor processing systems (except flare stacks);

ii. Method 2A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for all other vapor processing systems;

b. for the determination of total organic compounds concentration at the exhaust vent, Method 25A or 25B (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003). The calibration gas shall be either propane or butane.

2. Vapor processing systems utilizing a flare stack to destruct the collected VOCs will be exempt from testing and must be designed and operated in accordance with 40 CFR 60.482-10(d), as incorporated by reference in LAC 33:III.Chapter 30.

3. Immediately prior to the performance test for determination of compliance, all potential sources of vapor leakage in the facility's vapor collection system equipment shall be monitored for leaks using Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003). The monitoring shall be conducted only while a ship or barge is being loaded and should cover all parts of the vapor system, including tank hatches, that operate at pressures above atmospheric pressure. All leaks shall be repaired prior to conducting the performance test.

4. The test procedure for determining compliance with LAC 33:III.2108.C.3 shall be that specified below.

a. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

b. The time period for a performance test shall be not less than three hours. As much as possible, testing should be conducted during the three-hour period in which the highest emissions normally occur (near the end of the loading).

c. For intermittent vapor processing systems:

i. the vapor holder level shall be recorded at the start of the performance test. The end of the performance test shall coincide with a time when the vapor holder is at its original level;

ii. at least two start-ups and shutdowns of the vapor processor shall occur during the performance test. If this does not occur under automatically-controlled operation, the system shall be manually controlled.

d. The volume of crude oil, gasoline and volatile organic compounds loaded during the performance test period, whose vapor emissions are controlled by the processing system being tested, shall be determined.

e. An emission testing interval shall consist of each five-minute period during the performance test. For each interval:

i. the reading from each measurement instrument shall be recorded; and

ii. the volume exhausted and the average total organic compounds concentration in the exhaust vent shall be determined, as specified in the appropriate test method. The average total organic compounds concentration shall correspond to the volume measurement by taking into account the sampling system response time.

f. The mass emitted during each testing interval shall be calculated as follows.

$$M_{ei} = 10^{-6} K V_{es} C_e$$

where:

M_{ei} = mass of total organic compounds emitted during testing interval i, mg

V_{es} = volume of air-vapor mixture exhausted, m^3, at standard conditions

C_e = total organic compounds concentration (as measured) at the exhaust vent, ppmv

K = density of calibration gas, mg/m^3, at standard conditions

= 1.83×10^6, for propane

= 2.41×10^6 for butane

s = standard conditions, 20^oC and 760 mm Hg

g. The total organic compounds mass emissions shall be calculated as follows.

$$E = \frac{\sum_{i=1}^{n} M_{ei}}{L}$$

where:

E = mass of total organic compounds emitted per volume of crude oil, gasoline and volatile organic compounds loaded, mg/liter

M_{ei} = mass of total organic compounds emitted during testing interval i, mg

L = total volume of crude oil, gasoline and volatile organic compounds loaded, liters

n = number of testing intervals

5. The owner or operator may adjust the emission results to exclude the methane and ethane content in the exhaust vent by the chromatographic method shown in Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).

F. Reporting and Recordkeeping

1. The results of any testing done in accordance with LAC 33:III.2108.E shall be reported to the Office of Environmental Assessment within 45 days of the test.

2. The following records shall be kept on file at the affected facility for at least two years and shall be made available for inspection by a representative of the administrative authority on request:

a. daily throughput of liquid by type;

b. daily record of the number of each type of vessel loaded and the type and quantity of each liquid loaded on each vessel;

c. records of all replacements or additions of components performed on the vapor processing system;

d. records on control equipment operating parameters such as monitoring for breakthrough on carbon adsorption devices, pump amperes, and temperatures in refrigeration systems;

e. if any loadings are conducted which result in emissions exceeding those listed in LAC 33:III.2108.C.3 a record of the name, owner, type and quantity of liquid loaded, the date of loading and the vessel's last internal examination dates listed on its Certificate of Inspection shall be maintained for three years.

G. Operation and Maintenance

1. No person may load gasoline, crude oil or other VOC's into ships or barges at affected facilities unless all loading and vapor lines, arms and hoses are equipped with fittings which make vapor-tight connections and provide tight shut-off when disconnected.

2. Provisions must be made to prevent spills or leaks during attachment or disconnection of filling lines, hoses or arms. Liquids subject to this rule shall not be spilled or handled in any other manner that would result in evaporation to the atmosphere.

3. All equipment associated with the loading of gasoline, crude oil or other VOC's into ships or barges at affected facilities shall be maintained to be leak-free, gas-tight and in good working order.

H. Safety/Emergency. Nothing in this rule shall be construed to:

1. require any act or omission that would be in violation of any regulation or other requirement of the United States Coast Guard; or

2. prevent any act or omission that is necessary to secure the safety of a vessel or for saving life at sea.

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

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§2109. Oil/Water—Separation

A. Oil/Water—Separation. Single or multiple compartment volatile organic compound water separators which receive effluent water from any equipment processing, refining, treating, storing, or handling volatile organic compounds shall be equipped with one of the following vapor loss control devices properly installed, in good working order and in operation.

1. A container having all openings sealed and totally enclosed liquid contents. All gauging and sampling devices will be gas-tight except when gauging or sampling is taking place.

2. A container equipped with a floating roof, consisting of a pontoon type, double deck type roof, or internal floating cover which rests or floats on the surface of the contents and is equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices will be gas-tight except when gauging or sampling is taking place.

3. A container equipped with a vapor disposal system capable of processing such organic vapors and gases so as to limit their emission to the atmosphere to the same extent as LAC 33:III.2109.A.1 and 2 and with all container gauging and sampling devices gas-tight except when gauging or sampling is taking place.

4. Other equivalent equipment or means as may be approved by the administrative authority*.

B. Exemptions from LAC 33:III.2109.A

1. Volatile organic compound water separators used exclusively in conjunction with the production of crude oil or condensate are exempt from the provisions of LAC 33:III.2109.A.

2. Any single or multiple compartment volatile organic compound water separator which separates less than 200 gallons (757 liters) a day of materials containing volatile organic compounds.

3. Any single or multiple compartment volatile organic compound water separator which separates materials having a true vapor pressure of volatile organic compounds less than 0.5 psia (3.4 kPa).

4. Except for the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, any single- or multiple-compartment volatile organic compound water separator emitting 100 tons per year or less of regulated hydrocarbons (uncontrolled) is exempt from the provisions of LAC 33:III.2109.A.

5. Any facility may choose to reduce the flow of volatile organic compounds to the oil-water separator by process or equipment modifications at the source(s) as an alternate to the requirements of LAC 33:III.2109.A. Such alternate means of compliance must be shown to result in a reduction of VOC emissions at least as great as would result from application of the measures specified in LAC 33:III.2109.A.

C. Compliance. Compliance with LAC 33:III.2109.A shall be determined by monthly visual inspections or by use of one of the following test methods where appropriate:

1. Test Method 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates, as necessary;

2. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for measuring

gaseous organic compound emissions by gas chromatographic analysis;

3. Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile organic compound leaks;

4. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon;

5. determination of true vapor pressure using ASTM Test Method D323-82 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with API Publication 2517, Third Edition, 1989; or

6. additional performance test procedures, or equivalent test methods, approved by the administrative authority*.

D. Recordkeeping. The owner/operator of any single or multiple compartment volatile organic compound water separator shall maintain records to verify compliance with or exemption from LAC 33:III.2109. The records shall be maintained for at least two years and will include but not be limited to the following:

1. results of the monthly visual inspections and the results of other tests performed in accordance with LAC 33:III.2109.C;

2. measurement of the volume and true vapor pressure of the volatile organic compound(s) recovered by the separator to demonstrate continuous compliance with the criteria for exempted facilities; and

3. the date and reason for any maintenance and repair of the applicable control devices.

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§2111. Pumps and Compressors

A. All rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions shall be equipped with mechanical seals or other equivalent equipment or means as may be approved by the administrative authority*.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:118 (February 1990), amended by the Office of Air Quality and Radiation Protection, LR 17:361 (April 1991).

§2113. Housekeeping

A. Best practical housekeeping and maintenance practices must be maintained at the highest possible standards to reduce the quantity of organic compounds emissions. Emission of organic compounds must be reduced wherever feasible. Good housekeeping shall include, but not be limited to, the following practices.

1. Spills of volatile organic compounds shall be avoided and clean up of such spills shall employ procedures that reduce or eliminate the emission of volatile organic compounds.

2. Containers of volatile organic compounds shall not be left open and the contents allowed to evaporate.

3. Waste materials that contain volatile organic compounds shall be stored and disposed of in a manner that reduces or eliminates the emission of volatile organic compounds.

4. Each facility shall develop a written plan for housekeeping and maintenance that places emphasis on the prevention or reduction of volatile organic compound emissions from the facility. This plan shall be submitted to the Office of Environmental Services upon request. A copy shall be kept at the facility, if practical, or at an alternate site approved by the department.

5. Good housekeeping shall be determined by compliance with LAC 33:III.2121 (Fugitive Emission Control) and the maintenance and the housekeeping plan required by LAC 33:III.2113.A.4.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:118 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:361 (April 1991), LR 25:852 (May 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2452 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2439 (October 2005), LR 33:2085 (October 2007).

§2115. Waste Gas Disposal

Any waste gas stream containing volatile organic compounds (VOC) from any emission source shall be controlled by one or more of the applicable methods set forth in Subsections A-G of this Section. This Section shall apply to all waste gas streams located at facilities that have the potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or 100 TPY or more of VOC in any other parish. This Section does not apply to waste gas streams that must comply with a control requirement, meet an exemption, or are below an applicability threshold specified in another section of this Chapter. This Section does not apply to waste gas streams that are required by another federal or state regulation to

implement controls that reduce VOC to a more stringent standard than would be required by this Section.

A. Control Requirements for Operations that Commenced Construction Prior to January 20, 1985. Nonhalogenated hydrocarbons shall be burned at 1300°F (704°C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with Paragraph J.1 of this Section, or if emissions are reduced to 50 ppm by volume, whichever is less stringent.

B. Control Requirements for Operations that Commenced Construction On or After January 20, 1985. Nonhalogenated hydrocarbons shall be burned at 1600°F (870°C) for 0.5 second or greater in a direct-flame afterburner or thermal incinerator. Other devices will be accepted provided 98 percent or greater VOC destruction or removal efficiency can be demonstrated, as determined in accordance with Paragraph J.1 of this Section, or if emissions are reduced to 20 ppm by volume, whichever is less stringent.

C. Control Requirements for Existing Polypropylene Plants Using Liquid Phase Processes. All waste gas streams containing VOCs at the following sources in existing polypropylene plants using liquid phase processes shall be controlled as specified in Subsection B of this Section:

1. polymerization reaction section (i.e., reactor vents);

2. material recovery section (i.e., decanter vents, neutralizer vents, by-product and diluent recovery operation vents); and

3. product finishing section (i.e., dryer vents and extrusion and pelletizing vents).

D. Control Requirements for Existing High-Density Polyethylene Plants Using Liquid Phase Slurry Processes. All waste gas streams containing VOCs at the following sources in existing high-density polyethylene plants using liquid phase slurry processes shall be controlled as specified in Subsection B of this Section:

1. material recovery section (i.e., ethylene recycle treater vents); and

2. product finishing section (i.e., dryer vents and continuous mixer vents).

E. Control Requirements for Polystyrene Plants Using Continuous Processes. The emissions from the material recovery section (e.g., product devolatilizer system) shall be limited to 0.12 kg VOC/1,000 kg of product.

F. Control Requirements for Halogenated Hydrocarbons. The halogenated hydrocarbons shall be combusted or controlled by other methods specified in Subsection G of this Section that achieve a removal efficiency of 95 percent or greater, as determined in accordance with Paragraph J.1 of this Section. If combusted, the halogenated products of combustion shall be reduced to an emission level acceptable to the administrative authority.

G. Alternative Control Requirements. Other methods of control (such as, but not limited to, carbon adsorption, refrigeration, catalytic and/or thermal reaction, secondary steam stripping, recycling, or vapor recovery system) may be substituted for burning provided the substitute is acceptable to the administrative authority* and it achieves the same removal efficiency as required by this Section and determined in accordance with Paragraph J.1 of this Section or it achieves a degree of control not practically or safely achieved by other means.

H. Exemptions

1. All waste gas streams containing VOCs, except those subject to Subsections C, D, and E of this Section, are exempt from the requirements of this Section if any of the following conditions are met:

a. it can be demonstrated that the waste gas stream is not a part of a facility that emits, or has the potential to emit, 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or 100 TPY or more of VOC in any other parish;

b. it is a waste gas stream from a low-density polyethylene plant and no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1000 kg) of product are emitted from all the waste gas streams associated with the formation, handling, and storage of solidified product;

c. it is a waste gas stream having a combined weight of VOCs equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period; or

d. it is a waste gas stream with a concentration of VOCs less than 0.44 psia true partial pressure (30,000 ppm) except for the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, St. James, and West Baton Rouge in which the concentration of VOCs in the waste gas stream must be less than 0.044 psia true partial pressure (3,000 ppm).

2. Except for waste gas streams subject to Subsections C, D, and E of this Section, the administrative authority* may waive the requirements of this Section if one of the following conditions is met:

a. it will not support combustion without economically impractical amounts of auxiliary fuel; or

b. its disposal cannot be practically or safely accomplished by the means described herein or other equivalent means without causing undue economic hardship.

3. Waste gas streams subject to Subsections C, D, and E of this Section are exempt from the requirements of this Section if it can be demonstrated that the waste gas stream has a concentration of VOCs no greater than 408 ppm by volume.

I. Test Methods. Compliance with Subsections A-G of this Section shall be determined by applying the following test methods, as appropriate:

1. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates, as necessary;

2. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining gaseous organic compounds emissions by gas chromatography;

3. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon;

4. Test Method 25A or 25B (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous organic concentration using flame ionization or nondispersive infrared analysis; and

5. modified test methods approved or specified by the administrative authority*.

J. Compliance. All facilities affected by this Section shall be in compliance as soon as practicable but in no event later than August 20, 2003. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

1. Compliance with LAC 33:III.2115 shall be demonstrated at the owner/operator's expense as requested by the administrative authority. Such demonstration shall consist of control device destruction efficiency or recovery efficiency testing. Such compliance testing is in addition to the continuous monitoring required under LAC 33:III.2115.J.2.

2. The owner/operator of any facility subject to LAC 33:III.2115 shall install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specifications, including but not limited to:

a. the exhaust gas temperature of direct flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

b. the breakthrough of volatile organic compounds in a carbon adsorption unit;

c. the total amount of volatile organic compounds recovered by carbon adsorption or other waste gas stream recovery systems during a calendar month;

d. the dates for any maintenance of the required control devices and the estimated quantity and duration of volatile organic compound emissions during such activities; and

e. any other parameters affecting or related to waste gas streams as considered necessary by the administrative authority.

K. Recordkeeping. The owner or operator of any facility subject to LAC 33:III.2115 shall maintain the following information on the premises for at least two years and shall make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request:

1. a record for each vent of the results of any testing conducted at the facility in accordance with the provisions specified in Subsections I and J of this Section;

2. the date for any maintenance and repair of required control devices and the estimated quantity and duration of volatile organic compound emissions during such activities;

3. records for each vent required to satisfy the provisions of LAC 33:III.2115.J.2 to demonstrate the proper functioning of applicable control equipment to design specifications;

4. records to demonstrate that the criteria are being met for any exemption claimed.

L. This Section does not apply to safety relief and vapor blowdown systems where control cannot be accomplished because of safety or economic considerations. However, the emissions from these systems shall be reported to the department as required under LAC 33:III.918. Emergency conditions shall be reported in accordance with LAC 33:I.Chapter 39.

M. Definitions. Unless specifically defined in LAC 33:III.111, the terms in this Section shall have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply.

Safety Relief and *Vapor Blowdown Systems*—the emergency escape of gas from a process unit through a valve or other mechanical device, in order to eliminate system overpressure or in the case of an operational emergency.

Waste Gas Stream—any gas stream, excluding *fugitive emissions* as defined in LAC 33:III.Chapter 5, containing VOC and discharged from a processing facility directly to the atmosphere or indirectly to the atmosphere after diversion through other process equipment. Process gaseous streams that are used as primary fuels are excluded. The streams that transfer such fuels to a plant fuel gas system are not considered to be waste gas.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:960 (November 1990), LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 19:317 (March 1993), LR 22:1212 (December 1996), LR 24:21 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:1764 (August 2002), LR 30:745 (April 2004), LR 30:1672 (August 2004).

§2116. Glycol Dehydrators

A. Applicability. The provisions of this rule shall apply to the owner or operator of any glycol dehydrator that:

1. is not required to install controls according to LAC:33.III.Chapter 51; or

2. is not required to install controls according to LAC:33.III.2115.

B. Requirements. Any glycol dehydrator not exempt under Subsection C of this Section shall have a control device with the following efficiency:

1. an existing glycol dehydrator, constructed prior to October 20, 1994, shall:

a. demonstrate to the administrative authority, using methods found in Subsection D of this Section, a 70 percent or greater reduction of still-column emissions; or

b. if the control device is a condenser, annually achieve an average final exhaust temperature less than 110°F;

2. a new glycol dehydrator, constructed on or after October 20, 1994, and not subject to LAC:33.III.2115 or Chapter 51, shall ensure an 85 percent or greater reduction of still-column emissions using approved methods found in Subsection D of this Section; and

3. a glycol dehydrator using a flare or other combustion device as a control device shall be deemed to have equivalent efficiencies to the control efficiencies of Subparagraph B.1.a and Paragraph B.2 of this Section provided the flare or other combustion device is permitted in accordance with LAC 33:III.Chapter 5. Glycol dehydrators using a flare as a control device shall ensure destruction of emissions to the flare stack by maintaining the heat content of the flare gas above 300 Btu/scf and by documenting daily visual observations of the continuous presence of a flame.

C. Exemptions. A glycol dehydrator is exempt from the requirements of this Section if any of the following conditions are met:

1. the owner can demonstrate to the administrative authority that the glycol dehydrator operates fewer than 200 hours per year; or

2. the owner can demonstrate to the administrative authority, using method or methods found in Subsection D of this Section, that the total uncontrolled VOC emissions from the glycol dehydrator are not in excess of 9 tons per year. Once the glycol dehydrator becomes an affected unit, it does not revert to an exempted unit when the emissions drop below 9 tons per year, unless otherwise exempted by the approval of the administrative authority.

D. Test Methods. The emissions from glycol dehydrators affected by Subsection A of this Section shall be determined using the following methods, as appropriate:

1. rich/lean glycol mass balance using pressurized sample, for determining uncontrolled emissions;

2. total capture stack condensation;

3. partial stack condensation;

4. conventional stack measurements using Methods 18 and 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining volatile organic compound emissions; or

5. alternative methods of testing as approved by the administrative authority.

E. Compliance Schedule. All facilities affected by this Section shall be in compliance as soon as practicable, but in no event later than October 20, 1996, except those facilities required to submit a Part 70 permit application. Facilities required to submit a Part 70 permit application shall be in compliance by April 20, 1996.

F. Recordkeeping. The owner or operator of any facility subject to this rule shall maintain the following information on the premises, or an alternative location approved by the administrative authority for at least five years and shall make the following information available to representatives of the Louisiana Department of Environmental Quality upon request:

1. a record of the results of any testing conducted in accordance with Subsection D of this Section;

2. the date of any maintenance and repair of the required control device and the duration of uncontrolled emissions during such activities;

3. glycol units subject to Subparagraph B.1.b of this Section shall maintain:

a. a record of final exhaust temperature and time observed recorded twice a week on different days during daylight hours; and

b. a record of all temperature exceedances greater than or equal to 120° F, the date of each temperature exceedance, and a brief explanation describing the circumstances of the temperature exceedance; and

4. glycol units for which exemptions are being claimed shall maintain:

a. a record of total hours of operation on an annual basis if claiming an exemption under Paragraph C.1 of this Section; or

b. a record of actual throughput per day and the glycol circulation rate if claiming an exemption under Paragraph C.2 of this Section.

G. Reporting Requirements

1. The owner or operator of a facility shall submit to the Office of Environmental Services a permit application after installation of controls unless exempt from permitting pursuant to LAC 33:III.Chapter 5.

2. If no permit is required pursuant to LAC 33:III.Chapter 5, the owner or operator of a facility shall submit to the Office of Environmental Services a new or updated emission inventory questionnaire after installation of controls.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1107 (October 1994), repromulgated, LR 20:1279 (November 1994), amended LR 21:941 (September 1995), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2452 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2085 (October 2007).

§2117. Exemptions

A. The compounds listed in the following table are exempt from the control requirements of this Chapter.

Exempt Compounds
acetone
1-chloro-1,1-difluoroethane (HCFC-142b)
chlorodifluoromethane (HCFC-22)
1-chloro-1-fluoroethane (HCFC-151a)
chlorofluoromethane (HCFC-31)
chloropentafluoroethane (CFC-115)
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
cyclic, branched, or linear completely fluorinated alkanes
cyclic, branched, or linear completely fluorinated ethers with no unsaturations
cyclic, branched, or linear completely fluorinated tertiary amines with no unsaturations
cyclic, branched, or linear completely methylated siloxanes
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee)
dichlorodifluoromethane (CFC-12)
1,1-dichloro-1-fluoroethane (HCFC-141b)
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
1,1-difluoroethane (HFC-152a)
difluoromethane (HFC-32)
ethane
3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE–7500)
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$)
ethylfluoride (HFC-161)
1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-$C_3F_7OCH_3$, HFE–7000)
1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea)
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$)
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$)
1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
methane
methyl acetate
methylene chloride (dichloromethane)
methyl formate ($HCOOCH_3$)
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$)
parachlorobenzotrifluoride (PCBTF)
1,1,1,3,3- pentafluorobutane (HFC-365mfc)
pentafluoroethane (HFC-125)
1,1,1,2,3-pentafluoropropane (HFC-245eb)
1,1,1,3,3-pentafluoropropane (HFC-245fa)
1,1,2,2,3-pentafluoropropane (HFC-245ca)
1,1,2,3,3-pentafluoropropane (HFC-245ea)
perchloroethylene (tetrachloroethylene)
sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine
1,1,1,2-tetrafluoroethane (HFC-134a)
1,1,2,2-tetrafluoroethane (HFC-134)
1,1,1-trichloroethane (methyl chloroform)
trichlorofluoromethane (CFC-11)
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123)
1,1,1-trifluoroethane (HFC-143a)
trifluoromethane (HFC-23)

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§2119. Variances

A. If upon written application of responsible person(s) 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 technologically or economically under the circumstances, the administrative authority* may permit a variance from these regulations upon such conditions and with such time limitations as it may prescribe for prevention, control, or abatement of air pollution in harmony with the intent of the act.

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

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:118 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:361 (April 1991).

§2121. Fugitive Emission Control

A. Applicability. This regulation is applicable to equipment in petroleum refineries, natural gas processing plants, the synthetic organic chemical manufacturing

industry (SOCMI), the methyl tertiary butyl ether (MTBE) manufacturing industry, and the polymer manufacturing industry that contains any of the following components that are intended to operate in VOC service 300 hours or more during the calendar year:

1. pumps;
2. compressors;
3. pressure relief devices;
4. open-ended valves or lines;
5. process drains;
6. valves;
7. agitators;
8. instrumentation systems; and
9. connectors.

B. Fugitive Emission Control Requirements

1. No component specified for monitoring under Subsection C of this Section shall be allowed to leak organic compounds exceeding 10,000 parts per million by volume (ppmv), as defined in LAC 33:III.111, when tested by Method 21 "Determination of Volatile Organic Compound Leaks" in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003. Any regulated component observed leaking by sight, sound, or smell must be repaired according to Paragraph B.3 of this Section, regardless of the leak's concentration. This includes instrumentation system leaks and flange and connection leaks found per Subparagraph C.3.b of this Section, pump and compressor seal leaks found during the weekly visual inspections, and other regulated components found leaking.

2. No valve, except safety pressure relief valves, valves on sample lines, valves on drain lines and valves that can be removed and replaced without a shutdown, shall be located at the end of a pipe or line containing volatile organic compounds unless the end of such line is sealed with a second valve, a blind flange, a plug, or a cap. Such sealing devices may be removed only when the line is in use, for example, when a sample is being taken. When the line has been used and is subsequently resealed, the upstream valve shall be closed first, followed by the sealing device.

3. The operator shall make every reasonable effort to repair a leaking component, as described in LAC 33:III.2121.B within 15 days. If the component can be isolated or bypassed so as to significantly reduce or eliminate leakage, or if the repair of a component would require a unit shutdown, and if the shutdown would create more emissions than the repair would eliminate, the repair may be delayed to the next scheduled shutdown. An early unit shutdown may be ordered if leaking component losses become excessive.

C. Monitoring Requirements. The monitoring of the affected components shall be performed by the following schedule using the method described in LAC 33:III.2121.B.

1. Petroleum Refineries, SOCMI, MTBE, and Polymer Manufacturing Industry

a. Monitor with a leak detection device one time per year (annually) the following items:

i. pump seals;

ii. valves in liquid service; and

iii. process drains.

b. Monitor with a leak detection device four times per year (quarterly) the following items:

i. compressor seals;

ii. valves in gas service;

iii. pressure relief valves in gas service;

iv. valves in light liquid service at SOCMI, MTBE, and Polymer Manufacturing Plants; and

v. pumps in light liquid service at SOCMI, MTBE, and Polymer Manufacturing Plants.

c. Monitor pump seals visually 52 times a year (weekly).

2. Natural Gas Processing Plants

a. Monitor pump seals and compressor seals visually 52 times a year (weekly).

b. Monitor with a leak detection device four times a year (quarterly) the following items:

i. pumps, pump and compressor seals;

ii. valves; and

iii. pressure relief valves in gas service.

3. Facilities Listed in Paragraphs C.1 and 2 of This Section

a. Monitor with a leak detection device any pressure relief valve within 24 hours after it has vented to the atmosphere (For natural gas processing plants an immediate visual evaluation will be made).

b. Monitor immediately with a leak detection device any component that appears to be leaking on the basis of sight, smell, or sound. This includes flanges and connectors, instrumentation systems, and pump and compressor seals observed during the weekly visual inspections, and any other regulated components that appear to be leaking. In lieu of monitoring, the operator may elect to implement actions as specified in Paragraph B.3 of this Section.

c. Any valve that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Clauses C.1.b.ii and iv and C.2.b.ii of this Section if the valve:

i. has no external actuating mechanism in contact with the process fluid (e.g., diaphragm valves, sealed bellows valves);

ii. is operated with emissions less than 500 ppm above background as measured in accordance with this Section; and

iii. is tested for compliance with Clause C.3.c.ii of this Section initially upon designation and annually thereafter.

4. Exemptions. Monitoring is not required on the following:

a. components subject to LAC 33:III.2121.C.1 (petroleum refineries, SOCMI, MTBE, and polymer manufacturing industry) which contact a process fluid that contains less than 10 percent VOC by volume or components subject to LAC 33:III.2121.C.2 (Natural Gas Processing Plants) which contact a process fluid that contains less than 1.0 percent VOC by weight;

b. components in the petroleum refineries, SOCMI, MTBE, and polymer manufacturing industry which contact only a process liquid containing a VOC having a true vapor pressure equal to or less than 0.0435 psia (0.3 kPa) at 68°F (20°C);

c. flanges, inaccessible valves, valves that are unsafe to monitor, check valves (including similar devices not externally regulated). Inaccessible valves should be monitored on an annual basis at a minimum. Unsafe-to-monitor valves should be monitored when conditions would allow these valves to be monitored safely, e.g., during shutdown;

d. pressure relief valves in liquid service at SOCMI and polymer manufacturing industry, except after venting;

e. pressure relief devices, pump seals or packing and compressor seals or packing which are tied to either a flare header or vapor recovery device;

f. equipment operating under vacuum;

g. natural gas processing plants with less than 40 million cubic feet per day (mmcfd) capacity that do not fractionate natural gas liquids;

h. components contacting only organic compounds exempted under LAC 33:III.2117 or mixtures of same with water;

i. pumps and compressors that are sealless or have a double mechanical seal;

j. research and development pilot facilities and small facilities with less than 100 valves in gas or liquid service.

5. Alternate Monitoring Program. Any facility which already has in place a fugitive emission monitoring program which controls to a higher degree than required under this Section shall be exempted from this Section upon submittal of a description of the program to the administrative authority*.

D. Alternate Control Techniques. The monitoring schedule in LAC 33:III.2121.C may be modified as follows.

1. Alternate Standards for Valves and Pumps subject to LAC 33:III.2121.C.1.b and 2.b—Skip Period Leak Detection and Repair

a. An owner or operator may elect to comply with one of the alternative work practices specified in LAC 33:III.2121.D.1.b and c. However, the administrative authority must be notified before implementing one of the alternative work practices.

b. After two consecutive quarterly leak detection periods with the percent of components leaking equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and liquid service and pumps in light liquid service.

c. After five consecutive quarterly leak detection periods with the percent of components leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and liquid service and pumps in light liquid service.

d. If the percent of components leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in LAC 33:III.2121.C but subsequently can again elect to use this Subsection.

e. The percent of components leaking shall be determined by dividing the sum of components found leaking during current monitoring and components for which repair has been delayed by the total number of components subject to the requirements of LAC 33:III.2121.C.

f. An owner or operator must keep a record of the percent of valves and pumps found leaking during each leak detection period.

2. Alternative Standards for Valves and Pumps—Increased Monitoring Frequency. If there is an excessive number of leaks (greater than the good performance level), then an increase in the frequency of monitoring may be required.

E. Recordkeeping

1. When a leak that cannot be repaired on-line and in-place, as described in LAC 33:III.2121.B is located, a weatherproof and readily visible tag bearing an identification number and the date the leak is located shall be affixed to the leaking component. After the leak is repaired the tag is dated and removed.

2. A survey log shall be maintained by the operator which shall include the following:

a. the name of the process unit where the leaking component is located;

b. the name of the leaking component;

c. the stream identification at the leak;

d. the identification number from the tag required by LAC 33:III.2121.E.1;

e. the date the leak was located;

f. the date maintenance was performed;

g. the date the component was rechecked after maintenance, as well as the instrument reading upon check (For natural gas processing plants the soap bubble test commonly performed in the industry is satisfactory);

h. a record of leak detection device calibration;

i. a listing of leaks not repaired until turnaround;

j. a list of total number of items checked versus the total found leaking.

3. The operator shall retain the survey log for two years after the latter date specified in LAC 33:III.2121.E.2 and make said log available to the administrative authority upon request.

F. Reporting Requirements. The operator of the affected facility shall submit to the Office of Environmental Assessment a report semiannually containing the information below for each calendar quarter during the reporting period. The reports are due by the last day of the month (January and July) following the monitoring period or by a date approved by the department. The reports shall include the following information for each quarter of the reporting period:

1. the number of items checked versus the number found leaking, and a calculation of the percent of components leaking, as defined in Subparagraph D.1.e of this Section;

2. a listing of all leaks that were identified, but not repaired, within the 15-day limit, including the following information:

a. the name of the unit where the leaking component is located and the date of last unit shutdown;

b. the name of the leaking component;

c. the stream identification at the leak;

d. the date the leak was located;

e. the date maintenance was attempted;

f. the date the leak will be repaired; and

g. the reason repairs failed or were postponed;

3. the list of items awaiting turnaround for repair; and

4. a signed statement attesting to the fact that all other monitoring has been performed as required by the regulations.

G. Definitions. Terms used in this Section are defined in LAC 33:III.111 with the exception of those terms specifically defined as follows.

Heavy Liquid Service—equipment that is not in gas/vapor service or is not in light liquid service.

Inaccessible Valve—a valve than cannot be monitored without elevating the monitoring personnel more than 2 meters above a support service.

Instrumentation System—a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow). Valves and connectors are the predominant types of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems. Only valves nominally 0.5 inch and smaller and connectors nominally 0.75 inch and smaller in diameter are considered instrumentation systems for the purposes of these regulations. Valves greater than nominally 0.5 inch and connectors greater than nominally 0.75 inch associated with instrumentation systems are not considered part of instrumentation systems and must be monitored individually.

Light Liquid—a fluid with a vapor pressure greater than 0.3 kPa at 20°C.

Light Liquid Service—equipment in liquid service contacting a fluid greater than 10 percent by weight light liquid.

Liquid Service—equipment which processes, transfers or contains a VOC mixture of VOC in the liquid phase.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:959 (November 1990), LR 17:654 (July 1991), LR 21:1330 (December 1995), LR 22:1128 (November 1996), LR 22:1212 (December 1996), LR 24:22 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:1433 (July 2000), LR 26:2452 (November 2000), LR 30:1659 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007), LR 34:70 (January 2008).

§2122. Fugitive Emission Control for Ozone Nonattainment Areas and Specified Parishes

A. Applicability

1. This regulation is applicable to each process unit at petroleum refineries, natural gas processing plants, the synthetic organic chemical manufacturing industry (SOCMI), the methyl tertiary butyl ether (MTBE) manufacturing industry, and the polymer manufacturing industry that contains any of the following components that are intended to operate in VOC service 300 hours or more during the calendar year:

a. pumps;

b. compressors;

c. pressure relief devices;

d. open-ended valves or lines;

e. process drains;

f. valves;

g. agitators;

h. instrumentation systems; and

i. connectors.

2. This Section is applicable to sources in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge.

3. The requirements of this Section shall be effective for sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge starting January 1, 1996.

4. The requirements of this Section shall be effective for sources located in the parish of Calcasieu starting January 1, 2003.

5. When the provisions of this Section are effective, process units to which this Section applies that are also subject to the provisions of LAC 33:III.2121 will not be required to comply with the provisions of LAC 33:III.2121.

6. Applicable facilities as defined in Paragraph A.1 of this Section, which are subject to New Source Performance Standards, 40 CFR 60.480-489 (Subpart VV), 60.590-593 (Subpart GGG), 60.630-636 (Subpart KKK), or 61.240-247 (Subpart V), as incorporated by reference in LAC 33:III.Chapter 30, may become exempt from this Section by:

a. submitting a written notice to the administrative authority* informing them of the facility's request to become exempt from this Section and how 40 CFR 60.480-489 (Subpart VV), 60.590-593 (Subpart GGG), 60.630-636 (Subpart KKK), or 61.240-247 (Subpart V), as incorporated by reference in LAC 33:III.Chapter 30, will be administered to obtain that exemption;

b. applying 40 CFR 60.480-489 (Subpart VV), 60.590-593 (Subpart GGG), 60.630-636 (Subpart KKK), or 61.240-247 (Subpart V), as incorporated by reference in LAC 33:III.Chapter 30, to leak limitations specified in Paragraph C.1 of this Section rather than 10,000 ppm as specified in 40 CFR 60.480-489 (Subpart VV), 60.590-593 (Subpart GGG), 60.630-636 (Subpart KKK), or 61.240-247 (Subpart V), as incorporated by reference in LAC 33:III.Chapter 30;

c. including connectors as leak sources monitored and repaired using the restrictions in 40 CFR 60.480-489 (Subpart VV), 60.590-593 (Subpart GGG), 60.630-636 (Subpart KKK), or 61.240-247 (Subpart V), as incorporated by reference in LAC 33:III.Chapter 30, which apply to valves; and

d. increasing monitoring frequency only when the leaking sources monitored and repaired using the restrictions in 40 CFR 60.480-489 (Subpart VV), 60.590-593 (Subpart GGG), 60.630-636 (Subpart KKK), or 61.240-247 (Subpart V), as incorporated by reference in LAC 33:III.Chapter 30, which apply to valves, equal or exceed 2 percent of the valves monitored at or above 10,000 ppm.

B. Definitions. Terms used in this Section are defined in LAC 33:III.111 with the exception of those terms specifically defined as follows.

Connector—flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. Welded connections are not connectors.

Good Performance Level—an operating level reached when no more than 2.0 percent of a component in VOC service in a process unit are leaking at the leak rate definition or greater as determined by Method 21, "Determination of Volatile Organic Compound Leaks" (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).

Heavy Liquid Service—equipment that is not in VOC gas/vapor service or is not in VOC light liquid service.

Inaccessible Valve—a valve that cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

Instrumentation System—a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow). Valves and connectors are the predominant types of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems. Only valves nominally 0.5 inch and smaller and connectors nominally 0.75 inch and smaller in diameter are considered instrumentation systems for the purposes of these regulations. Valves greater than nominally 0.5 inch and connectors greater than nominally 0.75 inch associated with instrumentation systems are not considered part of instrumentation systems and must be monitored individually.

In Vacuum Service—equipment operating at an internal pressure that is at least 20 inches of water (38 mm of Hg) below ambient pressure.

Light Liquid—a fluid with a vapor pressure greater than 0.3 kPa (0.0435 psia) at 20°C (68°F) or a fluid for which the weight percent evaporation at 150°C exceeds 10 percent as determined by ASTM D86.

Light Liquid Service—equipment in liquid service contacting a fluid greater than 10 percent by weight light liquid.

Liquid Service—equipment which processes, transfers, or contains a VOC or mixture of VOC in the liquid phase.

Process Unit—a *process unit* that can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

Process Unit Shutdown—a work practice or operational procedure that stops production from a process unit or part of a process unit during which it is technically feasible to clear process material from a process unit or part of a process unit consistent with safety constraints and during

which repairs can be effected. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. An unscheduled work practice or operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the process unit or part of the process unit of materials and start-up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown, is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Unrepairable Component—unrepairable components are those designated as requiring a process unit shutdown to repair where more emissions would be created by an immediate facility shutdown than allowing the component to leak until the next scheduled shutdown, and the component is listed on a shutdown list for repairs.

C. Fugitive Emission Control Requirements

1. Leak Limitations

a. No component in petroleum refineries, SOCMI, MTBE, and polymer manufacturing industry shall be allowed to leak volatile organic compounds exceeding an instrument reading of 1,000 ppmv or greater for valves, connectors, instrumentation systems, pressure relief devices, and process drains; 5,000 ppmv for pumps and compressors; or 10,000 ppmv for agitators, as outlined in Subsection D of this Section, when tested by Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).

b. No component in natural gas processing plants shall be allowed to leak volatile organic compounds exceeding an instrument reading of 2,500 ppmv for valves, connectors, instrumentation systems, pressure relief devices, process drains, and open-ended valves and lines; 5,000 ppmv for pumps and compressors; or 10,000 ppmv for agitators, as outlined in Subsection D of this Section, when tested by Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).

c. Any regulated component observed leaking by sight, sound, or smell, except those covered under Subparagraph C.1.d of this Section, must be repaired according to Paragraph C.3 of this Section, regardless of the leak's concentration. This includes flange and connection leaks found per Subparagraph D.3.b of this Section, pump and compressor seal leaks found during the weekly visual inspections, and any other regulated component found leaking. This does not include valves or pumps in heavy liquid service.

d. Any pump or valve in heavy liquid service observed leaking by sight, sound, or smell shall be monitored within five days by the method specified in 40 CFR Part 60, Appendix A (Method 21), as incorporated by reference in LAC 33:III.Chapter 30. If the pump or valve is determined to be leaking in excess of the applicable limits given in this Subsection, it shall be repaired according to Paragraph C.3 of this Section.

2. No valve, except safety pressure relief valves, shall be located at the end of a pipe or line containing volatile organic compounds unless the end of such line is sealed with a second valve, a blind flange, a plug, or a cap. Such sealing devices may be removed only when the line is in use, for example, when a sample is being taken. When the line has been used and is subsequently resealed, the upstream valve shall be closed first, followed by the sealing device.

3. The operator shall make every reasonable effort to repair a leaking component, as described in this Subsection, within 15 days. If the component cannot be isolated or bypassed so as to significantly reduce or eliminate leakage, or if the repair of a component would require a unit shutdown, and if the shutdown would create more emissions than the repair would eliminate, the repair may be delayed to the next scheduled shutdown. The delay of repair shall not be any later than the next scheduled process unit shutdown. An early unit shutdown may be ordered if the total percentage of leaking and unrepairable components are excessive.

4. Percent of leaking components at a process unit shall be determined for a test period as follows.

Equation 1

$$\% C_{lvp} = [C_{lv}] / [C_{tv}] * 100\%$$

where:

$\% C_{lvp}$ = percent of leaking valves, flanged connectors, or pumps

C_{lv} = number of valves, flanged connectors, or pumps found leaking during the monitoring period

C_{tv} = total number of valves, flanged connectors, or pumps monitored during the period

5. Total percent of leaking and unrepairable components shall be determined as follows.

Equation 2

$$\% C_{tlvp} = [C_{tlv}] / [C_{ttv} + C_{tuvp}] * 100\%$$

where:

$\% C_{tlvp}$ = total percent of leaking and unrepairable valves, flanged connectors, or pumps

C_{tlv} = number of valves, flanged connectors, or pumps found leaking or defined as unrepairable

C_{ttv} = total number of valves, flanged connectors, or pumps tested during the period

C_{tuvp} = total number of valves, flanged connectors, or pumps which were defined as unrepairable

D. Monitoring Requirements. The monitoring of the affected components shall be performed by the following schedule using the method described in Subsection C of this Section or one of the alternate monitoring programs in Subsection E of this Section.

1. Petroleum Refineries, SOCMI, MTBE, and Polymer Manufacturing Industry

a. Monitor process drains with a leak detection device one time per year (annually).

b. Monitor with a leak detection device four times per year (quarterly) the following items:

i. compressor seals;

ii. pressure relief valves in gas service;

iii. valves in light liquid service;

iv. pumps in light liquid service; and

v. valves in gas service.

c. Monitor pump seals visually 52 times a year (weekly).

d. Monitor all flanged connectors in accordance with either Clause D.1.d.i or ii of this Section.

i. Inspect all flanged connectors weekly by visual, audible, and olfactory means.

ii. Monitor flanged connectors four times per year (quarterly) using a leak detection device as follows.

(a). Either 200 or 10 percent, whichever is less, of the flanged connectors shall be monitored each quarterly period in accordance with a written sampling plan.

(b). The sampling plan shall ensure that at least 66 percent of the flanged connectors monitored each quarterly period shall not have been previously monitored, until all flanged connectors within the process have been monitored.

e. Inspect weekly, by visual, audible, and olfactory means, all instrumentation systems.

f. Records of the visual, audible, and olfactory inspections of connectors and instrumentation systems are not required unless a leak is detected.

2. Natural Gas Processing Plants

a. Monitor pump seals and compressor seals visually 52 times a year (weekly).

b. Monitor with a leak detection device four times a year (quarterly) the following items:

i. pumps, pump and compressor seals;

ii. valves; and

iii. pressure relief valves in gas service.

3. Facilities Listed in Paragraphs D.1 and 2 of This Section

a. Monitor with a leak detection device any pressure relief valve within 24 hours after it has vented to the atmosphere. (For natural gas processing plants an immediate visual evaluation will be made.)

b. Monitor immediately with a leak detection device any component that appears to be leaking on the basis of sight, smell, or sound. This includes flanges and connectors, instrumentation systems, and pump and compressor seals observed during the weekly visual inspections, and any other regulated components that appear to be leaking. In lieu of monitoring, the operator may elect to implement actions as specified in Paragraph C.3 of this Section.

c. Inaccessible valves shall be monitored on an annual basis at a minimum.

d. Unsafe-to-monitor valves shall be monitored when conditions would allow these valves to be monitored safely (e.g., during shutdown).

e. Any valve that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Clauses D.1.b.iii and v and D.2.b.ii of this Section if the valve:

i. has no external actuating mechanism in contact with the process fluid (e.g., diaphragm valves, sealed bellows valves);

ii. is operated with emissions less than 500 ppm above background as measured in accordance with this Section; and

iii. is tested for compliance with Clause D.3.e.ii of this Section initially upon designation and annually thereafter.

4. Exemptions. Monitoring is not required on the following:

a. components subject to Paragraph D.1 of this Section (petroleum refineries, SOCMI, MTBE, and polymer manufacturing industry) which contact a process fluid that contains less than 10 percent VOC by volume or components subject to Paragraph D.2 of this Section (natural gas processing plants) which contact a process fluid that contains less than 1.0 percent VOC by weight;

b. components in the petroleum refineries, SOCMI, MTBE, and polymer manufacturing industry that contact only a process liquid containing a VOC having a true vapor pressure equal to or less than 0.3 kPa (0.0435 psia) at 20°C (68°F);

c. pressure relief valves in liquid service at SOCMI and polymer manufacturing industry, except after venting;

d. pressure relief devices, pump seals or packing, and compressor seals or packing where leaks are vented to either a flare header or vapor recovery device;

e. equipment in vacuum service;

f. natural gas processing plants with less than 40 million cubic feet per day (mmcfd) capacity that do not fractionate natural gas liquids;

g. components contacting only organic compounds exempted under LAC 33:III.2117 or mixtures of same with water;

h. pumps and compressors that are sealless or have a double mechanical seal;

i. research and development pilot facilities and small facilities with less than 100 valves in gas or liquid service;

j. insulated connectors;

k. components that have been placed on a shutdown list for repairs are exempt from further monitoring until a repair has been attempted; and

l. check valves.

5. Alternate Monitoring Program. Any facility that already has in place a fugitive emission monitoring program which controls to a higher degree than required under this Section shall be exempted from this Section upon submittal of a description of the program to the administrative authority* and approval thereof.

E. Alternate Control Techniques. The monitoring schedule in Subsection D of this Section may be modified as follows.

1. Alternate Standards for Valves Subject to Subparagraph D.1.b or D.2.b of This Section—Skip Period Leak Detection and Repair

a. An owner or operator may elect to comply with one of the alternative work practices specified in Subparagraphs E.1.b, c, g or Paragraph E.2 of this Section. However, the administrative authority* must be notified in writing before implementing one of the alternative work practices.

b. After two consecutive quarterly leak detection periods with the percent of leaking valves (Equation 1) equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

c. After five consecutive quarterly leak detection periods with the percent of leaking valves (Equation 1) equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

d. If the percent of leaking valves (Equation 1) is greater than 2.0, or the total percent of leaking and unrepairable valves (Equation 2) is greater than 4.0, the owner or operator shall comply with the requirements as described in Subsection D of this Section but subsequently can again elect to use this Subsection when the requirements are met.

e. The percent of leaking valves (Equation 1) shall be determined by dividing the sum of components found leaking during the current monitoring period by the total number of valves which were tested and multiplying the results by 100 percent.

f. An owner or operator must keep a record of the percent of valves found leaking during each leak detection period and the total percentage of leaking and unrepairable valves.

g. Existing equipment that has been monitored under LAC 33:III.2121 for fugitives at the leak definition of 10,000 ppmv can initially elect to use this alternate standard if the unit has data documented with the department by either January 1, 1996, or for the 12 months prior to becoming subject to this Section, that indicates the percent of leaking valves (Equation 1) is less than or equal to a 2.0 percent leak rate at 10,000 ppmv for the required time period.

2. Alternative Standards for Valves—Increased Monitoring Frequency. If the percent of leaking valves (Equation 1) in a test period is greater than 2.0, or the total percent of leaking and unrepairable valves (Equation 2) is greater than 4.0, then an increase in the frequency of monitoring may be required by the administrative authority*.

3. Alternate Standards for Flanged Connectors Subject to Clause D.1.d of this Section—Skip Period Leak Detection and Repair

a. An owner or operator may elect to comply with one of the alternative work practices specified in Clause E.3.b or Paragraph E.4 of this Section. However, the administrative authority* must be notified in writing before implementing one of the alternative work practices.

b. After four consecutive quarterly leak detection periods with the percent of leaking flanged connectors (Equation 1) equal to or less than 1.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the flanged connectors in gas/vapor and light liquid service.

c. If the percent of leaking flanged connectors (Equation 1) is greater than 1.0, or the total percent of leaking and unrepairable flanged connectors (Equation 2) is greater than 2.0, the owner or operator shall comply with the requirements as described in Subsection D of this Section but subsequently can again elect to use this Subsection when the requirements are met.

d. The percent of leaking flanged connectors (Equation 1) shall be determined by dividing the sum of components found leaking during the current monitoring period by the total number of flanged connectors that were tested and multiplying the results by 100 percent.

e. An owner or operator must keep a record of the percent of flanged connectors found leaking during each leak detection period and the total percentage of leaking and unrepairable flanged connectors.

4. Alternative Standards for Flanged Connectors—Increased Monitoring Frequency. If the percent of leaking

flanged connectors (Equation 1) in a test period is greater than 1.0, or the total percent of leaking and unrepairable flanged connectors (Equation 2) is greater than 2.0, then an increase in the frequency of monitoring may be required by the administrative authority*.

5. Alternate Standard for Batch Processes. As an alternate to complying with the requirements in Subsection D of this Section an owner or operator of a batch process in VOC service may elect to comply with one of the following alternative work practices. The batch product-process equipment shall be tested with a gas using the procedures specified in Subparagraph E.5.a of this Section or with a liquid as specified in Subparagraph E.5.b of this Section.

a. The following procedures shall be used to pressure test batch product-process equipment using a gas (e.g., air or nitrogen) to demonstrate compliance.

i. The batch product-process equipment train shall be pressurized with a gas to the operating pressure of the equipment. The equipment shall not be tested at a pressure greater than the pressure setting of the lowest relief valve setting.

ii. Once the test pressure is obtained, the gas source shall be shut off.

iii. The test shall continue for not less than 15 minutes, unless it can be determined in a shorter period of time that the allowable rate of pressure drop was exceeded. The pressure in the batch product-process equipment shall be measured after the gas source is shut off and at the end of the test period. The rate of change in pressure in the batch product-process equipment shall be calculated using the following equation:

Equation 3

$$\frac{P}{t} = \frac{(P_f - P_i)}{(t_f - t_i)}$$

where:

P/t = change in pressure, psia/hr

P_f = final pressure, psia

P_i = initial pressure, psia

$t_f - t_i$ = elapsed time, hours

iv. The pressure shall be measured using a pressure measurement device (gauge, manometer, or equivalent) that has a precision of ±2.5 millimeters (±0.05 psig) of mercury in the range of test pressure and is capable of measuring pressures up to the relief set pressure of the pressure relief device.

v. A leak is detected if the rate of change in pressure is greater than 6.9 kPa (1 psig) in one hour or if there is visible, audible, or olfactory evidence of fluid loss.

b. The following procedures shall be used to pressure test batch product-process equipment using a liquid to demonstrate compliance.

i. The batch product-process equipment train, or section of the train, shall be filled with the test liquid (e.g., water, alcohol). Once the equipment is filled, the liquid source shall be shut off.

ii. The test shall be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that the test is a failure.

iii. Each seal in the equipment being tested shall be inspected for indications of liquid dripping or other indications of fluid loss. If there are any indications of liquids dripping or of fluid loss, a leak is detected.

iv. If a leak is detected, it shall be repaired and the batch product-process equipment shall be retested before VOCs are fed to the equipment.

v. If the batch product-process equipment fails the retest or the second of two consecutive pressure tests, it shall be repaired as soon as practicable, but not later than 30 calendar days after the equipment is placed in VOC service.

F. Recordkeeping

1. When a component which has a leak that cannot be repaired, as described in Subsection C of this Section, is located, a weatherproof and readily visible tag bearing an identification number and the date the leak is located shall be affixed to the leaking component. After the leak has been repaired the tag identifying the component as a leaking component may be removed.

2. A survey log shall be maintained by the operator and shall include the following:

a. the name of the process unit where the leaking component is located;

b. the name of the leaking component;

c. the stream identification at the leak;

d. the identification number from the tag required by Paragraph F.1 of this Section;

e. the date the leak was located;

f. the date maintenance was performed;

g. the date(s) the component was rechecked after maintenance, as well as the instrument reading(s) upon recheck (For natural gas processing plants the soap bubble test commonly performed in the industry is satisfactory.);

h. a record of leak detection device calibration;

i. a list of leaks not repaired until turnaround;

j. a list of total number of items checked versus the total found leaking.

3. The operator shall retain the survey log for two years after the latter date specified in Paragraph F.2 of this Section and make said log available to the administrative authority* upon request.

G. Reporting Requirements. The operator of the affected facility shall submit a report semiannually to the Office of

Environmental Assessment containing the information below for each calendar quarter during the reporting period. The reports are due by the last day of the month (January and July) following the monitoring period or by a date approved by the department. The reports shall include the following information for each quarter of the reporting period:

1. the number of items checked versus the number found leaking;

2. the percent of components leaking for the *test period*, as defined in Paragraph C.4 of this Section;

3. the total percent of leakers, as defined in Paragraph C.5 of this Section;

4. a listing of all leaks that were identified, but not repaired, within the 15-day limit, including the following information:

a. the name of the unit where the leaking component is located and the date of last unit shutdown;

b. the name of the leaking component;

c. the stream identification at the leak;

d. the date the leak was located;

e. the date maintenance was attempted;

f. the date the leak will be repaired if the component is awaiting a shutdown; and

g. the reason repairs failed or were postponed;

5. the list of items awaiting turnaround for repair; and

6. a signed statement attesting to the fact that all other monitoring has been performed as required by the regulations.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1102 (October 1994), repromulgated LR 20:1279 (November 1994), amended LR 22:1129 (November 1996), LR 22:1212 (December 1996), repromulgated LR 23:197 (February 1997), amended LR 23:1678 (December 1997), LR 24:22 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2453 (November 2000), LR 28:1764 (August 2002), LR 30:1660 (August 2004), repromulgated by the Office of Environmental Assessment, LR 30:2030 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007).

Subchapter B. Organic Solvents

§2123. Organic Solvents

A. Except as provided in LAC 33:III.2123.B and C, any emission source using organic solvents having an emission of organic solvents of more than three pounds (1.3 kilograms) per hour or 15 pounds (6.8 kilograms) per day shall reduce the emission, where feasible, by incorporating one or more of the following control methods:

1. incineration, provided 90 percent of the carbon in the organic compounds being incinerated is oxidized to carbon dioxide (except as provided in LAC 33:III.2123.D);

2. carbon adsorption of the organic compounds;

3. any other equivalent means as may be approved by the administrative authority. Once a source exceeds the emission cutoff specified in this Paragraph that source shall be subject and shall remain subject to the requirements of LAC 33:III.2123.A regardless of future emission rates.

B. Soldering operations, painting and coating operations, not listed in LAC 33:III.2123.C, and dry cleaning operations using organic solvents which are not considered photochemically reactive shall be considered for exemption from the requirements of LAC 33:III.2123.

1. For the purposes of this Subsection, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

a. a combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cycloolefinic type of unsaturation: 5 percent;

b. a combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent;

c. a combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

2. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

C. Surface Coating Industries. No person may cause, suffer, allow, or permit volatile organic compound (VOC) emissions from the surface coating of any materials affected by this Subsection to exceed the emission limits as specified in this Section.

	Daily Weighted Average VOC Emission Limitation	
Affected Facility	**Lbs. per Gal. of Coating as applied (minus water and exempt solvent)**	**Kgs. per Liter of Coating as applied (minus water and exempt solvent)**
1. Large Appliance Coating Industry. The following emission limits shall apply: Prime, single, or topcoat application area, flashoff area and oven	2.8	0.34

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	**Kgs. per Liter of Coating as applied (minus water and exempt solvent)**
2. Surface Coating of Cans. The following emission limits shall apply: Sheet Basecoat (exterior and interior) and over-varnish: Two-piece can exterior (basecoat and over-varnish)	2.8	0.34
Two and three-piece can interior body spray, two-piece can exterior end (spray or roll coat)	4.2	0.51
Three-piece can side-seam spray	5.5	0.66
End sealing compound	3.7	0.44
3. Surface Coating of Coils. The following emission limits shall apply: Prime and topcoat or single coat operation	2.6	0.31
4. Surface Coating of Paper. The following emission limits shall apply: Coating Line	2.9	0.35
5. Surface Coating of Fabrics. The following emission limits shall apply: Fabric Facility	2.9	0.35
Vinyl Coating Line (except Plasticol coatings)	3.8	0.45
6. Surface Coating of Assembly Line Automobiles and Light Duty Trucks. The following emission limits shall apply: Prime application, flashoff area and oven (determined on a monthly basis)	1.2	0.14
Primer surface application flashoff area and oven	2.8	0.34
Topcoat application, flashoff area and oven	2.8	0.34
Final repair application, flashoff area and oven	4.8	0.58
As an alternative to the emission limitation of 2.8 pounds of VOC per gallon of coating applied for the primer surfacer and/or topcoat application, compliance with these emission limitations may be demonstrated by meeting a standard of 15.1 pounds of VOC per gallon of solids deposited.		
7. Surface coating-magnet wire coating. The following emission limits shall apply: Coating Line	1.7	0.20
8. Surface Coating of Metal Furniture. Volatile organic compound emissions from metal furniture coating lines shall not exceed 3 pounds per gallon (0.36 kg/liter) of coating (minus water and exempt solvent).		
9. Surface Coating of Miscellaneous Metal Parts and Products. The following emission limits shall apply: Clear Coat	4.3	0.52
Air or force air dried items (not oven dried)	3.5	0.42
Frequent color change and/or large numbers of colors applied, or first coat on untreated ferrous substrate	3.0	0.36
Outdoor or harsh exposure or extreme performance characteristics	3.5	0.42
No or infrequent color change, or small number of colors applied a. Powder Coating	0.4	0.05
b. Other	3.0	0.36
These limits do not apply to operations covered in 1-8 or 11 herein or exterior coating of fully assembled aircraft, auto refinishing, and auto customizing topcoating (processing less than 35 vehicles per day).		
10. Factory Surface Coating of Flat Wood Paneling. The following emission items shall apply:	**VOC Emission Limitation**	
	Lbs/1000 sq. ft. of Coated Surface	**Kgs/100 sq. meter of Coated Surface**
Printed interior wall panels made of hardwood plywood and thin particleboard	6.0	2.9
Natural finish hardwood plywood panels	12.0	5.8
Class II finishes for hardboard paneling	10.0	4.8
11. Surface Coating for Marine Vessels and Oilfield Tubulars and Ancillary Oilfield Equipment.	**Daily Weighted Average VOC Emission Limitation**	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	**Kgs. per Liter of Coating as applied (minus water and exempt solvent)**
a. Except as otherwise provided in this Rule, a person shall not apply a marine coating with a VOC content in excess of the following limits:		
Baked Coatings	3.5	0.42
Air-Dried Single-Component Alkyd or Vinyl Flat or Semi Gloss Finish Coatings	3.5	0.42
Two Component Coatings	3.5	0.42
b. Except for the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, in which the VOC limitations in Subparagraph C.11.a of this Section may not be exceeded, specialty marine coatings and coatings on oilfield tubulars and ancillary oilfield equipment with a VOC content not in excess of the following limits may be applied:		
Heat Resistant	3.5	0.42
Metallic Heat Resistant	4.42	0.53
High Temperature (Fed. Spec. TT-P-28)	5.41	0.65
Pre-Treatment Wash Primer	6.5	0.78
Underwater Weapon	3.5	0.42
Elastomeric Adhesives With 15 Percent Weight Natural or Synthetic Rubber	6.08	0.73
Solvent-Based Inorganic Zinc Primer	5.41	0.65
Pre-Construction and Interior Primer	3.5	0.42
Exterior Epoxy Primer	3.5	0.42
Navigational Aids	3.5	0.42
Sealant for Wire-Sprayed Aluminum	5.4	0.648
Special Marking	4.08	0.49
Tack Coat (Epoxies)	5.08	0.61
Low Activation Interior Coating	4.08	0.49
Repair and Maintenance Thermoplastic	5.41	0.65

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
Extreme High Gloss Coating	4.08	0.49
Antenna Coating	4.42	0.53
Antifoulant	3.66	0.44
High Gloss Alkyd	3.5	0.42
Anchor Chain Asphalt Varnish (Fed. Spec. TT-V-51)	5.2	0.62
Wood Spar Varnish (Fed. Spec. TT-V-119)	4.1	0.492
Dull Black Finish Coating (DOD-P-15146)	3.7	0.444
Tank Coatings (DOD-P-23236)	3.5	0.42
Potable Water Tank Coating (DOD-P-23236)	3.7	0.444
Flight Deck Markings (DOD-C-24667)	4.2	0.504
Vinyl Acrylic Top Coats	5.4	0.648
Antifoulant Applied to Aluminum Hulls	4.5	0.55

D. Control Techniques

1. If add-on controls such as incinerators or vapor recovery systems are used to comply with the emission limitation requirements, in terms of pounds per gallon of solids as applied (determined in accordance with Paragraph D.8 of this Section), the volatile organic compound capture and abatement system shall be at least 80 percent efficient overall. All surface coating facilities shall submit to the Office of Environmental Services, for approval, design data for each capture system and emission control device that is proposed for use. The effectiveness of the capture system (i.e., capture efficiency) shall be determined using the procedure specified in Paragraph E.6 of this Section.

2. If a person wishes to use low solvent technology to meet any of the emission limits specified in regulation LAC 33:III.2123.C.1-10 and if the technology to be used for any particular application is not now proven but is expected to be proven in a reasonable length of time, he may request a compliance date extension from the administrative authority*. Compliance date extensions will require progress reports every 90 days, or as directed, to show reasonable progress, as determined by the administrative authority, toward technology to meet the specified emission limitation.

3. Compliance will be determined by the procedure specified in "Control of Volatile Organic Emissions for Existing Stationary Sources. Vol 2-Surface Coating of Cans, Coils, Paper, Fabric, Autos and Lt. Duty Trucks", (EPA 450/2-77-008), the procedures specified in "Measurement of Volatile Organic Compounds" (EPA-450/2-78-041), a method approved by the administrative authority or certification from the paint manufacturer concerning the solvent makeup of the paint. Exempt solvents shall be treated the same as water in calculating the VOC content per gallon of coating. Exempt solvents are those compounds listed in LAC 33:III.2117.

4. Compliance with the alternative emission limit established in LAC 33:III.2123.C.6 of 15.1 pounds of VOC per gallon of solids deposited shall be determined in accordance with EPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations", EPA 450/3-88-018, December, 1988.

5. A plant wide emission reduction plan may be approved by the administrative authority* if it can be demonstrated by the surface coating facility that any emissions in excess of those allowed for a given coating line will be compensated for by reducing emissions from regulated sources within the surface coating facility.

6. Surface coating facilities on any property in Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge parishes that when controlled have a potential to emit, at maximum production, a combined weight (total from the property) of VOCs less than 10 tons in any consecutive 12 calendar months are exempt from the provisions of Subsection C of this Section. Surface coating facilities on any property in parishes other than Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge that when uncontrolled have a potential to emit a combined weight of VOCs less than 100 pounds (45 kilograms) in any consecutive 24-hour period are exempt from the provisions of Subsection C of this Section.

7. Soldering and surface coating facilities or portions thereof, may request from the administrative authority* exemption from the requirements of LAC 33:III.2123.C if all of the following conditions are met:

a. the affected portion of the facility will not emit 25 tons per year (TPY) or more of VOC if the facility is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge, or 50 TPY or more of VOC if located in any other parish;

b. that the only practical means of VOC control is thermal oxidization;

c. that the substance to be emitted is not toxic;

d. that the moles of fuel used would exceed the moles of VOC destroyed;

e. that the reasonable control of the VOC would result in a net increase of emissions from the facility;

f. the exemption will be described in detail in the Compliance Orders, under Section 110a.(3) of the Federal Clean Air Act, adopted by the administrative authority*.

8. Compliance with an emission limit specified under Subsection C of this Section may be demonstrated, in terms of pounds per gallon solids as applied, based upon the daily weighted average of a coating type within a single coating line. The equivalent emission limit in terms of pounds per gallon solids as applied (E_s) shall be determined using the following calculation.

$$V_s = (1 - E_c/D_s)$$

$$E_s = E_c/V_s$$

D_s = 7.36 pounds volatile organic compound per gallon volatile organic compound (i.e., density of reference solvent)

E_c = Emission limit found in Subsection C. of this Section, in terms of pounds per gallon of coating (less water and exempt solvents)

E_s = Emission limit equivalent to E_c, but in terms of pounds per gallon solids as applied

V_s = Gallon solids per gallon coating (less water and exempt solvents)

9. If improved transfer efficiency application equipment is used to comply with the emission limitations in terms of pounds per gallon solids deposited, the improved transfer efficiency equipment shall be tested following procedures approved in advance by the administrative authority* and consistent with those transfer efficiency testing procedures specified in Paragraph E.5 of this Section. The applicable emission limit shall be calculated using the transfer efficiency baseline established by the administrative authority* and compliance shall be determined following a calculation procedure also approved by the administrative authority*.

E. Testing. Compliance with LAC 33:III.2123.A, C and D shall be determined by applying the following test methods, as appropriate.

1. Test Method 24 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) with a one-hour bake;

2. Test Method 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates;

3. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for measuring gaseous organic compound emissions by gas chromatographic analysis;

4. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon;

5. Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations (Document No. EPA-450/3-88-018 dated December, 1988) for determining transfer efficiency, oven loading and incinerator destruction efficiency;

6. performance test procedures described in 40 CFR 60.444, as incorporated by reference in LAC 33:III.Chapter 30;

7. additional performance test procedures, or equivalent test methods, approved by the administrative authority*.

F. Recordkeeping. The owner/operator of any surface coating facility shall maintain records at the facility to verify compliance with or exemption from LAC 33:III.2123. The records shall be maintained for at least two years and will include, but not be limited to, the following:

1. records of any testing done in accordance with LAC 33:III.2123.E;

2. the owner/operator of any facility subject to LAC 33:III.2123 shall install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specifications, including but not limited to:

a. the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

b. the total amount of volatile organic compounds recovered by carbon adsorption or other solvent recovery systems during a calendar month;

c. the dates and reasons for any malfunction of a required control device and the estimated quantity and duration of volatile organic compound emissions during the upset period; and

d. the exhaust gas VOC concentration of a carbon adsorption system to determine breakthrough;

3. material data sheets which document the volatile organic compound content, composition, solids content, solvent density, and other relevant information regarding each coating and/or solvent used;

4. records used for determining the daily volatile organic compound emission rate of automobile and light-duty truck topcoat operations as specified in Document Number EPA-450/3-88-018 dated December, 1988.

G. Definitions

Air Dried Coating—any coating that is cured at a temperature below 90°C (194°F).

Baked Coating—any coating that is cured at a temperature at or above 90°C (194°F).

Extreme High Gloss Coating—any coating that achieves at least 95 percent reflectance on a 60° meter when tested by ASTM Method D-523.

Heat Resistant Coating—any coating that during normal use must withstand temperatures of at least 204°C (400°F).

High Gloss Coating—any coating that achieves at least 85 percent reflectance on a 60° meter when tested by ASTM Method D-523.

High Temperature Coating—any coating that must withstand temperatures of at least 426°C (800°F).

Marine Coating—any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by brush, spray, roller, or other means to ships, boats and their appurtenances, and to buoys and oil drilling rigs intended for the marine environment.

Metallic Heat Resistant Coating—any coating which contains more than five grams of metal particles per liter as applied and which must withstand temperatures over 80°C (175°F).

Repair and Maintenance Thermoplastic Coating—a resin-bearing coating in which the resin becomes pliable with the application of heat, such as vinyl, chlorinated rubber, or bituminous coatings.

H. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:119 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 22:340 (May 1996), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:23 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1240 (July 1999), LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007).

Subchapter C. Solvent Degreasers

§2125. Solvent Degreasers

A. Open Top Vapor Degreasers

1. No person shall operate or maintain a system utilizing a volatile organic compound for the open top vapor cleaning of objects without a cover that can be opened and closed easily without disturbing the vapor zone.

2. No person shall operate or maintain a system using a volatile organic compound for the open top vapor cleaning of objects without complying with the following operating procedures.

a. The cover shall be closed at all times except when processing work loads through the degreaser.

b. Parts shall be positioned so that maximum drainage is obtained.

c. Parts shall be moved in and out of the degreaser at less than 11 feet per minute (3.3 meters per minute).

d. The work load shall be degreased in the vapor zone at least 30 seconds or until condensation ceases.

e. Any pools of solvent on the cleaned parts shall be removed by tipping the part before withdrawing the part.

f. Parts shall be allowed to dry within the degreaser for at least 15 seconds or until visually dry.

g. Porous or absorbent materials such as cloth, leather, wood or rope shall not be degreased.

h. Work loads shall not occupy more than half of the degreaser open top area.

i. Solvent shall not be sprayed above the vapor level.

j. Solvent leaks shall be repaired immediately or the degreaser shall be shut down.

k. Waste solvent shall not be disposed of or transferred to another party such that greater than 20 percent of the waste (by weight) will evaporate into the atmosphere.

l. Exhaust ventilation shall not exceed 65 cubic feet per minute (CFM) per square foot (ft^2) (20 cubic meters per minute per square meter) of degreaser open area, unless necessary to meet OSHA requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans shall not be used near the degreaser opening.

m. Water shall not be visibly detectable in solvent exiting the water separator.

3. No person shall operate or maintain a system utilizing a volatile organic compound for the open top vapor cleaning of objects without the following safety switches:

a. the following control devices which will automatically shut off sump heat:

i. a condenser flow sensor and thermostat which will detect if the condenser coolant is not circulating or if the condenser coolant temperature exceeds the solvent manufacturer's recommendations;

ii. a solvent level sensor which will detect if the solvent level drops below acceptable design limits;

iii. a vapor level sensor which will detect if the vapor level rises above acceptable design limits;

b. a spray safety switch which will shut off the spray pump if the vapor level drops more than 4 inches (10 cm) to prevent spraying above the vapor level;

c. one of the following controls:

i. the degreaser shall have a freeboard that provides a ratio (the distance from the top of the vapor level to the top edge of the degreasing tank divided by the degreaser width) equal to or greater than 0.75, and, if the degreaser opening is greater than 10 ft^2 (1 m^2), a powered cover;

ii. the degreaser shall have a properly sized refrigerated chiller capable of achieving an 85 percent reduction in solvent emissions;

iii. the degreaser shall be of an enclosed design where the cover or door opens only when the dry part is actually entering or exiting the degreaser;

iv. the degreaser shall be equipped with a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft^2 (15 m^3/min per m^2) of air/vapor area (when the cover is open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

d. a permanent conspicuous label summarizing the operating procedures.

B. Conveyorized Degreasers. No person shall operate or maintain a system utilizing a volatile organic compound for the conveyorized cleaning of objects without complying with the following operation procedures.

1. Exhaust ventilation shall not exceed 65 CFM per ft^2 (20 m^3/min per m^2) of degreaser opening, unless necessary to meet OSHA requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans shall not be used near the degreaser opening.

2. Parts shall be positioned so that maximum drainage is obtained.

3. Vertical conveyor speed shall be maintained at less than 11 ft/min (3.3 m/min).

4. Waste solvent shall not be disposed of or transferred to another party such that greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers.

5. Leaks shall be repaired immediately or the degreaser shall be shutdown.

6. Water shall not be visibly detectable in the solvent exiting the water separator.

7. Downtime covers shall be placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shut down and removed just before they are started up.

8. No person shall operate or maintain a system utilizing a volatile organic compound for the conveyorized cleaning of objects without the following controls:

a. one of the following major control devices is required:

i. the conveyorized degreaser shall have a properly sized refrigerated chiller capable of achieving an 85 percent reduction in solvent emissions;

ii. the conveyorized degreaser shall be equipped with a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft^2 (15 m^3/min per m^2) of air/vapor area (when down-time covers are open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

b. a condenser flow switch and thermostat which will shut off sump heat if the condenser coolant is not circulating or if the condenser coolant discharge temperature exceeds the solvent manufacturer's recommendations;

c. a spray safety switch which will shut off the spray pump if the vapor level drops more than 4 inches (10 cm);

d. a drying tunnel or other means such as a rotating (tumbling) basket if space is available to prevent solvent liquid or vapor carry-out;

e. a vapor level control thermostat which will shut off the sump heat when the vapor level rises above the designed operating level;

f. entrances and exits which silhouette work loads so that the average clearance (between parts and edge of the degreaser opening) is either less than 4 inches (10 cm) or less than 10 percent of the width of the opening;

g. down-time covers which close off the entrance and exit during nonoperating hours;

h. a permanent conspicuous label summarizing the operating procedures.

C. Cold Cleaning Facilities

1. No person shall operate or maintain a system utilizing a volatile organic compound for the cold cleaning of objects without a cover that can be opened or closed easily. If the solvent volatility is greater than 2.3 kPa (0.6 psi) measured at 38°C (100°F) or if the solvent is heated to above 50°C (120°F) one of the following control devices must be installed:

a. freeboard that gives a freeboard ratio greater than or equal to 0.7; or

b. water cover (solvent must be insoluble in and heavier than water); or

c. other systems of equivalent control, such as a refrigerated chiller or carbon adsorption, approved by the administrative authority.

2. No person shall operate or maintain a system using a volatile organic compound for cold cleaning of objects without complying with the following operating procedures.

a. The cover shall be closed at all times except when processing work loads through the degreaser.

b. Parts shall be positioned so that maximum drainage is obtained.

c. Any pools of solvent on the cleaned parts shall be removed by tipping the part before withdrawing the part.

d. Parts shall be allowed to dry within the degreaser for at least 15 seconds or until visually dry.

e. Solvent shall not be sprayed above the vapor level.

f. Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased.

g. Solvent leaks shall be repaired immediately or the degreaser shall be shut down.

h. Waste solvent shall not be disposed of or transferred to another party such that greater than 20 percent of the waste (by weight) will evaporate into the atmosphere.

i. Exhaust ventilation shall not exceed 65 CFM per ft^2 (20 m/min per m^2) of degreaser open area, unless necessary to meet OSHA requirements or unless a carbon adsorption system is installed as a major control device.

Ventilation fans shall not be used near the degreaser opening.

j. Water shall not be visibly detectable in a solvent exiting the water separator.

D. Exemptions. Except as required in this Subsection, a vapor degreaser emitting 100 pounds (45 kilograms) or less of volatile organic compounds (VOC) in any consecutive 24-hour period (uncontrolled) is exempt from the provisions of this Section provided the total emissions from all the vapor degreasers at the facility combined are less than 100 tons per year of VOC, uncontrolled. If these two conditions are not met, the provisions of this Section must apply. For the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, the requirements of this Section apply to all solvent metal cleaners, except as follows.

1. Open top degreasers with an open area smaller than 10.8 ft^2 (1 m^2) shall be exempt from the requirements of LAC 33:III.2125.A.3.c.ii and iv.

2. Conveyorized degreasers with an air/vapor interface smaller than 21.6 ft^2 (2.0 m^2) shall be exempt from the requirements of LAC 33:III.2125.B.8.a.

E. Test Methods. Compliance with this Section shall be determined by applying the following test methods, as applicable:

1. Test Method D323-82 for determining Reid vapor pressure;

2. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates;

3. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining gaseous organic compound emissions by gas chromatography;

4. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon.

F. Recordkeeping Requirements. The owner or operator of any solvent metal cleaning operation shall maintain the following records at the facility for at least two years:

1. the amount and type of solvent purchased each month;

2. the amount and type of waste solvent disposed of each month;

3. a record of control equipment maintenance, such as replacement of the carbon in a carbon adsorption unit, when applicable; and

4. the results of all tests conducted at the facility in accordance with the requirements described in LAC 33:III.2125.E.

G. Sources affected by this Section shall achieve compliance as expeditiously as possible but in no event later than one year after becoming an affected facility.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:959 (November 1990), LR 18:1122 (October 1992), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 34:70 (January 2008).

Subchapter D. Cutback Paving Asphalt

§2127. Cutback Paving Asphalt

A. No person may cause, allow or permit the manufacture, mixing, storage, use or application of cutback paving asphalts or emulsified asphalts used for paving which contain volatile organic compounds without approval of the administrative authority as provided in LAC 33:III.2127.D.

B. Compliance. Compliance with this Section shall be determined on a daily basis by direct observation as specified in guideline report EPA-450/2-77-037.

C. Recordkeeping. The owner/operator of any operation involved with the manufacture, mixing, storage, use, or application of cutback paving asphalts and emulsified asphalts shall maintain records to verify compliance with this Section. The records will be maintained for at least two years and will include but not be limited to the following:

1. purchase and sales receipts including delivery dates, quantities, types of materials and comments;

2. equipment operation schedules and maintenance records; and

3. testing data to document compliance with LAC 33:III.2127.B and D.2.

D. Exemptions

1. The administrative authority may approve the manufacture, mixing, storage, use, or application of cutback paving asphalt where:

a. long life (greater than one month) stockpile storage is necessary;

b. the use or application at ambient temperatures less than 10°C (50°F) is necessary;

c. the cutback paving asphalt is to be used solely as a penetrating prime coat;

d. it can be demonstrated that no VOC emissions will occur from the use of the cutback.

2. The administrative authority may approve the manufacture, mixing, storage, use or application of

emulsified asphalts used for paving which contain volatile organic compounds where certain grades or applications of emulsified asphalt shall be allowed with the following maximum solvent contents as determined by ASTM D-244:

a. 3.0 percent by weight for seal coats;

b. 3.0 percent by weight for chip seals when dusty or dirty aggregate is used;

c. 8.0 percent by weight for mixing with open graded aggregate with less than 1 percent by weight of dust or clay-like materials adhering to the coarse aggregate fraction (1/4 inch in diameter or greater); and

d. 12.0 percent by weight for mixing with dense graded aggregate when used to produce a mix designed to have 10 percent or less voids when fully compacted.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:118 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:361(April 1991), LR 17:477 (May 1991).

Subchapter E. Reserved

Subchapter F. Gasoline Handling

§2131. Filling of Gasoline Storage Vessels

A. Control Requirement. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage container unless such container is equipped with a submerged fill pipe and unless the displaced vapor emissions from submerged filling of the container are processed by a vapor recovery system which reduces such emissions by at least 90 percent.

B. Approved Vapor Balance System. When a vapor balance system is used to comply with the above vapor recovery system control requirements, the balance system will be assumed to meet the specified control requirements if the following conditions are met.

1. A vapor-tight return line having an internal cross-sectional area at least one-half that of the liquid line is connected before gasoline can be transferred into the storage container. No gasoline leaks exist anywhere in the liquid transfer system. Inspection for visible liquid leaks, visible fumes, or odors resulting from gasoline dispensing operations shall be conducted by the owner or the operator of the gasoline outlet and the owner or the operator of the tank truck. Gasoline loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

2. The only atmospheric emission during gasoline transfer into the storage container is through the storage container pressure-vacuum valve.

3. The delivery vessel is kept vapor-tight at all times with vapor recovery equipment. The delivery vessel must be in compliance with LAC 33:III.2137. The vapor-laden delivery vessel may only be refilled at bulk gasoline plants complying with LAC 33:III.2133 or bulk gasoline terminals complying with LAC 33:III.2135.

C. Alternate Vapor Balance Systems. Other vapor balance arrangements may be accepted if proof of the emission level required in LAC 33:III.2131.A is provided to the administrative authority. Approval of any alternate vapor balance system shall not be valid unless it is received from the administrative authority in writing.

D. Exemptions. The following are exempt from the requirements of LAC 33:III.2131.A:

1. affected facilities in attainment or unclassified areas (all parishes except Bossier, Caddo, Beauregard, Calcasieu, Livingston, Pointe Coupee, East Baton Rouge, West Baton Rouge, Iberville, Lafayette, St. Mary, Ascension, St. James, St. John the Baptist, St. Charles, Lafourche, Jefferson, Orleans, St. Bernard and Grant);

2. transfers made to storage tanks with a capacity greater than 40,000 gallons (151,400 liters) and equipped with controls as required by LAC 33:III.2103 of these regulations;

3. any gasoline outlet in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee and West Baton Rouge whose throughput is less than 120,000 gallons (454,200 liters) per year or any gasoline outlet in the parishes of Beauregard, Bossier, Caddo, Grant, Jefferson, Lafayette, Lafourche, Orleans, St. Bernard, St. Charles, St. James, St. John the Baptist, and St. Mary whose throughput is less than 500,000 gallons (1,892,700 liters) per year. Once the rolling 30-day average throughput exceeds 10,000 gallons for a facility in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee and West Baton Rouge or 42,000 gallons for a facility in the parishes of Beauregard, Bossier, Caddo, Grant, Jefferson, Lafayette, Lafourche, Orleans, St. Bernard, St. Charles, St. James, St. John the Baptist, and St. Mary that facility becomes an affected facility and does not revert to an exempted facility when the throughput drops back below the throughput exemption level;

4. tanks with a capacity of 2,000 gallons or less installed before January 1, 1979, and new tanks with a capacity of 250 gallons or less installed after December 31, 1978;

5. tanks having a capacity of less than 550 gallons used exclusively for the fueling of farm implements and having a submerged fill line.

E. Compliance. Compliance with this Section shall be determined by applying the following test methods, as appropriate:

1. Test Method 27 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for

determination of vapor tightness of gasoline delivery tanks using pressure-vacuum test;

2. Guideline report EPA-450/2-78-051, Appendix B, Gasoline Vapor Leak Detection Procedure by Combustible Gas Detector;

3. Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile organic compound leaks.

F. Recordkeeping. The owner or operator of any operation involved with storing gasoline in any stationary container and required to comply with LAC 33:III.2131 shall maintain records to verify compliance with this Section. The records will be maintained for at least two years and will include, but not be limited to, the following:

1. the date of delivery of each shipment of gasoline, the certificate number and date of certification of each delivery vehicle that delivers a shipment:

a. regulation LAC 33:III.2137.A.2 requires a sticker to be displayed on the gasoline tank truck with the identification number of the tank and the date it was tested;

b. the owner or operator of any operation involved with storing gasoline in any stationary container and required to comply with LAC 33:III.2131 shall not accept delivery of gasoline from any gasoline tank truck that does not have a sticker indicating that it has been inspected in the last year;

c. the sticker should be located near the Department of Transportation certification plate;

2. the dates and descriptions of any malfunction, repair, replacement or modification of control systems or control equipment required to be used in the transfer of gasoline from the gasoline tank truck to a stationary storage tank. If the problem is with equipment on the tank truck, information on the owner or operator of the tank truck, the truck identification number, date the problem occurred and drivers name shall be recorded as part of the descriptions of any malfunction, repair, replacement or modification of control systems required above;

3. the owner or operator shall maintain records of any testing requested by the administrative authority to prove compliance with LAC 33:III.2131 or any testing done by the owner or operator on a voluntary basis.

G. Implementation Schedule. Facilities must be in compliance with this Section within six months after becoming an affected facility.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:609 (July 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1123 (October 1992), LR 19:1564 (December 1993), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:193 (February 2001).

§2132. Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities

A. Definitions. Terms used in this Section are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined as follows.

CARB—California Air Resources Board.

Independent Small Business Marketer of Gasoline (ISBM)—a person engaged in the marketing of gasoline who would be required to pay for procurement and installation of vapor recovery equipment under this Section, unless such person:

1. is a refiner; or

2. controls, is controlled by, or is under common control with, a refiner; or

3. is otherwise directly or indirectly affiliated with a refiner or with a person who controls, is controlled by, or is under a common control with, a refiner (unless the sole affiliation referred to herein is by means of a supply contract or an agreement or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person); or

4. receives less than 50 percent of his annual income from refining or marketing of gasoline. The term *refiner* shall not include any refiner whose total refinery capacity (including the refinery capacity of any person who controls, is controlled by, or is under common control with, such refiner) does not exceed 65,000 barrels per day. Control of a corporation means ownership of more than 50 percent of its stock.

Major System Modification (for the purposes of LAC 33:III.2132)—replacing, repairing or upgrading 75 percent or more of the facility's Stage II equipment.

Motor Vehicle Fuel—any petroleum distillate having a Reid vapor pressure of more than 4 pounds per square inch as determined by ASTM Method D323 and which is used primarily to power motor vehicles. This definition includes, but is not limited to, gasoline and mixtures of simple alcohols and gasoline.

Motor Vehicle Fuel Dispensing Facility (hereafter called *facility* or *facilities*)—a facility consisting of one or more stationary gasoline storage tanks, with an individual capacity of 250 gallons or more, together with dispensing devices, used to fill motor vehicle fuel tanks, or portable containers.

Small Business Stationary Source—a stationary source that:

1. is owned or operated by a person that employs 100 or fewer individuals;

2. is a small business concern as defined in the Small Business Act;

3. is not a major stationary source;

4. does not emit 50 tons or more per year of any regulated pollutant; and

5. emits less than 75 tons per year of all regulated pollutants.

Stage II Vapor Recovery System—a gasoline vapor recovery system that is CARB-approved on or before March 31, 2001, or equivalent, and recovers vapors during the refueling of motor vehicles.

B. Applicability

1. The provisions of this Section shall apply to motor vehicle fuel dispensing facilities in the affected parishes of Ascension, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge.

2. New facilities constructed after promulgation of this regulation shall comply with the requirements of this regulation upon start-up of the facility.

3. All facilities existing when these rules are promulgated that dispense greater than 10,000 gallons of gasoline per month (50,000 gallons of gasoline per month in the case of an independent small business marketer of gasoline) are subject to this regulation and shall demonstrate to the administrative authority their average monthly volume of motor vehicle fuel dispensed. This information shall be submitted to the administrative authority no later than 90 days after promulgation of this regulation. The criteria that mandate the installation of gasoline vapor recovery equipment are determined by calculating the average volume of motor vehicle fuel dispensed per month, without facility shutdown, for the most recent two-year period, and shall be calculated monthly. If data for two years is not available, this calculation shall be based on the monthly average for the most recent 12 calendar months, including only those months for which the facility was operating.

4. Facilities subject to the provisions of this Section shall demonstrate compliance according to the following schedule:

a. facilities for which new construction commenced after November 15, 1990, must comply with these requirements not later than May 20, 1993;

b. facilities constructed before November 15, 1990, which have an average monthly throughput rate of 100,000 gallons or more of gasoline per month must comply prior to November 20, 1993;

c. facilities constructed before November 15, 1990, which have an average monthly throughput rate between 10,000 and 100,000 gallons of gasoline per month must comply not later than November 20, 1994; and

d. existing facilities previously exempted from, but which become subject to, the requirements of this regulation shall comply with the requirements of this regulation within one year from the date on which the facility becomes subject.

5. No owner or operator as described in Paragraphs B.1, 2, and 3 of this Section shall cause or allow the dispensing of motor vehicle fuel at any time unless all fuel dispensing operations are equipped with and utilize a Stage II vapor recovery system certified by CARB on or before March 31, 2001, that is properly installed and operated in accordance with the corresponding CARB executive order. The vapor recovery equipment must also be installed and operated within the guidelines of the National Fire Protection Association (NFPA) 30. The vapor recovery equipment utilized shall be certified by CARB or equivalent certification authority approved by the administrative authority* to attain a minimum of 95 percent gasoline vapor control efficiency. This certified equipment shall have coaxial hoses and shall not contain remote check valves. In addition, only CARB or equivalent approved aftermarket parts and CARB or equivalent approved rebuilt parts shall be used for installation or replacement use. CARB certified enhanced vapor recovery systems and/or individual parts are approvable by the administrative authority* as equivalent alternatives.

6. The regulated facility shall submit the following application information to the Office of Environmental Compliance prior to installation of the Stage II Vapor Recovery System:

a. plans for installation of the Stage II Vapor Recovery System, including approved equipment (per Paragraph B.5 of this Section) and piping, together with the proposed construction schedule;

b. plans to test for proper operation of the Stage II equipment in accordance with Subparagraph D.1.a of this Section or upon major system modification;

c. information in the application for approval form shall include:

i. the facility name and address;

ii. signature of the owner or operator;

iii. the CARB or equivalent executive order number of the vapor recovery system to be utilized; and

iv. any other pertinent information.

7. Once a facility becomes subject to this regulation, that facility shall continue to be subject to this regulation even if throughput drops back below the throughput exemption level.

8. Upon request by the Department of Environmental Quality, the owner or operator of a facility that claims to be exempt from the requirements of this Section shall submit supporting records to the Office of Environmental Compliance within 30 calendar days from the date of the request. The Department of Environmental Quality shall make a final determination regarding the exemption status of a facility.

C. Training

1. At least one owner/operator/employee from each facility shall receive training in the categories listed in this

Section. For each person who successfully completes training, a certificate or other proof of training shall be required. The required training shall be completed prior to the initiation of operation of a facility's Stage II Vapor Recovery equipment. Training shall include the following areas:

a. purposes and effects of the Stage II vapor control program;

b. equipment operation and function specific to the facility's system;

c. maintenance schedules and requirements for the facility's equipment;

d. equipment warranties; and

e. equipment manufacturer contacts (names, addresses and telephone numbers) for parts and service.

2. The administrative authority shall accept equipment manufacturers' seminars as a form of training with proof of attendance or completion after evaluation. Other types of training may be accepted upon approval by the Department of Environmental Quality.

D. Testing

1. The owner/operator of the facility shall have the installed vapor recovery equipment tested prior to the start-up of the facility. The owner or operator shall notify the Office of Environmental Compliance at least five calendar days in advance of the scheduled date of testing. Testing must be performed by a contractor that is certified with the Department of Environmental Quality. Compliance with the emission specification for Stage II equipment shall be demonstrated by passing the following required tests or equivalent for each type of system:

a. vapor balance system:

i. a static pressure test (CARB test procedure TP 201.3) shall be initially conducted and successfully passed after installation of the vapor recovery system and prior to initiating operation of the vapor recovery system and once every year thereafter;

ii. a dynamic pressure drop test (San Francisco Bay Area Dynamic Back Pressure Test Procedure ST-27) shall be initially conducted and successfully passed after installation of the vapor recovery system and prior to initiating operation of the vapor recovery system and once every year thereafter; and

iii. a liquid blockage test (San Diego Test Procedure TP-91-2) shall be initially conducted and successfully passed after installation of the vapor recovery system and prior to initiating operation of the vapor recovery system and once every five years thereafter;

b. vacuum assist system:

i. a static pressure test (CARB test procedure TP 201.3) shall be initially conducted and successfully passed after installation of the vapor recovery system and prior to initiating operation of the vapor recovery system and once every year thereafter;

ii. an air to liquid volume ratio test (CARB test procedure TP 201.5) shall be initially conducted and successfully passed after installation of the vapor recovery system and prior to initiating operation of the vapor recovery system and once every year thereafter; and

iii. a liquid blockage test (San Diego Test Procedure TP-91-2) shall be initially conducted and successfully passed after installation of the vapor recovery system and prior to initiating operation of the vapor recovery system and once every five years thereafter.

2. The test methods used are contained in the Environmental Protection Agency document entitled, "Technical Guidance Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities, EPA-450-3-91-022b" and the CARB Stationary Source Test Methods, Volume 2, April 12, 1996.

3. The department reserves the right to confirm the results of the aforementioned testing at its discretion and at any time. Within 30 days after installation or major system modification of a vapor recovery system, the owner or operator of the facility shall submit to the Office of Environmental Compliance the date of completion of the installation or major system modification of a vapor recovery system and the results of all functional testing requirements.

E. Labeling. The facility owner/operator shall post operating instructions conspicuously on the front of each gasoline dispensing pump using a Stage II vapor recovery system. The instructions shall include:

1. a clear description of how to correctly dispense gasoline with the vapor recovery nozzles utilized at the site;

2. a warning that continued attempts at dispensing gasoline after the system indicates that the vehicle tank is full ("topping off") may result in spillage or recirculation of gasoline; and

3. a telephone number established by the department for use by the public to report comments, questions, or problems experienced with the system.

F. Inspection

1. The facility owner or operator shall maintain the Stage II vapor recovery system in proper operating condition as specified by the manufacturer and free of defects that could impair the effectiveness of the system, including but not limited to:

a. absence or disconnection of any component required to be used on a certified or equivalent system;

b. crimped or flattened vapor hose such that the vapor passage is blocked or restricted;

c. a nozzle boot that is torn in one or both of the following ways:

i. a triangular-shaped or similar tear more than 1/2 inch on a side or a hole more than 1/2 inch in diameter;

ii. a slit more than 1 inch in length;

d. for balance nozzles a faceplate that is damaged such that the capability to achieve a seal with a fill pipe interface is affected for a total of at least one-fourth of the circumference of the faceplate;

e. for nozzles in vacuum assist type systems, a flexible cone for which a total of at least one-fourth of the cone is damaged or missing;

f. a nozzle shutoff mechanism that malfunctions in any manner;

g. vapor return lines, including such components as swivels, anti-recirculation valves, and underground piping, that malfunction, are blocked, or are restricted such that the pressure drop through the line exceeds by a factor of two or more the value as certified in the approved system;

h. a vapor processing unit that is inoperative;

i. a vacuum producing device that is inoperative;

j. pressure/vacuum valves, vapor check valves, or dry breaks that are inoperative;

k. a vapor guard that is missing or damaged such that a slit from the outer edge of the open end flange to the spout anchor clamp exists or that has an equivalent cumulative damage;

l. any equipment defect that is identified by the department as substantially impairing the effectiveness of the system in reducing refueling vapor emissions; or

m. any gasoline leaks as detected by sight, sound, or smell.

2. The owner or operator shall perform daily inspections and accurately record the results of the inspections.

3. Any equipment having a defect, as determined through daily visual inspections or other means, shall be tagged "out of order" by the facility owner or operator and shall not be used until it has been repaired or replaced.

4. Any equipment that has been tagged "out of order" by the department shall not be used until it has been repaired or replaced.

G. Recordkeeping. The facility owner/operator shall maintain the following records on the facility premises for at least two years and present them to an authorized representative of the department upon request:

1. application approval records;

2. certificate to operate;

3. system installation and testing results;

4. Stage II maintenance records, which shall include, but not be limited to, daily visual inspections for malfunctions;

5. department inspection records;

6. compliance records; and

7. training certification.

H. Enforcement

1. Enforcement of these regulations, authorized under R.S. 30:2054, shall include, but not be limited to, the following penalties:

a. notices of corrected violations;

b. compliance orders;

c. cease and desist orders;

d. suspension of license or permit to operate;

e. revocation of license or permit to operate;

f. monetary fines; and

g. "red tagging" equipment to prevent its operation.

2. The administrative authority may consider requests from a small business stationary source for modification of:

a. any work practice or technological method of compliance; or

b. the schedule of milestones for implementing such work practice or method of compliance preceding any applicable compliance date, based on the technological and financial capability of any such small business stationary source. No such modification may be granted unless it is in compliance with the applicable requirements of the Louisiana Environmental Quality Act and the Federal Clean Air Act, including the requirements of the applicable implementation plan. Where such applicable requirements are set forth in federal regulations, only modifications authorized in such regulations may be allowed.

I. Fees. The fees are defined in LAC 33:III.223.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 18:1254 (November 1992), repromulgated LR 19:46 (January 1993), amended LR 23:1682 (December 1997), LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2453 (November 2000), LR 29:558 (April 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007).

§2133. Gasoline Bulk Plants

A. Applicability

1. This Section applies to all unloading, loading, and storage operations at bulk gasoline plants and to any gasoline tank truck delivering or receiving gasoline at a bulk gasoline plant.

2. The following are subject only to the requirements of Subparagraphs C.3.g-i, Subsection E, and Paragraph E.1 of this Section and are exempt from the requirements of LAC 33:III.2131:

a. any stationary storage tank of 550 gallons (2,082 liters) capacity or less, notwithstanding LAC 33:III.2107; and

b. any bulk gasoline plant with an average daily throughput of gasoline of less than 4,000 gallons (15,000 liters) on a 30-day rolling average, provided that records are maintained according to the requirements in Paragraph E.1 of this Section. Any facility that becomes or is currently subject to all of the provisions of this Section by exceeding this applicability threshold will remain subject to these provisions even if its throughput later falls below the applicability threshold. Any facility that is currently subject to a state or federal rule promulgated pursuant to the Clean Air Act Amendments of 1977 by exceeding an applicability threshold is and will remain subject to these provisions, even if its throughput or emissions have fallen or later fall below the applicability threshold.

B. Definitions. As used in this Section, all terms not defined herein shall have the meaning given to them in the act or in LAC 33:III.111.

C. Standards

1. Each bulk gasoline plant subject to this Section shall be equipped with a vapor balance system between the gasoline storage tank and the incoming gasoline tank truck designed to capture and transfer vapors displaced during filling of the gasoline storage tank. These lines shall be equipped with fittings that are vapor-tight and that automatically and immediately close upon disconnection.

2. Each bulk gasoline plant subject to this Section shall be equipped with a vapor balance system between the gasoline storage tank and the outgoing gasoline tank truck designed to capture and transfer vapors displaced during the loading of the gasoline tank truck. The vapor balance system shall be designed to prevent any vapors collected at one loading rack from passing to another loading rack.

3. Each owner or operator of a bulk gasoline plant subject to this Section shall act to ensure that the procedures in Subparagraphs C.3.a-i of this Section are followed during all loading, unloading, and storage operations:

a. the vapor balance system required by Paragraphs C.1 and 2 of this Section shall be connected between the tank truck and storage tank during all gasoline transfer operations;

b. all storage tank openings, including inspection hatches and gauging and sampling devices, shall be vapor-tight when not in use;

c. the gasoline tank truck compartment hatch covers shall not be opened during product transfer;

d. all vapor balance systems shall be designed and operated at all times to prevent gauge pressure in the gasoline tank truck from exceeding 18 inches (450 millimeters) of water and vacuum from exceeding 5.9 inches (150 millimeters) of water during product transfers;

e. no pressure vacuum relief valve in the bulk gasoline plant vapor balance system shall begin to open at a system pressure of less than 18 inches (450 millimeters) of water or at a vacuum of less than 5.9 inches (150 millimeters) of water;

f. all product transfers involving gasoline tank trucks at bulk gasoline plants subject to this Section shall be limited to vapor-tight gasoline tank trucks;

g. filling of storage tanks shall be restricted to submerged fill;

h. loading of outgoing gasoline tank trucks shall be limited to submerged fill; and

i. owners or operators of bulk gasoline plants or owners or operators of tank trucks shall observe all parts of the transfer and shall discontinue transfer if any liquid leaks are observed or vapor leaks are observed from lines, hoses, or connectors.

4. Each calendar month, the vapor balance systems described in Paragraphs C.1 and 2 of this Section and each loading rack that loads gasoline tank trucks shall be inspected for liquid or vapor leaks during product transfer operations. For purposes of this Section, detection methods incorporating sight, sound, or smell are acceptable. Each leak that is detected shall be repaired within 15 calendar days after it is detected.

D. Compliance. Compliance with this Section shall be determined by applying the following test methods, as appropriate:

1. leak tests for monitoring during loading, EPA, Appendix B, Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA 450/2-78-51);

2. Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile organic compound leaks;

3. Monitoring Requirements. Inspection for visible liquid leaks, visible fumes, or odors resulting from gasoline dispensing operations shall be conducted by the owner or the operator of the bulk plant or the owner or the operator of the tank truck. Gasoline loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

E. Recordkeeping. The owner/operator of any gasoline bulk plant shall maintain records to verify compliance with or exemption from this Section. The records will be maintained for at least five years and will include, but not be limited to, the following:

1. purchase and sales receipts including delivery dates, quantities, and comments;

2. equipment operation schedules and maintenance records;

3. data to document compliance with LAC 33:III.2133.D;

4. visual inspection to address the installation of the vapor return line, odor testing for leaks during transfer operations and suggested use of check-off sheets; and

5. the dates and times the vapor collection facility was inspected and whether it passed the requirements specified in LAC 33:III.2137.B.1.

F. Reporting. The owner or operator of any facility containing sources subject to this Section shall comply with the requirements of LAC 33:III.927 for the reporting of excess emissions.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:610 (July 1990), LR 21:552 (June 1995), LR 22:1212 (December 1996).

§2135. Bulk Gasoline Terminals

A. Areas Affected. All facilities in Ascension, Beauregard, Bossier, Caddo, Calcasieu, East Baton Rouge, Grant, Iberville, Livingston, Jefferson, Lafayette, Lafourche, Orleans, Pointe Coupee, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Mary, and West Baton Rouge parishes shall be in compliance with this Section.

B. Control Requirements

1. No person may load gasoline into any tank trucks or trailers from any bulk gasoline terminal unless:

a. the bulk gasoline terminal is equipped with a vapor control system, capable of complying with Paragraph B.2 of this Section, which is installed and in operation and consisting of one of the following:

i. an adsorber or condensation system which processes and recovers at least 90 percent by weight of all vapors and gases from the equipment being controlled:

$$\%\ \text{efficiency} = \frac{(\text{Influent} - \text{Effluent})}{(\text{Influent})} \times 100\%$$

ii. a vapor collection system which directs all vapors to a fuel gas system;

iii. a control system with an efficiency equivalent to or greater than the above, and approved by the administrative authority;

b. all displaced vapors and gases are vented only to the vapor control system;

c. a means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected;

d. all loading and vapor lines are equipped with fittings without vapor leaks and which close automatically when disconnected.

2. No person may allow mass emissions of volatile organic compounds from control equipment to exceed 80 milligrams per liter (4.7 grains per gallon or 0.67 pounds per 1,000 gallons) of gasoline loaded.

3. No person may allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation.

4. No person may allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

5. A facility subject to LAC 33:III.2135 shall service only those delivery trucks/transport vessels complying with LAC 33:III.2137.

C. Exemptions

1. Gasoline distribution facilities which have a gasoline throughput less than 20,000 gallons (75,708 liters) per day averaged over any consecutive 30-day period shall meet the provisions of LAC 33:III.2133. Once a facility's throughput exceeds this rate, it shall become subject to and shall comply with LAC 33:III.2135 and shall remain so regardless of any fluctuations in throughput.

2. All loading and unloading facilities for crude oil and condensate, for ships and barges and for facilities loading and unloading only liquified petroleum gas are exempt from LAC 33:III.2135.

3. Gasoline bulk terminals which are located in an attainment area and do not service facilities controlled by LAC 33:III.2131 and 2133 are exempt from the control requirements of LAC 33:III.2135.B. Bulk terminals servicing exempted and controlled facilities are required to collect vapors from controlled facilities.

D. Compliance. Compliance with this Section shall be determined by applying the following test methods, as appropriate:

1. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates, as necessary;

2. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for measuring gaseous organic compound emissions by gas chromatographic analysis;

3. Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile organic compound leaks;

4. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon;

5. EPA leak tests for monitoring during loading, Appendix B, Control of Volatile Organic Compound Leaks

from Gasoline Tank Trucks and Vapor Collection Systems (EPA 450/2-78-051);

6. additional performance test procedures, or equivalent test methods, approved by the administrative authority*; and

7. Monitoring Requirements. Inspection for visible liquid leaks, visible fumes, or odors resulting from gasoline dispensing operations shall be conducted by the owner or the operator of the terminal or the owner or the operator of the tank truck. Gasoline loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

E. Recordkeeping. The owner/operator of any gasoline bulk terminal shall maintain records to verify compliance with or exemption from this Section. The records will be maintained for at least two years and will include, but not be limited to, the following:

1. purchase and sales receipts including delivery dates, quantities, and comments;

2. equipment operation schedules and maintenance records;

3. testing, sampling and analysis data to document compliance with LAC 33:III.2135.B and D;

4. visual inspection to address the installation of the vapor return line, odor testing for leaks during transfer operations and suggested use of check-off sheets;

5. for vapor disposal systems, the following information shall be recorded:

a. daily measurements of the exhaust gas temperature immediately downstream of a direct-flame incinerator;

b. daily measurements of the inlet and outlet temperature of a chiller or catalytic incinerator; and

c. breakthrough of VOCs in a carbon adsorption unit.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:611 (July 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1123 (October 1992), LR 22:1212 (December 1996), LR 24:25 (January 1998).

§2137. Gasoline Terminal Vapor-Tight Control Procedure

A. Gasoline Tank Trucks

1. Testing Procedure. Gasoline tank trucks and their vapor collection systems shall not sustain a pressure change of more than 3 inches of water (0.75 kPa) in five minutes when pressurized to 18 inches of water (4.5 Kpa) or evacuated to 6 inches of water (1.5 Kpa) using Test Method 27 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of vapor tightness of gasoline delivery tanks using pressure-vacuum test.

2. Inspection Sticker Required. All tank trucks must have a sticker displayed on each tank indicating the identification number of the tank and the date each tank last passed the pressure and vacuum test described in LAC 33:III.2137.A.1. Each tank must be certified annually and the sticker must be displayed near the Department of Transportation certification plate. Any repairs necessary to pass the specified requirements must be made within 15 days of failure.

B. Vapor Collection System

1. Requirements for Potential Leak Source. Loading and unloading operations at gasoline terminals shall not produce a reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters around the perimeter of a potential leak source as detected by a combustible gas detector using Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile organic compound leaks.

2. Design and Operating Requirements. Vapor collection and processing equipment shall be designed and operated to prevent tank truck gauge pressure from exceeding 18 inches of water (4.5 kPa) and prevent vacuum from exceeding 6 inches of water (1.5 kPa).

3. The vapor collection system will be inspected annually.

a. If the administrative authority determines that there is an excessive number of leaks during any given test by the terminal operator or by an administrative authority representative, an increase in the monitoring frequency may be requested.

b. If the vapor collection system fails to pass inspection, any repairs necessary to pass the specified requirements must be made within 15 days of failure.

C. Exemptions. All loading and unloading facilities for crude oil and condensate, for ships and barges and for facilities loading or unloading only liquified petroleum gas are exempt from LAC 33:III.2137.

D. Recordkeeping Requirements. The gasoline terminal operator shall maintain records at the facility for at least two years indicating the last time the vapor collection facility passed the requirements specified in LAC 33:III.2127.B.1. Items which required repair in order to pass the specified requirements must also be recorded during the annual test procedure.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the

Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:612 (July 1990), LR 22:1212 (December 1996).

Subchapter G. Petroleum Refinery Operations

§2139. Refinery Vacuum Producing Systems

A. Control of Steam Jet Ejectors and Mechanical Pumps. Emissions of volatile organic compounds from steam jet ejectors and mechanical pumps shall be controlled by one of the applicable methods specified in LAC 33:III.2115.A, B, and F. Compliance shall be determined and records shall be kept as specified in LAC 33:III.2115.I, J, and K.

B. Emissions of volatile organic compounds from a hot-well with a contact condenser shall be controlled by covering the hot-well and controlling the vapors by one of the applicable methods specified in LAC 33:III.2115.A, B, and F. Compliance shall be determined and records shall be kept as specified in LAC 33:III.2115.I, J, and K.

C. Exemptions. This Section does not apply to refinery vacuum producing systems that are required by another federal or state regulation to implement controls that reduce VOCs to a more stringent standard than would be required by this Section.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 24:917 (May 1998).

§2141. Refinery Process Unit Turnarounds

A. Emissions of volatile organic compounds from petroleum refinery process unit turnarounds shall be controlled by pumping the liquid contents to storage and depressurizing the processing units to 5 psig (pounds per square inch gauge) or below before venting to the atmosphere. Control of the vapors during the depressurization prior to venting to atmosphere shall be accomplished by one of the applicable methods specified in LAC 33:III.2115.A, B, and F. Compliance shall be determined and records shall be kept as specified in LAC 33:III.2115.I, J, and K.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991).

Subchapter H. Graphic Arts

§2143. Graphic Arts (Printing) by Rotogravure and Flexographic Processes

A. Control Requirements. No person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, or flexographic printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Paragraphs A.1-5 of this Section. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production.

1. The solvent fraction of ink, as it is applied to the substrate, less exempt solvent, contains 25 volume percent or less of organic solvent and 75 volume percent or more of water. Also acceptable as an alternative limit is ink containing no more than 0.5 pounds of volatile organic compounds per pound of solids. Exempt solvents are those compounds listed in LAC 33:III.2117.

2. A volatile organic compound adsorption or incineration system having at least 90 percent (by weight) control efficiency across the control device, which can be demonstrated to have an overall capture and abatement reduction of at least:

a. 75 percent where a publication rotogravure process is employed;

b. 65 percent where a packaging rotogravure process is employed;

c. 65 percent where a flexographic printing process is employed.

3. The ink as it is applied to the substrate, less water and exempt solvent, contains 60 percent by volume or more of nonvolatile material.

4. This rule applies to affected machines on which both surface coating and printing operations are performed.

5. Line-by-line compliance with the emission limits or control requirements of this rule is required. Any cross-line averaging or bubbling must receive approval from the administrative authority*.

B. Applicability Exemption. A rotogravure or flexographic printing facility that has the potential to emit, at full production (8760 hours per year basis), a combined weight of VOC of less than 25 TPY in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; less than 50 TPY in the parishes of Calcasieu and Pointe Coupee; or less than 100 TPY in any other parish, calculated from historical records of actual consumption of ink, is exempt from the provisions of Subsections A and C of this Section and need only comply with Subsection D of this Section.

C. Compliance. The owner/operator of any facility subject to LAC 33:III.2143 shall install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specification. Compliance with this Section shall be determined by certification from the ink

manufacturer concerning the solvent makeup of the ink or by applying the following test methods as appropriate:

1. Test Method 24 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determination of volatile matter content, water content, density volume solids and weight of solids;

2. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates;

3. Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon; and

4. capture efficiency test by a method approved by the administrative authority*.

D. Recordkeeping. The owner or operator of any graphic arts facility shall maintain records at the facility to verify compliance with or exemption from LAC 33:III.2143. The records shall be maintained for at least two years and will include, but not be limited to, the following:

1. records of any testing done in accordance with LAC 33:III.2143.C;

2. records of operational parameters of control devices including:

a. the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream or downstream of any catalyst bed;

b. the total amount of volatile organic compounds recovered by carbon adsorption or other solvent recovery systems during a calendar month;

c. the dates for any malfunction of a required control device and the estimated quantity and duration of volatile organic compound emissions during the upset period; and

d. continuous monitoring for breakthrough of a carbon adsorption bed;

3. material data sheets which document the volatile organic compound content, composition, solids content, solvent density and other relevant information regarding each ink or coating used.

E. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:964 (November 1990), LR 18:1123 (October 1992), LR 22:1212 (December 1996), LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1796 (October 1999), LR 28:1765 (August 2002), LR 30:746 (April 2004).

Subchapter I. Pharmaceutical Manufacturing Facilities

§2145. Pharmaceutical Manufacturing Facilities

A. Reactors, Distillation Operations, Crystallizers, Centrifuges, and Vacuum Dryers. The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall control the volatile organic compound emissions from all reactors, distillation operations, crystallizers, centrifuges and vacuum dryers that have the potential to emit prior to control 15 pounds per day (6.8 kg/day) or more of VOC. Surface condensers or equivalent controls shall be used, provided that:

1. if surface condensers are used, the condenser outlet gas temperature must not exceed:

a. –13°F (–25°C) when condensing VOC of vapor pressure greater than 5.8 psia (40.0 KPA);

b. 5°F (–15°C) when condensing VOC of vapor pressure greater than 2.9 psia (20.0 KPA);

c. 32°F (0°C) when condensing VOC of vapor pressure greater than 1.5 psia (10.0 KPA);

d. 50°F (10°C) when condensing organic compounds of vapor pressure greater than 1.0 psia (7.0 KPA); or

e. 77°F (25°C) when condensing organic compounds of vapor pressure greater than 0.5 psia (3.50 KPA);

2. if equivalent controls are used, the VOC emissions must be reduced by at least as much as they would be by using a surface condenser which meets the requirements of LAC 33:III.2145.A.1.

B. Air Dryers and Production Equipment Exhaust Systems. The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall reduce the VOC emissions from all air dryers and production equipment exhaust systems:

1. by at least 90 percent if emissions are 330 lb/day (150 kg/day) or more of VOC; or

2. to 33 lb/day (15.0 kg/day) or less if emissions are less than 330 lb/day (150 kg/day) of VOC.

C. Storage and Loading Controls. The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall:

1. provide a vapor balance system or equivalent control that is at least 90 percent effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than 2,000 gallons that store VOC with vapor pressures greater than 4.1 psia (28.0 KPA) at 20°C; and

2. install pressure/vacuum conservation vents set at plus or minus 0.03 psi gauge (plus or minus 0.2 KPA) on all storage tanks that store VOC with vapor pressures greater than 1.5 psia (10.3 KPA) at 20°C, unless a more effective control system is used.

D. Centrifuges, Filters, and In-process Tank Requirements. The owner or operator of a synthesized pharmaceutical facility subject to this regulation shall:

1. enclose all centrifuges, rotary vacuum filters, and other filters which have exposed liquid surfaces, where the liquid contains volatile organic compounds and exerts a total volatile organic compound vapor pressure of 0.5 psia (3.50 KPA) or more at 20°C;

2. install covers on all in-process tanks containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

E. Volatile Organic Compound Leaks. The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall repair all leaks from which a liquid containing VOC can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair but in no event later than 15 days after observation.

F. Compliance. The owner/operator of any facility subject to LAC 33:III.2145 shall install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specifications. Compliance with this Section shall be determined by applying the following test methods as applicable:

1. ASTM Test Method D328-82 for determining Reid vapor pressure;

2. Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining flow rates;

3. Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) for determining gaseous organic compound emissions by gas chromatography;

4. Test Method 25 40 CFR Part 60, Appendix A, (as incorporated by reference at LAC 33:III.3003) for determining total gaseous nonmethane organic emissions as carbon.

G. Recordkeeping. The owner or operator of a pharmaceutical manufacturing facility shall maintain the following records at the facility for at least two years:

1. the results of all tests conducted in accordance with LAC 33:III.2145.F;

2. records of surface condenser outlet gas temperatures;

3. records of operational parameters of other control devices;

4. the dates and reasons for any control device malfunction and estimate of resultant VOC emissions.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:964 (November 1990), LR 22:1212 (December 1996), LR 24:25 (January 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 34:70 (January 2008).

Subchapter J. Limiting Volatile Organic Compound (VOC) Emissions from Reactor Processes and Distillation Operations in the Synthetic Organic Chemical Manufacturing Industry (SOCMI)

§2147. Limiting VOC Emissions from SOCMI Reactor Processes and Distillation Operations

A. Applicability

1. The provisions of this Subchapter apply to any vent stream discharging to the atmosphere and originating from a process unit in which a reactor process or distillation operation is located. This Subchapter shall apply to all vents located at facilities that emit, or have the potential to emit, 25 tons per year (TPY) or more of volatile organic compounds (VOC), plantwide, in the affected parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, or 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee. Once an operation is considered to be covered by this Subchapter, it shall be so considered ad infinitum. A decision tree is provided (Figure 1) to facilitate determination of applicability to this Subchapter on a per vent basis. The total resource effectiveness (TRE) index value may be applied on an individual process vent stream basis for a given process unit. Compliance with this rule shall be attained within a period of two years after promulgation. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision. Any emission source that is subject to this rule and to the Waste Gas Disposal Rule (LAC 33:III.2115) shall comply with this rule only. This rule shall apply only to Standard Industrial Major Code 28.

2. Exemptions from the provisions of this Subchapter are as follows:

a. any reactor process or distillation vent stream for which an existing combustion device is employed to control volatile organic compound (VOC) emissions is not required to meet the 98 percent destruction or 20 parts per million

(ppm) by volume emissions limit until the combustion device is replaced for other reasons;

b. any reactor process or distillation operation that is designed and operated in a batch mode is not subject to the provisions of this Subchapter;

c. any reactor process or distillation operation that is part of a polymer manufacturing operation is not subject to the provisions of this Subchapter;

d. any reactor process or distillation operation operating in a process unit with a total design capacity of less than 1 gigagrams per year for all chemicals produced within that unit is not subject to the provisions of this Subchapter except for the reporting and recordkeeping requirements listed in Paragraph F.4 of this Section;

e. any vent stream for a reactor process or distillation operation with a flow rate of less than 0.011 standard cubic meters per minute or a total VOC concentration of less than 500 ppm by volume is not subject to the provisions of this Subchapter except for the performance testing requirements listed in Subparagraph D.3.b and Paragraph D.9 of this Section and the reporting and recordkeeping requirements listed in Paragraph F.3 of this Section;

f. any reactor process or distillation operation which does not use, contain or produce VOCs is not subject to the provisions of this Subchapter; and

g. any reactor process or distillation operation that is subject to the Hazardous Organic NESHAP (HON), the NSPS of Subchapter NNN for distillation operations or the NSPS of Subchapter RRR for reactor processes is not subject to the provisions of this Subchapter.

B. Definitions. Unless specifically defined in LAC 33:III.111, the terms in this Subchapter shall have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply, unless the context clearly indicates otherwise.

Batch Mode—a discontinuous process involving the bulk movement of material through sequential manufacturing steps. Mass, temperature, concentration and other properties of the system vary with time. Batch processes are typically characterized as "nonsteady-state."

Boiler—any enclosed combustion device that extracts useful energy in the form of steam.

By Compound—by individual stream components, not carbon equivalents.

Continuous Recorder—a data recording device that either records an instantaneous data value at least once every 15 minutes or records 15-minute or more frequent block average values.

Distillation Operation—an operation separating one or more feed streams into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phases as they approach equilibrium within the distillation unit.

Distillation Unit—a device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, steam jet, etc.), plus any associated recovery system.

Flame Zone—the portion of the combustion chamber in a boiler occupied by the flame envelope.

Flow Indicator—a device that indicates whether gas flow is present in a vent stream.

Halogenated Vent Stream—any vent stream containing a total concentration of halogen atoms (by volume) contained in halogenated organic compounds of 200 ppm by volume or greater determined by using Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) or other test or validated data by the United States Environmental Protection Agency's (EPA) Method 301 of 40 CFR Part 63, Appendix A, or by engineering assessment or process knowledge that no halogenated organic compounds are present. For example, 150 ppm by volume of ethylene dichloride would contain 300 ppm by volume of total halogen atoms.

Incinerator—any enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one section; rather, the energy recovery system is a separate section following the combustion section and the two are joined by ducting or connections that carry flue gas.

Primary Fuel—the fuel that provides the principal heat input to the device. To be considered primary, the fuel must be able to sustain operation without the addition of other fuels.

Process Heater—a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that is heated to produce steam.

Process Unit—equipment assembled and connected by pipes or ducts to produce, as intermediates or final products, one or more synthetic organic chemical manufacturing industry (SOCMI) chemicals (see LAC 33:III.2199.Appendix A). A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities.

Product—any compound or SOCMI chemical that is produced as that chemical for sale as a product, by-product, co-product or intermediate or for use in the production of other chemicals or compounds.

Reactor Processes—unit operations in which one or more chemicals or reactants other than air are combined or decomposed in such a way that their molecular structures are altered and one or more new organic compounds are formed.

Recovery Device—an individual unit of equipment, such as an absorber, carbon adsorber, or condenser, capable

of and used for the purpose of recovering chemicals for subsequent use, reuse, destruction, disposal by underground injection, or sale.

Recovery System—an individual recovery device or series of such devices applied to one vent stream.

Total Organic Compounds (TOC)—those compounds measured according to the procedures of Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), for the purpose of measuring molar composition as required in Subparagraph D.5.b of this Section, hourly emission rate as required in Paragraph D.2 and Subparagraph D.5.d of this Section, and TOC concentration as required in Subparagraph F.1.d and Paragraph F.2 of this Section. The definition of *TOC* excludes those compounds that the administrative authority* designates as having negligible photochemical reactivity as listed in 40 CFR 51.100(s).

Total Resource Effectiveness (TRE) Index Value—a measure of the supplemental total resource requirement per unit reduction of TOC associated with a process vent stream, based on vent stream flow rate, emission rate of VOC, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds) as quantified by the given equations. The TRE index is a decision tool used to determine if the annual cost of controlling a given vent stream is acceptable when considering the emissions reduction achieved.

Vent Stream—any gas stream discharged directly from a distillation operation or reactor process to the atmosphere or indirectly to the atmosphere after diversion through other process equipment. The *vent stream* excludes relief valve discharges, equipment leaks including, but not limited to, pumps, compressors, and valves, vents from storage vessels, vents from transfer/loading operations, and vents from wastewater. The *vent stream* also excludes process gaseous streams that are used as primary fuels. The lines that transfer such fuels to a plant fuel gas system are not considered vents.

Volatile Organic Compound Control Device—any equipment used for oxidizing or destroying VOCs. Such equipment includes, but is not limited to, incinerators, flares, boilers, and process heaters.

C. Control Requirements

1. For individual vent streams from an affected reactor process or distillation operation with a TRE index value less than or equal to 1.0, the owner or operator shall:

a. reduce emission of TOC (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppm by volume, on a dry basis corrected to three percent oxygen, whichever is less stringent by means of a VOC recovery and/or control device, if such a control device is necessary. If a boiler or process heater is used to comply with this Section, then the vent stream shall be introduced into the flame zone of the boiler or process heater; or

b. combust emissions in a flare. Flares used to comply with this Section shall comply with the requirements of 40 CFR 60.18. The flare operation requirement does not apply if a process vents an emergency relief discharge into a common flare header and causes the flare servicing the process to be out of compliance with one or more of the provisions of the flare operation rule.

2. For each individual vent stream from an affected reactor process or distillation operation with a TRE index value greater than 1.0, the owner or operator shall maintain vent stream parameters that result in a calculated TRE index value greater than 1.0 without the use of a volatile organic compound control device and with or without the use of one or more recovery devices. The TRE index shall be calculated at the outlet of the final recovery device, if any, as specified in Clause D.5.a.i of this Section except if an affected vent stream is mixed with an unaffected vent stream prior to the final recovery device as specified in Paragraph D.5 of this Section. If it can be demonstrated that a TRE index value is greater than 1.0 prior to the use of a recovery device, then such recovery device is not subject to the requirements of this Subchapter.

D. Total Effectiveness Determination, Performance Testing, and Exemption Testing

1. For the purpose of demonstrating compliance with the TRE index value in Paragraph C.2 of this Section, engineering assessment may be used to determine process vent stream flow rate, net heating value, and TOC emission rate for the representative operating condition expected to yield the lowest TRE index value.

a. If the TRE value calculated using such engineering assessment and the TRE equation in Paragraph D.6 of this Section is greater than 4.0, then it is not required that the owner or operator perform the measures specified in Paragraph D.5, the monitoring requirements in Subsection E, or the reporting/record keeping requirements of Paragraph F.1 of this Section. If a subsequent process change effects a reduction in the TRE index value to 4.0 or less, the owner or operator is immediately subject to all requirements of this Section that are applicable to a recalculated TRE value of 4.0 or less.

b. If the TRE value calculated using such engineering assessment and the TRE equation in Paragraph D.6 of this Section is less than or equal to 4.0, then it is required that the owner or operator perform the measurements specified in Paragraph D.5 of this Section.

c. Engineering assessment includes, but is not limited to, the following:

i. previous test results that proved the test was representative of current operating practices at the process unit;

ii. bench-scale or pilot-scale test data representative of the process under representative operating conditions;

iii. maximum flow rate specified or implied within a permit limit applicable to the process vent;

iv. design analysis based on accepted chemical engineering principles, measured process parameters, or physical or chemical laws or properties. Examples for analytical methods include, but are not limited to:

(a). use of material balances based on process stoichiometry to estimate maximum VOC concentrations;

(b). estimation of maximum flow rate based on physical equipment design such as pump or blower capacities;

(c). estimation of TOC concentrations based on saturation conditions; or

(d). estimation of maximum expected net heating value based on the stream concentration of each organic compound or, alternatively, as if all TOC in the stream were the compound with the highest heating value; and

v. documentation of all data, assumptions, and procedures used in the engineering assessment.

2. For purposes of demonstrating compliance with the control requirements of this Subchapter, the process unit shall be run at representative operating conditions and flow rates during any performance test.

3. The following methods in 40 CFR Part 60, Appendix A, as incorporated by reference in LAC 33:III.Chapter 30, shall be used to demonstrate compliance with the emission limit or percent reduction efficiency requirement listed in Subparagraph C.1.a of this Section.

a. Method 1 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) or Method 1A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), as appropriate, shall be used for selection of the sampling sites. The control device inlet sampling site for determination of vent stream molar composition or TOC (less methane and ethane) reduction efficiency shall be located after the last recovery device but prior to the inlet of the control device, prior to any dilution of the process vent stream, and prior to release to the atmosphere.

b. Method 2 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), Method 2A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), Method 2C (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), or Method 2D (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), as appropriate, shall be used for determination of the gas stream volumetric flow rate.

c. The emission rate correction factor, integrated sampling and analysis procedure of Method 3 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used to determine the oxygen concentration ($\%O_{2d}$) for the purpose of determining compliance with the 20 ppm by volume limit. The sampling site shall be the same as that for the TOC samples, and samples shall be taken during the same time that the TOC samples are taken. The TOC concentration corrected to 3 percent oxygen (C_c) shall be computed using the following equation.

$$C_c = C_{TOC} \text{ x } \frac{17.9}{20.9 - \% O_{2d}}$$

where:

C_c = concentration of TOC (minus methane and ethane) corrected to 3 percent O_2, dry basis, ppm by volume

C_{TOC} = concentration of TOC (minus methane and ethane), dry basis, ppm by volume

$\% O_{2d}$ = concentration of oxygen, dry basis, percent by volume

d. Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used to determine the concentration of TOC (minus methane and ethane) at the outlet of the control device when determining compliance with the 20 ppm by volume limit, or at both the control device inlet and outlet when the reduction efficiency of the control device is to be determined.

i. The minimum sampling time for each run shall be one hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used then the samples shall be taken at 15-minute intervals.

ii. The emission reduction (R) of TOC (minus methane and ethane) shall be determined using the following equation.

$$R = \frac{E_i - E_o}{E_i} \text{ x} 100$$

where:

R = emission reduction, percent by weight

E_i = mass rate of TOC (minus methane and ethane) entering the control device, kilogram TOC per hour

E_o = mass rate of TOC (minus methane and ethane) discharged to the atmosphere, kilogram TOC per hour

iii. The mass rates of TOC (E_i, E_o) shall be computed using the following equations.

where:

$$E_i = K_2 \left(\sum_{j=1}^{n} C_{ij} \, M_{ij} \right) Q_i$$

$$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} \, M_{oj} \right) Q_o$$

C_{ij}, C_{oj} = concentration of sample component "j" of the gas stream at the inlet and outlet of the control device, respectively, dry basis, ppm by volume

M_{ij}, M_{oj} = molecular weight of sample component "j" of the gas stream at the inlet and outlet of the control device, respectively, grams per gram-mole

Q_i, Q_o = flow rate of gas at the inlet and outlet of the control device, respectively, dry standard cubic meters per minute

K_2 = 2.494 x 10^{-6} (liters per minute) (gram-mole per standard cubic meter) is 20°C

iv. The TOC concentration (C_{TOC}) is the sum of the individual components and shall be computed for each run using the following equation.

$$C_{TOC} = \sum_{j=1}^{n} C_j$$

where:

C_{TOC} = concentration of TOC (minus methane and ethane), dry basis, ppm by volume

C_j = concentration of sample component "j", dry basis, ppm by volume

n = number of components in the sample

e. When a boiler or process heater with a design heat input capacity of 44 megawatts or greater, or a boiler or process heater into which the process stream is introduced with the primary fuel, is used to comply with the control requirements, an initial performance test is not required.

4. When a flare is used to comply with the control requirements of this Subchapter, the flare shall comply with the requirements of 40 CFR 60.18, as incorporated by reference in LAC 33:III.Chapter 30.

5. The following test methods shall be used to determine compliance with the TRE index value in Paragraph C.2 of this Section.

a. Method 1 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) or Method 1A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), as appropriate, shall be used for selection of the sampling site.

i. The sampling site for the vent stream molar composition determination and flow rate prescribed in Subparagraphs D.5.b and c of this Section shall be, except for the situations outlined in Clause D.5.a.ii of this Section, after the final recovery device, if a recovery system is present, prior to any post-reactor or post-distillation unit introduction of halogenated compounds into the process vent stream. No traverse site selection method is needed for vents smaller than 10 centimeters in diameter.

ii. If any gas stream other than the reactor or distillation vent stream is normally conducted through the final recovery device:

(a). the sampling site for the vent stream flow rate and molar composition shall be prior to the final recovery device and prior to the point at which any nonreactor or nondistillation stream or stream from a nonaffected reactor or distillation unit is introduced. Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used to measure organic compound concentrations at this site;

(b). the efficiency of the final recovery device is determined by measuring the organic compound concentrations using Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) at the inlet to the final recovery device after the introduction of all vent streams and at the outlet of the final recovery device;

(c). the efficiency of the final recovery device according to Subclause D.5.a.ii.(b) of this Section shall be applied to the organic compound concentrations measured according to Subclause D.5.a.ii.(a) of this Section to determine the concentrations of organic compounds from the final recovery device attributable to the reactor or distillation vent stream. The resulting organic compound concentrations are then used to perform the calculations outlined in Subparagraph D.5.d of this Section.

b. The molar composition of the vent stream shall be determined as follows.

i. Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used to measure the concentration of organic compounds including those containing halogens.

ii. ASTM D1946-77 shall be used to measure the concentration of carbon monoxide and hydrogen.

iii. Method 4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used to measure the content of water vapor.

c. The volumetric flow rate shall be determined using Method 2, Method 2A, Method 2C or Method 2D of 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003, as appropriate.

d. The emission rate of TOC (minus methane and ethane) (E_{TOC}) in the vent stream shall be calculated using the following equation.

$$E_{TOC} = K_2 \sum_{j=1}^{n} C_j \, M_j \, Q_s$$

where:

E_{TOC} = emission rate of TOC (minus methane and ethane) in the sample, kilograms per hour

K_2 = constant, 2.494 x 10^{-6} (liters per ppm) x (gram-moles per standard cubic meter [scm]) (kilograms per gram) (minutes per hour), where standard temperature for (gram-mole per scm) x (gram-mole per scm) is 20°C

C_j = concentration of sample component "j", on a dry basis, in ppm as measured by Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), as indicated in Subparagraph D.3.d of this Section

M_j = molecular weight of sample component "j", grams per gram-mole

Q_s = vent stream flow rate (scm per minute) at a temperature of 20°C, on a dry basis

e. The total process vent stream concentration (by volume) of compounds containing halogens (ppm by volume, by compound) shall be summed from the individual concentrations of compounds containing halogens which were measured by Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).

f. The net heating value of the vent stream shall be calculated using the equation.

$$H_T = K_1 \sum_{j=1}^{n} C_j H_j (1 - B_{ws})$$

where:

H_T = net heating value of the sample (megajoules per standard cubic meter), where the net enthalpy per mole of vent stream is based on combustion at 25°C and 760 millimeters of mercury, but the standard temperature for determining the volume corresponding to one mole is 20°C, as in the definition of Q_s (vent stream flow rate)

K_1 = constant, 1.740 x 10^{-7} $(ppm)^{-1}$ (gram-mole per standard cubic meter), (megajoules per kilocalorie), where standard temperature for (gram-mole per standard cubic meter) is 20°C

B_{ws} = water vapor content of the vent stream, proportion by volume; except that if the vent stream passes through a final stream jet and is not condensed, it shall be assumed that B_{ws} = 0.023 in order to correct 2.3 percent moisture

C_j = concentration on a dry basis of sample component "j" in parts per million, as measured for all organic compounds by Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) and measured for hydrogen and carbon monoxide by ASTM D1946-77

H_j = net heat of combustion of sample component "j", kilocalories per gram-mole, based on combustion at 25°C and 760 millimeters of mercury. The heats of combustion of vent stream components shall be determined using ASTM D2382-76 if published values are not available or cannot be calculated

6. The TRE index value of the vent shall be calculated using the following equation.

$$TRE = \frac{1}{E_{TOC}} \left[a + b (Q_s) + c (H_T) + d (E_{TOC}) \right]$$

where:

TRE = TRE index value;

E_{TOC} = hourly emission rate of TOC (minus methane and ethane), kilograms per hour, as calculated in Subparagraph D.5.d of this Section

Q_s = vent stream flow rate standard cubic meters per minute at a standard temperature of 20°C

H_T = vent stream net heating value (megajoules per standard cubic meter), as calculated in Subparagraph D.5.f of this Section

a, b, c, d = coefficients presented in Table 1

Table 1

Type of Stream	Control Device Basis	Values of Coefficient			
		a	b	c	d
Nonhalogenated	Flare	2.129	0.183	-0.005	0.359
	Thermal incinerator 0 percent heat recovery	3.075	0.021	-0.037	0.018
	Thermal incinerator 70 percent heat recovery	3.803	0.032	-0.042	0.007
Halogenated	Thermal incinerator and scrubber	5.470	0.181	-0.040	0.004

a. The owner or operator of a unit with a nonhalogenated vent stream shall use the applicable coefficients in Table 1 to calculate the TRE index value based on a flare, thermal incinerator with 0 percent heat recovery, and a thermal incinerator with 70 percent heat recovery, and shall select the lowest TRE index value.

b. The owner or operator of a unit with a halogenated vent stream, determined as any stream with a total concentration of halogen atoms contained in organic compounds of 200 ppm by volume or greater, shall use the applicable coefficients in Table 1 to calculate the TRE index value based on a thermal incinerator and scrubber.

7. Each owner or operator of a vent stream subject to Paragraph C.2 of this Section shall recalculate the flow rate, TOC concentration, and TRE index value for that vent stream within two weeks of any process change that could effect a change in one or more of these vent stream parameters. The recalculations must be made using the methods and procedures contained in this Subsection. Examples of process changes include, but are not limited to, changes in production capacity, feedstock type, or catalyst type or replacement, removal, or addition of recovery equipment.

8. Where a TRE index value, recalculated as required in Paragraph D.7 of this Section, yields a value less than or equal to 1.0, the owner or operator shall, within one week of the recalculation, notify the administrative authority* of the process change and the results of the recalculation and shall conduct a performance test, as provided in Subparagraph D.1.b and Paragraph D.5 of this Section, as soon as possible, but no later than 90 days after the recalculation. If the recalculated TRE index value is verified by the performance test to be less than or equal to 1.0, the owner or operator is immediately subject to all requirements of this Section that are applicable to a recalculated TRE value of 1.0 or less.

9. Procedures contained in Subparagraphs D.9.a-e of this Section shall be used to demonstrate that a process vent stream has a VOC concentration below 500 ppm by volume.

a. The sampling site shall be selected as specified in Subparagraph D.3.a of this Section.

b. Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) or Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used to measure concentration; alternatively, any other method or data that has been validated according to the protocol in EPA Method 301 of 40 CFR Part 63, Appendix A may be used.

c. Where Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) is used, the following procedures shall be used to calculate parts per million by volume concentration.

i. The minimum sampling time for each run shall be one hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

ii. The concentration of TOC (minus methane and ethane) shall be calculated using Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) according to Subparagraph D.3.d of this Section.

d. Where Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) is used, the following procedures shall be used to calculate parts per million by volume TOC concentration.

i. Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be used only if a single VOC is greater than 50 percent of total VOC, by volume, in the process vent stream.

ii. The process vent stream composition may be determined by either process knowledge, test data collected using an appropriate method previously promulgated, or a method of data collection validated according to the protocol in EPA Method 301 of 40 CFR Part 63, Appendix A. Examples of information that could constitute process knowledge include calculations based on material balances, process stoichiometry, or previous test results provided the results are still relevant to the current process vent stream conditions.

iii. The VOC used as the calibration gas for Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be the single VOC present at greater than 50 percent of the total VOC by volume.

iv. The span value for Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) shall be 50 ppm by volume.

v. Use of Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) is acceptable if the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

vi. The concentration of TOC shall be corrected to 3 percent oxygen using the procedures and equation in Subparagraph D.3.c of this Section.

e. The owner or operator shall demonstrate that the concentration of TOC including methane and ethane measured by Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) is below 250 ppm by volume with VOC concentration below 500 ppm by volume to qualify for the low concentration exclusion.

E. Monitoring Requirements

1. The owner or operator of an affected facility that uses an incinerator to seek to comply with the TOC emission limit specified under Subparagraph C.1.a of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder having an accuracy of ±0.5°C, or alternatively ±1 percent, as follows.

a. Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

b. Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

2. The owner or operator of an affected facility that uses a flare to seek to comply with Subparagraph C.1.b of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications, a heat-sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate the continuous presence of a flame.

3. The owner or operator of an affected facility that uses a boiler or process heater with a design heat input capacity less than 44 megawatts to seek to comply with Subparagraph C.1.b of this Section shall install, calibrate, maintain, and operate according to the manufacturer's specifications, a temperature monitoring device in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered. The monitoring device should be equipped with a continuous recorder and have an accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5°C, whichever is greater. Any boiler or process heater in which all vent streams are introduced with primary fuel is exempt from this requirement.

4. The owner or operator of an affected facility that seeks to demonstrate compliance with the TRE index limit specified under Paragraph C.2 of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment:

a. where an absorber is the final recovery device in the recovery system:

i. a scrubbing liquid temperature monitor equipped with a continuous recorder; and

ii. a specific gravity monitor equipped with continuous recorders;

b. where a condenser is the final recovery device in the recovery system, a condenser exit (product side) temperature monitoring device equipped with a continuous recorder and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius or ±0.5°C, whichever is greater;

c. where a carbon adsorber is the final recovery device unit in the recovery system, an integrating regeneration stream flow monitoring device having an accuracy of ±10 percent, capable of recording the total regeneration stream mass flow for each regeneration cycle, and a carbon bed temperature monitoring device having an accuracy of ±1 percent of the temperature being monitored, or ±0.5°C, capable of recording the carbon bed temperature after each regeneration and within 25 minutes of completing any cooling cycle;

d. where a pressure swing adsorption (PSA) unit is the final recovery device in the recovery system, instead of Subparagraph E.4.c of this Section, the temperature of the bed near the inlet and near the outlet shall be continuously monitored and recorded. The temperature monitoring devices shall have an accuracy of ±1 percent of the temperature being measured or ±0.5°C. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet;

e. where an absorber scrubs halogenated streams after an incinerator, boiler, or process heater, the following monitoring equipment is required for the scrubber:

i. a pH monitoring device equipped with a continuous recorder; and

ii. flow meters equipped with continuous recorders to be located at the scrubber influent for liquid flow and the scrubber inlet for gas stream flow;

f. as noted in Clause F.1.d.iv of this Section an organics monitoring device may be used as an alternative method.

5. The owner or operator of a process vent using a vent system that contains bypass lines (other than low leg drains, high point bleeds, analyzer vents open-ended valves or lines and pressure relief valves) that could divert a vent stream away from the combustion device used shall either:

a. install, calibrate, maintain, and operate a flow indicator/recorder that provides a record of vent stream flow at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line that diverts the vent stream away from the combustion device to the atmosphere; or

b. secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once per month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

F. Reporting/Recordkeeping Requirements

1. Each reactor process or distillation operation subject to this Subchapter shall keep records of the following parameters measured during a performance test or TRE determination required under Subsection D of this Section and required to be monitored under Subsection E of this Section:

a. where an owner or operator subject to the provisions of this Subchapter seeks to demonstrate compliance with Subparagraph C.1.a of this Section through the use of either a thermal or catalytic incinerator:

i. the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured at least every 15 minutes and averaged over the same period as the performance testing; and

ii. the percent reduction of TOC determined as specified in Paragraph D.3 of this Section achieved by the incinerator or concentration of TOC (parts per million by volume, by compound) determined as specified in Paragraph D.3 of this Section at the outlet of the control device on a dry basis corrected to 3 percent oxygen;

b. where an owner or operator subject to the provisions of this Subchapter seeks to demonstrate compliance with Subparagraph C.1.a of this Section through the use of a boiler or process heater:

i. a description of the location at which the vent stream is introduced into the boiler or process heater; and

ii. the average combustion temperature of the boiler or process heater with a design heat input capacity of less than 44 megawatts measured at least every 15 minutes and averaged over the same time period as the performance testing;

iii. any boiler or process heater in which all vent streams are introduced with primary fuel are exempt from these requirements;

c. where an owner or operator subject to the provisions of this Subchapter seeks to demonstrate compliance with Subparagraph C.1.b of this Section through use of a smokeless flare, flare design (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determinations, flow measurements, and exit velocity determinations made during the performance test; continuous flare pilot flame monitoring, and all periods of operation during which the pilot flame is absent;

d. where an owner or operator subject to the provisions of this Subchapter seeks to demonstrate compliance with Paragraph C.2 of this Section:

i. where an absorber is the final recovery device in the recovery system, the exit specific gravity (or

alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by the administrative authority*) and average exit temperature of the absorbing liquid measured at least every 15 minutes and averaged over the same time period as the performance testing (both measured while the vent stream is normally routed and constituted); or

ii. where a condenser is the final recovery device in the recovery system, the average exit (product side) temperature measured at least every 15 minutes and averaged over the same time period as the performance testing while the vent stream is routed and constituted normally; or

iii. where a carbon adsorber is the final recovery device in the recovery system, the total stream mass or volumetric flow measured at least every 15 minutes and averaged over the same time period as the performance test (full carbon bed cycle), temperature of the carbon bed after regeneration and within 15 minutes of completion of any cooling cycle(s), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed and constituted normally); or

iv. as an alternative to Clause F.1.d.i, ii, or iii of this Section, the concentration level or reading indicated by the organics monitoring device at the outlet of the absorber, condenser, or carbon adsorber, measured at least every 15 minutes and averaged over the same time period as the performance testing while the vent stream is normally routed and constituted; and

v. all measurements and calculations performed to determine the flow rate, volatile organic compound concentration, heating value, and TRE index value of the vent stream;

vi. where a pressure swing adsorption (PSA) unit is the final recovery device in the recovery system, the temperature of the bed near the inlet and near the outlet shall be continuously monitored and recorded. The temperature monitoring devices shall have an accuracy of ±0.5°C. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet.

2. Each reactor process or distillation operation seeking to comply with Paragraph C.2 of this Section shall also keep records of the following information:

a. any changes in production capacity, feedstock type, or catalyst type or of any replacement, removal, and addition of recovery equipment or reactors and distillation units;

b. any recalculation of the flow rate, TOC concentration or TRE value performed according to Paragraph D.7 of this Section.

3. Each reactor process or distillation operation seeking to comply with the flow rate or concentration exemption level in Subparagraph A.2.e of this Section shall keep records to indicate that the stream flow is less than 0.011 standard cubic meters per minute or the concentration is less than 500 ppm by volume.

4. Each reactor process or distillation operation seeking to comply with the production capacity exemption level in Subparagraph A.2.d of this Section of less than one gigagrams per year shall keep records of the design production capacity or any changes in equipment or process affected process unit. operation that may affect design production capacity of the affected process unit.

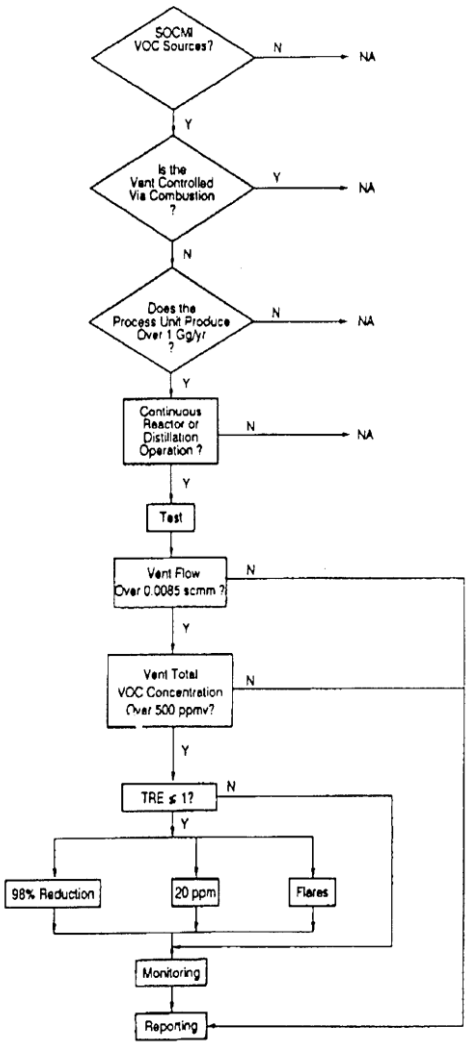

Figure 1. Synthetic organic chemical manufacturing industry reactor/distillation control techniques guideline logic diagram per vent.

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Subchapter K. Limiting Volatile Organic Compound (VOC) Emissions from Batch Processing

§2149. Limiting VOC Emissions from Batch Processing

A. Applicability

1. The provisions of this Subchapter apply to process vents associated with batch processing operations. This Subchapter shall apply to the stationary sources that emit, or have the potential to emit, 25 tons per year (TPY) or more of VOC in the affected parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, or 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee. Once an operation is considered to be covered by this Subchapter, it shall be so considered ad infinitum. The scope of affected industries is limited to those industries in the following standard industrial classification (SIC) codes: 2821, 2833, 2834, 2861, 2865, 2869, 2879. Compliance with this rule shall be attained within a period of two years after promulgation. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision. Any emission source that is subject to this rule and to the Waste Gas Disposal Rule (LAC 33:III.2115) shall comply with this rule only.

2. Exemptions from the provisions of this Subchapter, except for the reporting and recordkeeping requirements listed in Subsection G of this Section, are as follows:

a. combined vents from a batch process train which have a mass annual emission (AE) total as follows:

Volatility Range	Lower Limit of AE (1b/yr)
Low	26,014
Moderate	15,935
High	23,154

b. single unit operations that have mass AE of 500 lb/yr or less;

c. any batch process vent stream for which an existing combustion device or recovery device is employed to control VOC emissions is assumed to meet the 90 percent reduction requirement until the combustion device or recovery device is replaced for any reason. Such units shall be exempt from any monitoring, recordkeeping and reporting requirements under this Subchapter.

B. Definitions. Unless specifically defined in LAC 33:III.111, the terms in this Subchapter shall have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply, unless the context clearly indicates otherwise.

Aggregated—the summation of all process vents containing VOCs within a process.

Annual Mass Emissions Total—the sum of all VOC emissions (lb/yr), evaluated before control, from a vent. Annual mass emissions may be calculated from an individual process vent or groups of process vents by using emission estimation equations contained in Chapter 3 of the United States Environmental Protection Agency's (EPA) Batch Control Technology Guide (CTG), EPA-433/19-93-017 (November 1993) and then multiplying by the expected duration and frequency of the emission or groups of emissions over the course of a year. For processes that have been permitted, the *annual mass emissions total* should be based on the permitted levels, whether they correspond to the maximum design production potential or to the actual annual production estimate.

Average Flow Rate—the flow rate in standard cubic feet per minute averaged over the amount of time that VOCs are emitted during an emission event. For the evaluation of *average flow rate* from an aggregate of sources, the *average flow rate* is the weighted average of the *average flow rates* of the emission events and their annual venting time, or:

$$\text{Average FlowRate} = \frac{\sum \left(\text{Average Flow Rate per emission event}\right)\left(\text{annual duration of emission event}\right)}{\sum \left(\text{annual duration of emission events}\right)}$$

Batch—a discontinuous process involving the bulk movement of material through sequential manufacturing steps. Mass, temperature, concentration, and other properties of a system vary with time. Batch processes are typically characterized as non-steady-state.

Batch Cycle—a manufacturing event of an intermediate or product from start to finish in a batch process.

Batch Process (for the purpose of determining RACT applicability)—the batch equipment assembled and connected by pipes, or otherwise operated in a sequence of steps, to manufacture a product in a batch fashion.

Batch Process Train—an equipment train that is used to produce a product or intermediate in batch fashion. A typical equipment train consists of equipment used for the synthesis, mixing, and purification of a material.

Control Devices—air pollution abatement devices, not devices such as condensers operating under reflux conditions, which are required for processing.

Emissions before Control—the emissions total prior to the application of a control device, or if no control device is used, the emissions total. No credit for discharge of VOCs into wastewater should be considered when the wastewater is further handled or processed with the potential for VOCs to be emitted to the atmosphere.

Emission Events—discrete venting episodes that may be associated with a single unit of operation. For example, a displacement of vapor resulting from the charging of a vessel with VOC will result in a discrete emission event that will last through the duration of the charge and will have an

average flow rate equal to the rate of the charge. If the vessel is then heated, there will be another discrete emission event resulting from the expulsion of expanded vessel vapor space. Both *emission events* may occur in the same vessel or unit operation.

Primary Fuel—the fuel that provides the principal heat input to a device. To be considered primary, the fuel must be able to sustain operation without the addition of other fuels.

Process Vent—a gas stream containing greater than 500 ppm(v) total VOC that is discharged from a batch process. *Process vents* include gas streams that are discharged directly to the atmosphere or are discharged to the atmosphere after diversion through a recovery device. *Process vents* exclude relief valve discharges, leaks from equipment, vents from storage vessels, vents from transfer/loading operations, and vents from wastewater. Process gaseous streams that are used as primary fuels are also excluded. The lines that transfer such fuels to a plant fuel gas system are not considered to be vents.

Semi-Continuous—conduction of operations on a steady- state mode but only for finite durations (in excess of eight hours minimum) during the course of a year. For example, a steady-state distillation operation that functions for one month would be considered *semi-continuous*.

Unit Operations—those discrete processing steps that occur within distinct equipment that are used to prepare reactants, facilitate reactions, separate and purify products, and recycle materials.

Vent—a point of emission from a unit operation. Typical process vents from batch processes include condenser vents, vacuum pumps, steam ejectors, and atmospheric vents from reactors and other process vessels. *Vents* also include relief valve discharges. Equipment exhaust systems that discharge from unit operations also would be considered process vents.

Volatility—low volatility materials are defined as those which have a vapor pressure less than or equal to 75 mm Hg at 20°C, moderate volatility materials have a vapor pressure greater than 75 and less than or equal to 150 mm Hg at 20°C, and high volatility materials have a vapor pressure greater than 150 mm Hg at 20°C. To evaluate VOC volatility for single unit operations that service numerous VOCs or for processes handling multiple VOCs, the weighted average volatility can be calculated from the total amount of each VOC emitted in a year and the individual component vapor pressure, as shown in the following equation.

$$\text{Weighted Average Volatility} = \frac{\sum_{i=1}^{n}\left[\left(\text{vapor pressure of component } i\right)\frac{\left(\text{mass of VOC component } i\right)}{\left(\text{molecular weight of VOC component } i\right)}\right]}{\sum_{i=1}^{n}\left[\frac{\left(\text{mass of VOC component } i\right)}{\left(\text{molecular weight of VOC component } i\right)}\right]}$$

C. Control Requirements

1. The VOC mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90 percent if the actual average flow rate value (in the units of scfm) is below the value of FR calculated using the applicable RACT equation for the volatility range (low, moderate or high) of the material being emitted when the annual mass emission total, in the units of pounds per year, are input. The RACT equations, specific to volatility, are as follows.

FR = 0.07 (AE) - 1821	(Low Volatility)
FR = 0.031 (AE) - 494	(Moderate Volatility)
FR = 0.013 (AE) - 301	(High Volatility)

2. For aggregate streams within a process, the control requirements must be evaluated with the successive ranking scheme described below until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool.

a. If, for the process vent streams in aggregate, the value of FR calculated using the applicable RACT equation is negative (i.e., less than zero), then the process is exempt from the control requirements and there is no need to proceed with the successive ranking scheme described in Subparagraph C.2.f of this Section. This would occur if the mass annual emission rates are below the lower limits specified in Subparagraph A.2.a of this Section.

b. If, for the process vent streams in aggregate, the actual average flow rate value (in the units of scfm) is below the value of FR calculated using the applicable RACT equation, then the overall emissions from the batch process must be reduced by 90 percent and there is no need to proceed with the successive ranking scheme described in Subparagraph C.2.f of this Section. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels so long as the overall control meets the specified level of 90 percent. Single units that are below the exemption level specified in Subparagraph A.2.b of this Section would not have to be controlled even if all units should qualify for the exemption.

c. If, for the process vent streams in aggregate, the actual average flow rate value (in the units of scfm) is greater than the value of FR calculated using the applicable RACT equation (and the calculated value of FR is a positive number), then the control requirements must be evaluated with the successive ranking scheme described in Subparagraph C.2.f of this Section until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool. Single units that are below the exemption level specified in Subparagraph A.2.b of this Section would not have to be included in the rankings and would not have to be controlled even if all units should qualify for the exemption.

d. Sources that will be required to be controlled to the level specified by the RACT (90 percent) will have an average flow rate that is below the flow rate specified by the RACT equation (when the source's annual emission total is input). The applicability criterion is implemented on a two-tier basis. First, single pieces of batch equipment

corresponding to distinct unit operations shall be evaluated over the course of an entire year, regardless of what materials are handled or what products are manufactured in them. Second, equipment shall be evaluated as an aggregate if it can be linked together based on the definition of a process.

e. To determine applicability of a RACT option in the aggregation scenario, all the VOC emissions from a single process shall be summed to obtain the annual mass emission total, and the weighted average flow rates from each process vent in the aggregation shall be used as the average flow rate.

f. All unit operations in the batch process, as defined for the purpose of determining RACT applicability, shall be ranked in ascending order according to their ratio of annual emission (lb/yr) divided by average flow rate (in scfm). Sources with the smallest ratios shall be listed first. This list of sources constitutes the "pool" of sources within a batch process. The annual emission total and average flow rate of the pool of sources shall then be compared against the RACT equations to determine whether control of the pool is required. If control is not required after the initial ranking, unit operations having the lowest annual emissions/average flow rates ratios shall then be eliminated one by one, and the characteristics of annual emission and average flow rate for the remaining pool of equipment will have to be evaluated with each successive elimination of a source from the pool. Control of the unit operations remaining in the pool to the specified level shall be required once the aggregated characteristics of annual emissions and average flow rates have met the specified RACT. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels so long as the overall control meets the specified level of 90 percent.

D. Measuring Emissions and Flow Rate

1. Determination of Uncontrolled Annual Emission Total. Determination of the annual mass emissions total may be achieved by engineering estimates of the uncontrolled emissions from a process vent or group of process vents within a batch process train and multiplying by the potential or permitted number of batch cycles per year. Engineering estimates should follow the guidance provided in the EPA Batch CTG. Alternatively, if an emissions measurement is to be used to measure vent emissions, the measurement must conform with the requirements of measuring incoming mass flow rate of VOCs as described in Subparagraph E.2.b and Clauses E.2.c.ii and iii of this Section.

2. Determination of Average Flow Rate. To obtain a value for average flow rate, the owners or operators may elect to measure the flow rates or to estimate the flow rates using suitable estimation methods (e.g., EPA document EPA-453/R4-93-017, November 1993). For existing manifolds, the average flow rate is often the flow that was assumed in the design.

E. Performance Testing

1. For the purpose of demonstrating compliance with the control requirements of this Subchapter, the process unit shall be run at full operating conditions and flow rates during any performance test.

2. The following methods in LAC 33:III.Chapter 60, shall be used to comply with the percent reduction efficiency requirement listed in Subsection C of this Section.

a. Method 1 or Method 1A in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003, as appropriate, shall be used for selection of the sampling sites if the flow rate measuring device is a rotameter. No traverse is necessary when the flow measuring device is an ultrasonic probe. The control device inlet sampling sites for determination of vent stream VOC composition reduction efficiency shall be prior to the control device and after the control device.

b. Method 2, Method 2A, Method 2C, or Method 2D in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003, as appropriate, shall be used for determination of gas stream volumetric flow rate. Flow rate measurements should be made continuously.

c. Method 25A or Method 18 in 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003, if applicable, shall be used to determine the concentration of VOC in the control device inlet and outlet.

i. The sampling time for each run will be the entire length of the batch cycle in which readings will be taken continuously if Method 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003) is used or as often as is possible using Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003), with a maximum of one-minute intervals between measurements throughout the batch cycle.

ii. The emission rate of the process vent or inlet to the control device shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

iii. The mass flow rate of the control device outlet shall be obtained by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

iv. The efficiency of the control device shall be determined by integrating the mass flow rates obtained in Clauses E.2.c.ii and iii of this Section over the time of the batch cycle and dividing the difference in inlet and outlet mass flow totals by the inlet mass flow total.

F. Monitoring Requirements

1. The owner or operator of an affected facility that uses an incinerator to seek to comply with the VOC emission limit specified under Subsection C of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications a temperature monitoring

device equipped with a continuous recorder and having an accuracy of ±0.5°C, or alternately ±1 percent, as follows.

a. Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

b. Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

2. The owner or operator of an affected facility that uses a flare to seek to comply with Subsection C of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications a heat sensing device, such as an ultra-violet beam sensor or thermocouple, at the pilot light to indicate continuous presence of a flame.

3. The owner or operator of an affected facility that uses an absorber to comply with Subsection C of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment:

a. a scrubbing liquid temperature monitoring device having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius or ±0.02 of a specific gravity unit, each equipped with a continuous recorder; or

b. an organic monitoring device used to indicate the concentration level of organic compounds exiting the recovery device based on a detection principle such as infrared photoionization or thermal conductivity, each equipped with a continuous recorder.

4. The owner or operator of an affected facility that uses a condenser or refrigeration system to comply with Subsection C of this Section shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment:

a. a condenser exit temperature monitoring device equipped with a continuous recorder and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius or ±0.5°C, whichever is greater; or

b. an organic monitoring device used to indicate the concentration level of organic compounds exiting the recovery device based on a detection principle such as infrared photoionization or thermal conductivity, each equipped with a continuous recorder.

5. The owner or operator of an affected facility that uses a carbon adsorber to comply with Subsection C of this Section shall install, calibrate, maintain, and operate according to manufacturers specifications the following equipment:

a. an integrating steam flow monitoring device having an accuracy of ±10 percent and a carbon bed temperature monitoring device having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius or ±0.5°C, whichever is greater, both equipped with a continuous recorder; or

b. an organic monitoring device used to indicate the concentration level of organic compounds exiting the recovery device based on a detection principle such as infrared photoionization or thermal conductivity, each equipped with a continuous recorder;

c. where a pressure swing adsorption (PSA) unit is the final recovery device in the recovery system the temperature of the bed near the inlet and near the outlet shall be continuously recorded. The temperature monitoring devices shall have an accuracy of ±1 percent of the temperature being measured or ±0.5°C. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet.

G. Reporting/Recordkeeping Requirements

1. Each batch processing operation subject to this Subchapter shall keep records for a minimum of two years of the following emission stream parameters for each process vent contained in the batch process:

a. the annual mass emission total and documentation verifying these values; if emission estimation equations are used, the documentation shall be the calculations coupled with the expected or permitted (if available) number of emission events per year. If the annual mass emission total is obtained from measurement in accordance with Subsection E of this Section, this data should be available;

b. the average flow rate in standard cubic feet per minute (scfm) and documentation verifying these values.

2. Each batch processing operation subject to this Subchapter shall keep records of the following parameters required to be measured during a performance test required under Subsection E of this Section and required to be monitored under Subsection F of this Section:

a. where an owner or operator subject to the provisions of this Section seeks to demonstrate compliance with Subsection C of this Section through use of either a thermal or catalytic incinerator, the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured continuously and averaged over the same time period as the performance testing;

b. where an owner or operator subject to the provisions of this Section seeks to demonstrate compliance with Subsection C of this Section through use of a smokeless flare, flare design, (i.e., steam-assisted, air-assisted or nonassisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test; continuous flare pilot flame monitoring; and all periods of operations during which the pilot flame is absent;

c. where an owner or operator subject to the provisions of this Section seeks to demonstrate compliance with Subsection C of this Section:

i. where an absorber is the final control device, the exit specific gravity (or alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by the administrative authority*) and average exit temperature of the absorbing liquid measured continuously and averaged over the same time period as the performance testing (both measured while the vent stream is routed normally); or

ii. where a condenser is the control device, the average exit (product side) temperature measured continuously and averaged over the same time period as the performance testing while the vent stream is routed normally; or

iii. where a carbon adsorber is the control device, the total steam mass flow measured continuously and averaged over the same time period as the performance test (full carbon bed cycle), temperature of the carbon bed after regeneration (and within 15 minutes of completion of any cooling cycle(s), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed normally); or

iv. the concentration level or reading indicated by an organic monitoring device at the outlet of the absorber, condenser, or carbon adsorber, measured continuously and averaged over the same time period as the performance testing while the vent stream is routed normally; or

v. where a pressure swing adsorption (PSA) unit is the final recovery device in the recovery system the temperature of the bed near the inlet and near the outlet shall be continuously monitored and recorded. The temperature monitoring devices shall have an accuracy of ±1 percent of the temperature being measured or ±0.5°C. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:387 (April 1995), amended LR 22:1212 (December 1996), LR 23:1507 (November 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:747 (April 2004).

Subchapter L. Limiting Volatile Organic Compound (VOC) Emissions from Cleanup Solvent Processing

§2151. Limiting VOC Emissions from Cleanup Solvent Processing

A. Applicability. The provisions of this Subchapter apply to stationary sources that emit, or have the potential to emit, 25 TPY or more of VOC and conduct one or more of the affected cleaning operations in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge, or 50 TPY or more of VOC and conduct one or more of the affected cleaning operations in the parish of Calcasieu or Pointe Coupee. Once a source is subject to this Subchapter, it shall be so ad infinitum. Affected cleaning operations are ones that use solvents in the following operations:

1. spray gun cleaning, which includes spray guns, attached paint lines, and any other gun equipment used in applying a coating;

2. spray booth cleaning, which includes all interior surfaces of booths and all equipment within the booth such as conveyors, robots, etc.;

3. large manufactured components cleaning (i.e., the cleaning of large parts as a step in the manufacturing process), which includes large manufactured products, such as automobile bodies, furniture sheet metal, etc.;

4. equipment cleaning, which includes all production equipment that may be cleaned in place (not moved to a cleaning area) to prevent cross-contamination or merely for maintenance purposes. Examples are punch presses, electrical contacts on a major piece of equipment, pump parts, packaging equipment, rollers, ink pans, carts, press frames, and table tops;

5. floor cleaning, which includes floors in all production areas of a facility;

6. line cleaning, which includes lines that transport raw material (e.g., paint, resin, etc.) and that are cleaned separately from tanks, spray guns, and other process equipment. In some cases a small tank may be part of the system;

7. parts cleaning, which includes miscellaneous items that might be moved to dip into a container of solvent. Examples of parts include applicator tips, brushes, machine parts, pumps, circuit boards, truck parts, engine blocks, gauges, cutoff steel/machined parts, tool dies, motors and assemblies, screws, oil guns, welded parts, bearings, and filters;

8. tank cleaning, which includes mixing pots, process vessels, and tanks. In some instances, tank lines are cleaned in conjunction with the tanks and would be considered part of the system; and

9. small manufactured components cleaning (i.e., the cleaning of small parts as a step in the manufacturing process), which includes small manufactured products such as glass windows, engine components, subassemblies, sheet metal panels, molded parts, electrical contacts, steel and copper components, tin/silver-plated terminals, plastic parts, upholstered parts, circuit breaker cases, switch covers, and threads and bolts.

B. Definitions. Unless specifically defined in LAC 33:III.111, the terms in this Subchapter shall have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply, unless the context clearly indicates otherwise.

Cleaning Activity—physical removal of foreign material from a substrate being cleaned. It includes such actions as wiping, brushing, flushing, or spraying.

Cleaning Classification—cleaning is considered to have three main classifications:

a. cleaning of external surfaces;

b. cleaning of interior surfaces (i.e., containers); and

c. cleaning of removable parts.

Cleaning of External Surfaces—solvent is applied to the external surface being cleaned (as contrasted to the interior of tanks or pipes). Surfaces that fall within this classification include rollers in printing machines, wings of airplanes, floors, tables, and walls. The cleaning activities applied to the external surface may include wiping, brushing, mopping, or spraying.

Cleaning of Internal Surfaces/Containers—solvent is applied to an interior surface for cleaning. Surfaces may include the inside of tanks/vessels, batch reactors, columns, heat exchangers, paint spray booths, and fuel tanks. The cleaning activities applied may include flushing, agitation, spraying, mopping, or brushing. Any combination of activities may be used, depending upon the shape and size of the unit operation and upon the type of residue that is being removed.

Cleaning of Parts—solvent engulfs the entire surface of the part as it is dipped into a container of solvent or the part is cleaned above the container by a cleaning activity such as spraying or wiping. Equipment or the unit operation where this might take place includes part washers, batch-loaded cold cleaners, ultrasonic cleaners, and spray gun washers.

Cleaning of Removable Parts—solvent engulfs the entire surface of the part as it is dipped into a container of solvent or the part is cleaned above the container by a cleaning activity such as spraying or wiping. Equipment or the unit operation where this might take place includes part washers, batch-loaded cold cleaners, ultrasonic cleaners, and spray gun washers.

Cleaning Practice—a repeated or customary action that is specific to an industry. An example is nightly maintenance of a spray booth in an automobile assembly plant.

Cleaning Tool—an item used to aid cleaning, such as a wiping rag, a brush, a scraper, or a water jet.

Closed-Loop Recycling (In-Process Recycling)—reuse or recirculation of a chemical material within the boundaries used to develop a material balance around a unit operation system. A recovery or regeneration (R and R) unit operation may be within the boundaries selected for the primary unit operation system if it is:

a. solely dedicated. The chemical is reused only for cleaning the primary unit operation; or

b. physically integrated. The R and R unit operation is connected to the primary unit operation by means of piping, so that it is not possible to perform the material balance around the primary unit operation system without including it.

Hazardous Air Pollutant (HAP)—any of the substances identified in LAC 33:III.5115.

In-Process Recycling—see *Closed-Loop Recycling*.

Line Flushing—the procedure of completely cleaning out a large paint circulating system such as those found at auto assembly plants. The system includes the paint mix tanks and perhaps hundreds of feet of piping. This procedure is only necessary when a system is inadvertently contaminated or for a routine color change. (Although the system is essentially a closed loop, some losses can occur during the flushing; i.e., through various vents, from transfer operations, and from the paint mix tanks.)

Material Balance—the sum of all materials entering a system equated to the sum of all materials leaving the same system. Emissions from storage vessels shall be included.

Net Usage—the *net usage* (U) of solvent, in appropriate weight units, shall be calculated on a monthly basis as follows: opening solvent inventory (A), plus any estimated opening in-process solvent inventory (B), minus the closing solvent inventory (C), minus any closing in-process solvent inventory (D), minus the corrected waste solvent collected during the month, corrected by subtracting the amount of water and solid contaminants (W), i.e., $U = A + B - C - D - W$.

Off-Site Recycling—an R and R unit operation system located outside of the plant boundaries.

On-Site Recycling—an R and R unit operation located within the plant boundaries from which waste solvent is returned to a process other than that which generated the waste solvent. A material balance for the R and R unit operation (distillation, filtration, etc.) shall be developed independently. (See *Storage Container*.)

Pollution Prevention—practices or process changes that decrease or eliminate emissions (or wastes) at the source. Such prevention techniques include the use of new materials, modification of equipment, and changes in work practices.

Product Substitution—replacement of any product or raw material intended for an intermediate or final use, with another. This substitution is a source reduction activity if either the VOC emission or the quantity of waste generated is reduced.

Purging—the process wherein individual paint applicators and portions of paint delivery lines are emptied of one color paint, cleaned, and filled with another.

Reclaim—process or regenerate a material to recover a usable product. (See *Recycled*.)

Recovery or Regeneration (R and R) Unit Operation—a device for purifying solvent that may use any of a variety of techniques, including extraction, distillation, filtration, adsorption, or absorption.

Recycled—used, reused, or reclaimed. A material is used or reused if it is employed as an ingredient (including its use as an intermediate) to make a product; i.e., when solvent, recovered by distillation, is reused in the plant.

Reused—see *Used or Reused*.

Solvent—a substance that has the potential to emit VOCs and the sum of the partial pressures of the VOCs exceeds 1.5 psia at operating conditions.

Source Reduction—any activity or treatment that prevents, reduces, or eliminates the generation of VOC emissions (or waste), including product substitution or elimination and pollution prevention.

Treatment—destruction or degradation of waste using techniques such as combustion or neutralization to produce material that is less toxic and more environmentally benign. (See *Recycled*.)

Unit Operation—an industrial operation classified or grouped according to its function in the operating environment. Examples include distillation columns, paint mixing vessels (tanks), spray booths, parts cleaners, and printing machines. A *unit operation* may consist of one or more items of equipment, e.g., both a reactor and a mixing vessel or several mixing vessels. There may be considerable variation in the type of *unit operations* from one industry to another. (See *Unit Operation System*.)

Unit Operation System (UOS)—the ensemble of equipment around which a material balance is performed. A *UOS* includes all possible points/sources from which losses could occur to the atmosphere as a result of its being cleaned. This includes losses from solvent storage, during the dispensing of solvent, and from residual solvent on or in cleaning tools (such as rags). An item of equipment used for cleaning parts is, by definition, a unit operation. Therefore, carry-out losses during removal of cleaned parts is to be considered in a material balance.

Used or Reused—employed as an ingredient (including use as an intermediate) in an industrial process to make a product. (For example, in purifying a waste solvent, distillation bottoms from one column may be used as feedstock to another column.)

Waste Minimization—the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated and stored. It includes any source reduction or recycling activity undertaken by a generator that results in either the reduction of total volume or quantity of hazardous waste, or both, so long as such reduction is consistent with the goal of minimizing present and future threats to human health and the environment. In order of preference *waste minimization* activities are: source reduction, recycling, and treatment.

Work Practice—specific human activities within industry that lead to a reduction in VOC emissions (or waste). The activities include increased operator training, management directives, segregation of the waste solvent, and practices that lead to a reduction in cleaning frequency. It does not include the use of specialized equipment, such as solvent dispensers.

C. Control Requirements. Sources specified in Subsection A of this Section shall implement the following actions, per EPA publication number EPA-453/R-94-015, February 1994:

1. conduct a three-month intensive study of solvent types and usage;

2. utilize accounting on a unit operation system; and

3. submit plans to the administrative authority, to reduce VOC emissions from solvent usage, within 12 months after promulgation of these Regulations. Any increases in VOC emissions due to the substitution of a nonhazardous air pollutant for a hazardous one shall require approval of the administrative authority*. To satisfy all requirements of this Subsection, the owner or operator of an affected facility may alternatively report the controls and/or work practices deemed to be MACT that have been adopted to reduce VOC emissions from solvent cleanup operations. These plans or submissions become enforceable upon approval.

D. Testing. ASTM Method D-4828, "Standard Test Method for Practical Washability of Organic Coatings", is a method adaptable for comparing the cleaning effectiveness of solvents and other cleaners. Minor modifications of this method may be approved by the administrative authority. Alternative methods may be approved only by the administrator.

E. Monitoring, Reporting, and Recordkeeping. Reporting and recordkeeping shall be used to monitor VOC emissions from solvent use for cleanup purposes. Affected facilities shall calculate and record the net VOC emissions from usage of solvents monthly and report the net VOC emissions from solvent usage annually. In addition, solvent reduction progress shall be reported annually, based on product output or other suitable basis approved by the administrative authority*. To satisfy all requirements of this Subsection, the owner or operator of an affected facility may alternatively report the controls and/or work practices deemed to be MACT that have been adopted to reduce VOC emissions from solvent cleanup operations.

F. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:391 (April 1995), amended LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2453 (November 2000), LR 30:747 (April 2004).

Subchapter M. Limiting Volatile Organic Compound (VOC) Emissions from Industrial Wastewater

§2153. Limiting VOC Emissions from Industrial Wastewater

A. Definitions. Unless specifically defined in LAC 33:III.111, the terms in this Chapter shall have the meanings normally used in the field of air pollution control. Additionally the following meanings apply, unless the context clearly indicates otherwise.

Affected Source Category—any facilities of the following source categories located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge and having the potential to emit 25 TPY or more of VOC, or located in the parishes of Calcasieu and Pointe Coupee and having the potential to emit 50 TPY or more of VOC:

a. organic chemicals, plastics, and synthetic fibers manufacturing industry under Standard Industrial Classification (SIC) codes 2821, 2823, 2824, 2865, and 2869;

b. pesticides manufacturing industry under SIC code 2879;

c. pharmaceutical manufacturing industry under SIC codes 2833, 2834, and 2836; and

d. hazardous waste treatment, storage, and disposal facilities industry under SIC codes 4952, 4953, and 4959.

Affected Volatile Organic Compounds (VOC) Wastewater—a VOC wastewater stream from an affected source category with either a VOC concentration greater than or equal to 10,000 parts per million by weight (ppmw) or a VOC concentration greater than or equal to 1000 ppmw and a flow rate greater than or equal to 10 liters per minute (2.64 gallons per minute), as determined in accordance with Subsection H of this Section.

Chemical Manufacturing Process Unit—the equipment assembled and connected by pipes or ducts to process raw materials and to manufacture an intended product. A *chemical manufacturing process unit* consists of more than one unit operation. For the purpose of this Section, *chemical manufacturing process unit* includes air oxidation reactors and their associated product separators and recovery devices; reactors and their associated product separators and recovery devices; distillation units and their associated distillate receivers and recovery devices; associated unit operations; associated recovery devices; and any feed, intermediate and product storage vessels, product transfer racks, and connected ducts and piping. A *chemical manufacturing process unit* includes pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices or systems. A *chemical manufacturing process unit* is identified by its primary product.

Components—includes, but is not limited to, wastewater storage tanks, surface impoundments, drains, junction boxes, lift stations, weirs, and oil-water separators.

Continuously Monitor—measure at least once every 15 minutes.

Maintenance Wastewater—wastewater generated by the draining of process fluid from components in the facility prior to or during maintenance activities. *Maintenance wastewater* can be generated during planned or unplanned shutdowns and periods that are not associated with shutdowns. Examples of activities that can generate *maintenance wastewater* include descaling of heat exchanger tube bundles, cleaning of distillation column traps, draining of low legs and high point bleeds, draining of pumps, and draining of unrecovered portions of a facility prior to repair.

Plant—all facilities located within a contiguous area, under common control, and identified by the Plant ID number as assigned by the department, within the parish in which the plant is primarily located, for inclusion in the emission inventory system (EIS).

Point of Determination—each exit point where process wastewater exits the chemical manufacturing process unit.

Properly Operated Biotreatment Unit—a suspended growth process that generates and recycles biomass to maintain biomass concentrations in the treatment unit. The average concentration of suspended biomass maintained in the aeration basin of a *properly operated biotreatment unit* shall equal or exceed 1.0 kilogram per cubic meter (kg/m^3), measured as total suspended solids.

Volatile Organic Compounds (VOC) Wastewater—water which, as part of a facility process, has come into contact with VOC and is intended for treatment, disposal, or discharge without further use in a process unit. Examples of potential VOC wastewater are: product or feed tank drawdown; water formed during a chemical reaction; water used to wash impurities from organic products or reactants; water used to cool or quench organic vapor streams through direct contact; and condensed steam from jet ejector systems pulling a vacuum on vessels. Examples of water streams that are not VOC wastewater are: water being used within a facility process; rainfall runoff; fire, safety, and other exigency-use water; spills; once-through noncontact cooling water; cooling tower blowdown; and maintenance wastewater. The VOC content of noncontact cooling water shall be minimized through a leak detection program.

Wet Weather Retention Basin—an impoundment or tank that is used to store rainfall runoff that would exceed the capacity of the wastewater treatment system until it can be returned to the wastewater treatment system or, if the water meets the applicable discharge limits, discharged without treatment. These units may also be used to store wastewater during periods when the wastewater treatment system is shut down for maintenance or emergencies.

B. Control Requirements. Any person who is the owner or operator of an affected source category within a plant

shall comply with the following control requirements. Any component of the wastewater storage, handling, transfer, or treatment facility, if the component contains an affected VOC wastewater stream, shall be controlled in accordance with Paragraph B.1, 2, or 3 of this Section. The control requirements shall apply from the point of determination of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, disposed of in an underground injection well, incinerated, or treated to reduce the VOC content of the wastewater stream by 90 percent and also reduce the VOC content of the same wastewater stream to less than 1000 ppm by weight. For wastewater streams that are combined and then treated to remove VOC, the amount of VOC to be removed from the combined wastewater stream shall be at least equal to the total amount of VOC that would be removed from each individual stream so that they meet the reduction criteria mentioned above in this Subsection.

1. The wastewater component shall meet the following requirements:

a. all components shall be fully covered or be equipped with water seal controls;

b. all openings shall be closed and sealed, except when the opening is in actual use for its intended purpose or the component is maintained at a pressure less than atmospheric pressure;

c. all liquid contents shall be totally enclosed;

d. for junction boxes and vented covers the following apply:

i. if any cover or junction box cover, except for junction boxes described in Clause B.1.d.ii of this Section, is equipped with a vent, the vent shall be equipped with either a control device or a vapor recovery system that maintains a minimum control efficiency of 90 percent VOC removal or a VOC concentration of less than or equal to 50 parts per million by volume (ppmv) (whichever is less stringent) or a closed system which prevents the flow of VOC vapors from the vent during normal operation;

ii. any junction box that is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level may be vented to the atmosphere, provided it is equipped with a vent pipe at least 90 centimeters (cm) (36 inches) in length and no more than 10.2 cm (4.0 inches) in diameter;

e. all gauging and sampling devices shall be vapor-tight except during gauging or sampling;

f. all seals and cover connections shall be maintained in proper condition. For purposes of these regulations, *proper condition* means that covers shall have a tight seal around the edge and shall be kept in place except as allowed herein, that seals shall not be broken or have gaps, and that sewer lines shall have no visible gaps or cracks in joints, seals, or other emission interfaces;

g. if any seal or cover connection is found not to be in proper condition, the repair or correction shall be completed as soon as possible but within 15 days of detection, unless the repair or correction is technically impossible without requiring a unit shutdown, in which case the repair or correction shall be made before the end of the next unit shutdown;

h. fixed roof wastewater tanks that meet the following conditions do not require that vents be equipped with control devices or recovery devices as long as the tanks are not used for mixing (by means of a process that results in splashing, frothing, or visible turbulent flow on the surface during normal process operations), heating (except during conditions requiring that the material be heated to prevent freezing or to maintain adequate flow conditions), or treating with an exothermic reaction:

i. have a capacity less than 250 gallons at any vapor pressure;

ii. have any capacity and a vapor pressure less than 1.5 psia; or

iii. have a capacity greater than 250 gallons and less than 40,000 gallons and a vapor pressure greater than 1.5 psia (requires submerged fill); and

i. for wastewater tanks that would normally be required to have a control device or recovery device, these devices shall not be required to meet the 90 percent removal efficiency or 50 ppmv concentration during periods of malfunction or maintenance on the devices for periods not to exceed 336 hours per year.

2. Any wastewater tank equipped with a floating roof or internal floating cover shall meet the following requirements:

a. all openings in an internal or external floating roof, except for automatic bleeder vents and rim space vents, shall provide a projection below the liquid surface and be equipped with a cover, seal, or lid. Any cover, seal, or lid shall be in a closed (i.e., no visible gap) position at all times except when the opening is in actual use for its intended purpose;

b. automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports;

c. rim vents, if provided, shall be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;

d. any emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening;

e. there shall be no visible holes, tears, or other openings in any seal or seal fabric;

f. secondary seals shall be the rim-mounted type (i.e., the seal shall be continuous from the floating roof to the tank wall). The accumulated area of gaps that exceed 1/8 inch (0.32 cm) in width between the secondary seal and tank wall shall be no greater than 1.0 $inch^2$ per foot (21 cm^2 per meter) of tank diameter; and

g. if any seal is found not to meet the requirements of Paragraph B.2 of this Section, the tank shall be emptied and/or the repairs shall be completed within 45 days of identification in any inspection required by Paragraph D.2 of this Section. If the tank cannot be emptied or the repair cannot be completed within 45 days, a 30-day extension may be requested from the administrative authority*.

3. A properly operated biotreatment unit and wet weather retention basin shall meet the following requirements:

a. the VOC content of the wastewater shall be reduced by 90 percent; and

b. the average concentration of suspended biomass maintained in the aeration basin of the biotreatment unit shall equal or exceed 1.0 kilogram per cubic meter (kg/m^3), measured as total suspended solids, or an alternate parameter, as approved by the administrative authority, may be measured to ensure proper operation of the biotreatment unit.

4. Any wastewater component that becomes subject to this Section by exceeding the provisions of Subsection G of this Section, or becoming an *affected VOC wastewater* stream as defined in Subsection A of this Section, will remain subject to the requirements of this Section. This will be the case even if the component later falls below the above-mentioned provisions unless and until emissions are reduced to a level at or below the controlled emissions level existing prior to the implementation of the project by which throughput or emission rate was reduced and less than the applicable exemption levels in Subsection G of this Section, and if the following conditions are met:

a. the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or standard exemption required by LAC 33:III.501.B. If a standard exemption is available for the project, compliance with this Subsection must be maintained for 30 days after the filing of documentation of compliance with that standard exemption; or

b. if authorization by permit or standard exemption is not required for this project, the owner or operator has given the department 30 days notice of the project in writing.

C. Alternate Control Requirements. Alternate methods of demonstrating and documenting compliance with applicable control requirements or exemption criteria may be approved by the administrative authority* if emission reductions are demonstrated to be substantially equivalent.

D. Inspection and Monitoring Requirements. Any person who is the owner or operator of a facility subject to the control requirements of Subsection B of this Section, shall comply with the following inspection and monitoring requirements:

1. all seals and covers used to comply with Paragraph B.1 of this Section shall be inspected according to the following schedules to ensure compliance with Subparagraphs B.1.f and g of this Section:

a. initially and semiannually thereafter to ensure compliance with Subparagraph B.1.f of this Section; and

b. upon completion of repair to ensure compliance with Subparagraphs B.1.f and g of this Section;

2. floating roofs and internal floating covers used to comply with Paragraph B.2 of this Section shall be subject to the following requirements and all secondary seals shall be inspected according to the following schedules to ensure compliance with Subparagraph B.2.e of this Section:

a. if the primary seal is vapor-mounted, the secondary seal gap area shall be physically measured annually to ensure compliance with Subparagraph B.2.f of this Section;

b. if the tank is equipped with a metallic type shoe or liquid-mounted primary seal, compliance with Subparagraph B.2.f of this Section shall be determined annually by visual inspection; and

c. all secondary seals shall be visually inspected semiannually to ensure compliance with Subparagraph B.2.e of this Section;

3. monitors shall be installed and maintained as required by this Section to measure operational parameters of any emission control device or other device installed to comply with Subsection B of this Section. Such monitoring and parameters shall be sufficient to demonstrate proper functioning of those devices and be conducted as follows:

a. for an enclosed combustion device (including, but not limited to, a thermal incinerator, boiler, or process heater), continuously monitor and record the temperature of the gas stream either in the combustion chamber or immediately downstream before any substantial heat exchange;

b. for a catalytic incinerator, continuously monitor and record the temperature of the gas stream immediately before and after the catalyst bed;

c. for a condenser (chiller), continuously monitor and record the temperature of the gas stream at the condenser exit;

d. for a carbon adsorber, continuously monitor and record the VOC concentration of the exhaust gas stream to determine if breakthrough has occurred. If the carbon adsorber does not regenerate the carbon bed directly in the control device (e.g., a carbon canister), the exhaust gas stream shall be monitored at intervals no greater than daily. As an alternative to conducting monitoring, the carbon may be replaced with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorber. For pressure-swing adsorption (PSA) systems, as an alternative to monitoring the VOC concentration of the exhaust gas stream, the temperature of the bed near the inlet

and near the outlet may be continuously monitored and recorded. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet;

e. for a flare, continuously monitor for the presence of a flare pilot light using a thermocouple or any other equivalent device to detect the presence of a flame;

f. for a steam stripper, continuously monitor and record the steam flow rate, the wastewater feed mass flow rate, the wastewater feed temperature, and the condenser vapor outlet temperature;

g. in lieu of the monitoring and parameters listed in Subparagraphs D.3.a-f of this Section, other monitoring and parameters may be approved or required by the administrative authority*; and

h. monitoring of the following units is not required:

i. a boiler or process heater with a design heat input capacity of 44 megawatts or greater;

ii. a boiler or process heater into which the emission stream is introduced with the primary fuel; and

iii. a boiler or process heater burning hazardous waste for which the owner or operator:

(a). has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 256 Subpart H; or

(b). has certified compliance with the interim status requirements of 40 CFR Part 266 Subpart H; and

4. biological treatment units used to comply with Paragraph B.3 of this Section shall:

a. initially demonstrate 90 percent reduction in VOCs by using methods found in Subsection E of this Section. For existing units, this shall be done as soon as practicable, but no later than May 15, 2000; and

b. measure the total suspended solids (or approved alternate parameter) in the aeration basin of the biotreatment unit weekly.

E. Approved Test Methods. Compliance shall be determined by applying the following test methods, as appropriate:

1. for determination of gas flow rate—Test Methods 1-4 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

2. for determination of gaseous organic compound emissions by gas chromatography—Test Method 18 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

3. for determination of VOC leaks and for monitoring a carbon canister in accordance with Paragraph D.3 of this Section—Test Method 21 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

4. for determination of total gaseous nonmethane organic emissions as carbon—Test Method 25 (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

5. for determination of total gaseous organic concentration using a flame ionization or a nondispersive infrared analyzer—Test Method 25A or 25B (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

6. for determination of VOC concentration of wastewater samples—Test Method 5030 (purge and trap) followed by Test Method 8015 with a DB-5 boiling point (or equivalent column) and flame ionization detector, with the detector calibrated with benzene (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, and 40 CFR Part 261); Test Methods 3810, 5030 (followed by 8020), 8240, 8060, and 9060 (SW-846 and 40 CFR Part 261); Test Methods 601, 602, and 624 (40 CFR Part 136); Test Method 5310(B) (Standard Methods 17th Edition); Test Method 25D (40 CFR Part 60); Test Method 305 (40 CFR Part 63); or Test Method 415.1 (Methods for Chemical Analysis of Water and Wastes—EPA-600/4-79-020);

7. for determination of true vapor pressure—American Society for Testing and Materials Test Methods D323-89, D2879, D4953, D5190, or D5191 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989. In lieu of testing, vapor pressure data or Henry's Law Constants published in standard reference texts or by the U.S. EPA may be used;

8. for determination of total suspended solids—Method 160.2 (Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020) or Method 2540D (Standard Methods for the Examination of Water and Wastewater, 18th Edition, American Public Health Association);

9. for determination of biotreatment unit efficiency—Methods found in 40 CFR 63 Appendix C or 40 CFR 63.145. A stream-specific list of VOCs shall be used and is determined as follows:

a. compounds with concentrations below 1 ppm or below the lower detection limit may be excluded;

b. for the owner or operator that can identify at least 90 percent, by mass, of the VOCs in the wastewater stream or aqueous in-process stream, the individual VOCs that are 5 percent, by mass, or greater are required to be included on the list. If less than half of the total VOCs in the wastewater are represented by the compounds with a mass of 5 percent or greater, the owner or operator shall include those individual VOCs with the greatest mass on the stream-specific list of VOCs until 75 compounds or every compound, whichever is fewer, is included on the list, except as provided by Subparagraph E.9.a of this Section. The owner or operator shall document that the site-specific list of

VOCs is representative of the process wastewater stream and forms the basis of a good compliance demonstration; and

c. for the owner or operator that can identify at least 50 percent, by mass, of the VOCs in the wastewater stream, the individual VOCs with the greatest mass on the stream-specific list of VOCs up to 75 compounds or every compound, whichever is fewer, are to be included on the list, except as provided by Subparagraph E.9.a of this Section. The owner or operator shall document that the site-specific list of VOCs is representative of the process wastewater stream and forms the basis of a good compliance demonstration; and

10. alternative test methods or minor modifications to these test methods as approved by the administrative authority*.

F. Recordkeeping Requirements. Any person who is the owner or operator of an affected source category within a plant shall comply with the following recordkeeping requirements:

1. complete and up-to-date records shall be maintained as needed to demonstrate compliance with Subsection B of this Section. These shall be sufficient to demonstrate the characteristics of wastewater streams and the qualification for any exemptions claimed under Subsection G of this Section;

2. records shall be maintained of the results of any inspection or monitoring conducted in accordance with the provisions specified in Subsection D of this Section;

3. records shall be maintained of the results of any testing conducted in accordance with the provisions specified in Subsection E of this Section;

4. records shall be maintained of the dates and reasons for any maintenance and repair of the required control devices and duration of any VOC emissions during such activities; and

5. all records shall be maintained at the plant for at least five years and be made available upon request to representatives of the department, U.S. Environmental Protection Agency, or any local air pollution control agency having jurisdiction in the area.

G. Exemptions

1. Any affected plant with an annual VOC loading in wastewater, as determined in accordance with Subsection H of this Section, less than or equal to 10 megagrams (Mg) (11.03 tons) shall be exempt from the control requirements of Subsection B of this Section.

2. At any affected plant with an annual VOC loading in wastewater, as determined in accordance with Subsection H of this Section, greater than 10 Mg (11.03 tons), any person who is the owner or operator of the affected source category may exempt from the control requirements of Subsection B of this Section one or more affected VOC wastewater streams for which the sum of the annual VOC loading in wastewater for all of the exempted streams is less than or equal to 10 Mg (11.03 tons).

3. If compliance with the control requirements of Subsection B of this Section would create a safety hazard in a component of a wastewater storage, handling, transfer, or treatment facility, the owner or operator may request the administrative authority* to exempt that component from the control requirements of Subsection B of this Section. The administrative authority* shall approve the request if justified by the likelihood and magnitude of the potential injury and if the administrative authority* determines that reducing or eliminating the hazard is technologically or economically unreasonable based on the emissions reductions that would be achieved.

4. Wastewater components are exempt from the control requirements of Subsection B of this Section if the overall control of VOC emissions from the wastewater of affected source categories is at least 90 percent less than the 1990 baseline emissions inventory, and the following requirements are met:

a. the owner or operator of the wastewater components shall submit a control plan, no later than 180 days after promulgation of this rule, to the department and the appropriate regional office which demonstrates that the overall control of VOC emissions from wastewater at the affected source categories will be at least 90 percent less than the 1990 baseline emissions inventory by November 15, 1996. At a minimum, the control plan shall include the applicable emission point number (EPN); the plant identification number (PIN); the calendar year 1990 emission rates of wastewater from affected source categories (consistent with the 1990 baseline emissions inventory); a plot plan showing the location, EPN, and PIN associated with a wastewater storage, handling, transfer, or treatment facility; and the projected calendar year 1996 VOC emission rates. The projected 1996 VOC emission rates shall be calculated in a manner consistent with the 1990 baseline emissions inventory;

b. in order to maintain exemption status under this Subsection, the owner or operator shall submit an annual report no later than March 31 of each year, starting in 1997, to the Office of Environmental Assessment that demonstrates that the overall control of VOC emissions at the affected source category from which wastewater is generated during the preceding calendar year is at least 90 percent less than the 1990 baseline emissions inventory. At a minimum, the report shall include the EPN; the PIN; the throughput of wastewater from affected source categories; a plot plan showing the location, EPN, and PIN associated with a wastewater storage, handling, transfer, or treatment facility; and the VOC emission rates for the preceding calendar year. The emission rates for the preceding calendar year shall be calculated in a manner consistent with the 1990 baseline emissions inventory; and

c. all representations in initial control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if

the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions, unless the owner or operator of the wastewater component submits a revised control plan to the Office of Environmental Assessment within 30 days of the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions from wastewater at the affected source categories continues to be at least 90 percent less than the 1990 baseline emissions inventory. The emission rates shall be calculated in a manner consistent with the 1990 baseline emissions inventory.

5. The owner or operator of wastewater components subject to the control requirements of Subsection B of this Section may request an exemption determination from the administrative authority* if the overall control of VOC emissions from wastewater at the affected source categories is at least 80 percent less than the 1990 baseline emissions inventory, and the following requirements are met:

a. each request for an exemption determination shall be submitted to the Office of Environmental Assessment. Each request shall demonstrate that the overall control of VOC emissions from wastewater at the affected source categories will be at least 80 percent less than the 1990 baseline emissions inventory. The request shall include the applicable EPN; the PIN; the calendar year throughput of wastewater from affected source categories; the VOC emission rates; and a plot plan showing the location, EPN, and PIN associated with a wastewater storage, handling, transfer, or treatment facility. The emission rates shall be calculated in a manner consistent with the 1990 baseline emissions inventory;

b. the administrative authority* shall approve the exemption for specific wastewater components if it is determined to be economically unreasonable to control the associated emissions subject to these regulations, all reasonable controls are applied, and the overall control of VOC emissions from wastewater at the affected source categories is at least 80 percent less than the 1990 baseline emissions inventory. The administrative authority* may subsequently direct the holder of an exemption under this Section to reapply for the exemption if there is good cause to believe that it has become economically reasonable to meet the requirements of Subsection B of this Section. Within three months of an administrative authority* request, the holder of an exemption under this Section shall reapply for the exemption. If the reapplication for an exemption is denied, the holder of the exemption shall meet the requirements of Subsection B of this Section as soon as possible, but no later than two years from the date of denial; and

c. all representations in initial control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the wastewater component submits a revised control plan to the Office of Environmental Assessment within 30 days of the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions at the plant from wastewater affected source categories continues to be at least 80 percent less than the 1990 baseline emissions inventory.

6. Any component of a wastewater storage, handling, transfer, or treatment facility that is subject to the Hazardous Organic National Emission Standards for Hazardous Air Pollutants (HON) wastewater provisions or National Emission Standards for Hazardous Air Pollutants (NESHAPS) Subpart FF (benzene waste operations) or Subpart YYY (Synthetic Organic Chemical Manufacturing Industry (SOCMI) wastewater provisions) is exempt from the provisions of this Section.

7. Equipment that is installed temporarily or is portable (such as containers) is exempt from the provisions of this Section.

8. Unless specifically required, any component of a wastewater storage, handling, transfer, or treatment facility to which the requirements of this Section apply or which is specifically exempted shall be exempt from the requirements of any other portion of this Chapter.

9. Any wastewater sources identified in an enforceable commitment of the U.S. Environmental Protection Agency Early Reductions Program which grants a six-year compliance extension to otherwise applicable standards issued under Section 112(d) of the Clean Air Act are exempted from the provisions of this Chapter.

H. Determination of Wastewater Characteristics

1. The characteristics shall be determined at a location between the point of determination and the point before which the wastewater stream is exposed to the atmosphere, treated for VOC removal, or mixed with another wastewater stream. For wastewater streams that, prior to November 15, 1993, were either actually being mixed or construction had commenced that would result in the wastewater streams being mixed, this mixing shall not establish a limit on where the characteristics may be determined.

2. The flow rate of a wastewater stream shall be determined on the basis of an annual average by one of the following methods:

a. the highest annual quantity of wastewater managed, based on historical records for the most recent five years of operation, or for the entire time the wastewater stream has existed if less than five years but at least one year;

b. the maximum design capacity of the wastewater component;

c. the maximum design capacity to generate wastewater of the process unit generating the wastewater stream; or

d. measurements that are representative of the actual, normal wastewater generation rates.

3. The VOC concentration of a wastewater stream shall be determined on the basis of a flow-weighted annual average by one of the following methods or by a combination of the methods. If the administrative authority* determines that the VOC concentration cannot be adequately determined by knowledge of the wastewater or by bench-scale or pilot-scale test data, the VOC concentration shall be determined in accordance with Subparagraph H.3.c of this Section. A VOC with a Henry's Law Constant less than 7.5×10^{-5} atm-m^3/mole at 25°C (and compounds having normal boiling points of 350°F (177°C) or greater) shall not be included in the determination of VOC concentration.

a. Knowledge of the Wastewater. Sufficient information shall be used to document the VOC concentration. Examples of information include material balances, records of chemical purchases, or previous test results.

b. Bench-Scale or Pilot-Scale Test Data. Sufficient information shall be used to demonstrate that the bench-scale or pilot-scale test concentration data are representative of the actual VOC concentration.

c. Measurements. Collect a minimum of three representative samples from the wastewater stream and determine the VOC concentration for each sample in accordance with Subsection E of this Section. The VOC concentration of the wastewater stream shall be the flow-weighted average of the individual samples.

4. The annual VOC loading in wastewater for a wastewater stream shall be the annual average flow rate determined in Paragraph H.2 of this Section multiplied by the annual average VOC concentration determined in Paragraph H.3 of this Section.

5. The annual VOC loading in wastewater for an affected source category shall be the sum of the annual VOC loading in wastewater for each affected VOC wastewater stream.

I. Parishes and Compliance Schedules. For the affected facilities in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, any person who is the owner or operator of an affected source category within a plant shall be in compliance with these regulations no later than November 15, 1996. If an additional affected VOC wastewater stream is generated as a result of a process change, the wastewater shall be in compliance with this Section upon initial startup or by November 15, 1998, whichever is later, unless the owner or operator demonstrates to the administrative authority* that achieving compliance will take longer. If this demonstration is satisfactory to the administrative authority*, compliance shall be achieved as expeditiously as practicable, but in no event later than three years after the process change. An existing wastewater stream that becomes an affected VOC wastewater stream due to a process change must be in compliance with this Section as expeditiously as practicable, but in no event later than three years after the process change. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:936 (September 1995), amended LR 22:1212 (December 1996), LR 24:26 (January 1998), LR 25:850 (May 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:747 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2441 (October 2005), LR 33:2087 (October 2007).

Subchapter N. Method 43—Capture Efficiency Test Procedures

[*Editor's Note*: This Subchapter was moved and renumbered from Chapter 61 (December 1996).]

§2155. Principle

A. Temporary or permanent enclosures are employed to capture and measure volatile organic compound (VOC) air emissions that are not captured by the capture system under test within the enclosure. This measurement along with simultaneous measurements on the system under test allows calculation of the capture efficiency of the capture system.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991).

§2156. Definitions

A. For purposes of this regulation, the following definitions and abbreviations apply.

BE—a building or room enclosure that contains a process that emits VOC. If a *BE* is to serve as a PTE or TTE, the appropriate requirements given in 40 CFR, Part 51, Appendix M, Method 204 must be met.

Capture—the containment or recovery of emissions from a process for direction into a duct which may be exhausted through a stack or sent to a control device.

Capture Efficiency—the weight per unit time of VOC entering a capture system and delivered to a control device divided by the weight per unit time of total VOC generated by a source of VOC, expressed as a percentage.

Capture System—all equipment (including, but not limited to, hoods, ducts, fans, booths, ovens, dryers, etc.) that contains, collects and transports an air pollutant to a control device.

Control Device—equipment (such as an incinerator or carbon adsorber) used to reduce, by destruction or removal, the amount of air pollutant(s) in an air stream prior to discharge to the ambient air.

Control System—a combination of one or more capture system(s) and control devices working in concert to reduce discharges or pollutants to the ambient air.

Destruction or Removal Efficiency—the efficiency, expressed as a decimal fraction, of a control device in destroying or removing contaminants calculated as one minus the amount of VOC exiting the control device divided by the amount of VOC entering the control device.

F—the mass of VOC leaving the process as gaseous fugitive emissions.

G—the mass of VOC captured and delivered to a control device.

Gas/Gas Method—either of two methods for determining capture which rely only on gas phase measurements. One method requires construction of a temporary enclosure (TTE) to assure all would be fugitive emissions are measured while the other method uses the room or building which houses the emission source as an enclosure.

Hood—a partial enclosure or canopy for capturing and exhausting, by means of a draft, the organic vapors or other fumes rising from a coating process or other source.

L—the mass of VOC input to the process in liquid form.

Liquid/Gas Method—either of two methods for determining capture which require both gas phase and liquid phase measurements and analysis. One *liquid/gas method* requires construction of a temporary enclosure, the other uses the building or room which houses the facility as an enclosure.

Overall Emission Reduction Efficiency—the weight per unit time of VOC removed by a control device divided by the weight per unit time of VOC emitted by an emission source, expressed as a percentage. The *overall emission reduction efficiency* is the product of the capture efficiency and the control equipment destruction or removal efficiency.

PTE—a permanent total enclosure, which contains a process that emits VOC and meets the specifications given in 40 CFR, Part 51, Appendix M, Method 204, Section 6.

TTE—a temporary total enclosure which is built around a process that emits VOC and meets the specifications given in 40 CFR, Part 51, Appendix M, Method 204, Section 5.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991), amended LR 22:1212 (December 1996), LR 23:1679 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1223 (August 2001), LR 29:2038 (October 2003).

§2157. Applicability

A. The requirements of LAC 33:III.2158 shall apply to all regulated VOC emitting processes employing a control system except as provided below.

B. If a source installs a PTE that meets the requirements in 40 CFR, Part 51, Appendix M, Method 204, and which directs all VOC to a control device, the capture efficiency is assumed to be 100 percent, and the source is exempted from the requirements described in LAC 33:III.2158. This does not exempt a source from performance of any control device efficiency testing required under these or any other regulations. In addition, a source must demonstrate all criteria for a PTE are met during the testing for control efficiency.

C. If a source uses a control device designed to collect and recover VOC (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary if the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOC (L) to the recovered liquid VOC. The general procedure for use in this situation is given in 40 CFR 60.433 with the following additional restrictions.

1. The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average as given in 40 CFR 60.433. This must be done within 72 hours following each 24-hour period. In addition, one of the following two criteria must be met:

a. the solvent recovery system (i.e., capture and control system) must be dedicated to a single process line (e.g., one process line venting to a carbon adsorber system); or

b. if the solvent recovery system controls multiple process lines, the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all process lines venting to the control system) meets or exceeds the most stringent standard applicable for any process line venting to the control system.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991), amended LR 22:1212 (December 1996), LR 23:1679 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27: 1223 (August 2001).

§2158. Specific Requirements

A. The capture efficiency of a process line shall be measured using one of the four protocols given in Subsection C of this Section.

B. Any error margin associated with a test protocol may not be incorporated into the results of a capture efficiency test.

C. Any affected source must use one of the following four protocols to measure capture efficiency, unless a suitable alternative protocol is approved by the administrative authority*.

1. Gas/Gas Method Using TTE. The specifications to determine whether a temporary enclosure is considered a

TTE are given in 40 CFR, Part 51, Appendix M, Method 204, Section 5. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{Gw}{(Gw + Fw)}$$

where:

CE = capture efficiency, decimal fraction

Gw = mass of VOC captured and delivered to control device using a TTE

Fw = mass of fugitive VOC that escapes from a TTE

[NOTE: 40 CFR, Part 51, Appendix M, Method 204C, Section 9 is used to obtain Gw. 40 CFR, Part 51, Appendix M, Method 204D, Section 9 is used to obtain Fw.]

2. Liquid/Gas Method Using TTE. The specifications to determine whether a temporary enclosure is considered a TTE are given in 40 CFR, Part 51, Appendix M, Method 204, Section 5. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{(L - F)}{L}$$

where:

CE = capture efficiency, decimal fraction

L = mass of liquid VOC input to process

F = mass of fugitive VOC that escapes from a TTE

[NOTE: 40 CFR, Part 51, Appendix M, Method 204, Section A.10 is used to obtain L. 40 CFR, Part 51, Appendix M, Method 204D, Section 9 is used to obtain F.]

3. Gas/Gas Method Using the Building or Room (BE) in which the Affected Source is Located as the Enclosure and in which G and F are Measured while Operating only the Affected Facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{G}{G + F_B}$$

where:

CE = capture efficiency, decimal fraction

G = mass of VOC captured and delivered to a control device

F_B = mass of fugitive VOC that escapes from building enclosure

[NOTE: 40 CFR, Part 51, Appendix M, Method 204C, Section 9 is used to obtain G. 40 CFR, Part 51, Appendix M, Method 204E, Section 9 is used to obtain F_B.]

4. Liquid/Gas Method Using the Building or Room (BE) in which the Affected Source is Located as the Enclosure and in which L and F are Measured while Operating only the Affected Facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{(L - F_B)}{L}$$

where:

CE = capture efficiency, decimal fraction

L = mass of liquid VOC input to process

F_B = mass of fugitive VOC that escapes from building enclosure

[NOTE: 40 CFR, Part 51, Appendix M, Method 204, Section A.10 is used to obtain L. 40 CFR, Part 51, Appendix M, Method 204E, Section 9 is used to obtain F_B.]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991), amended LR 22:1212 (December 1996), LR 23:1679 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1223 (August 2001).

§2159. Recordkeeping and Reporting

A. All affected facilities must maintain a copy of the capture efficiency protocol on file. All results of appropriate test methods and CE protocols must be reported to the Office of Environmental Assessment within 60 days of the test date. A copy of the results must be kept on file with the source.

B. If any changes are made to capture or control equipment, the source is required to notify the Office of Environmental Assessment of these changes and a new test may be required.

C. The source must notify the Office of Environmental Assessment 30 days prior to performing any capture efficiency and/or control efficiency tests.

D. A source utilizing a PTE must demonstrate that this enclosure meets the requirement given in 40 CFR, Part 51, Appendix M, Method 204 for a PTE during any testing of a control device.

E. A source utilizing a TTE must demonstrate that its TTE meets the requirements given in 40 CFR, Part 51, Appendix M, Method 204 for a TTE during testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991), amended LR 22:1212 (December 1996), LR 23:1680 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2454 (November 2000), LR 27:1224 (August 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2087 (October 2007).

§2160. Procedures

A. Except as provided in Subsection C of this Section, the regulations at 40 CFR Part 51, Appendix M, July 1, 2006, are hereby incorporated by reference.

B. The volumes containing those federal regulations listed in Subsection A of this Section may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, DC 20402.

C. Modifications and Exceptions. The following modifications and exceptions are made to the incorporated federal standards.

1. Method 204C, Section 8.2.3.1. A sampling point shall be centrally located outside of the temporary total enclosure (TTE) at four equivalent diameters from each natural draft opening (NDO), if possible.

2. Other NDOs

a. This step is optional. Determine the exhaust flow rate, including that of the control device, from the enclosure and the intake air flow rate. If the exhaust flow rate divided by the intake air flow rate is greater than 1.1, then all other NDOs are not considered to be significant exhaust points.

b. If the option above is not taken, identify all other NDOs and other potential points through which fugitive emissions may escape the enclosure. Then use the following criteria to determine whether flow rates and VOC concentrations need to be measured.

i. Using the appropriate flow direction indicator, determine the flow direction. An NDO with zero or inward flow is not an exhaust point.

ii. Measure the outward volumetric flow rate from the remainder of the NDOs. If the collective flow rate is 2 percent, or less, of the flow rate from 40 CFR Part 51, Appendix M, Method 204E, Section 8.1.1, then these NDOs, except those within two equivalent diameters (based on NDO opening) from VOC sources, may be considered to be nonexhaust points.

iii. If the percentage calculated in Clause C.2.b.ii of this Section is greater than 2 percent, those NDOs (except those within two equivalent diameters from VOC sources) whose volumetric flow rate totals 2 percent of the flow rate from 40 CFR Part 51, Appendix M, Method 204E, Section 8.1.1 may be considered as nonexhaust points. All remaining NDOs shall be measured for volumetric flow rate and VOC concentrations during the capture efficiency (CE) test.

iv. The tester may choose to measure VOC concentrations at the forced exhaust points and the NDOs. If the total VOC emissions from the NDOs are less than 2 percent of the emissions from the forced draft and roof NDOs, then these NDOs may be eliminated from further consideration.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991), amended LR 22:1212 (December 1996), LR 23:1680 (December 1997), LR 24:1286 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1224 (August 2001), LR 29:698 (May 2003), LR 30:1009 (May 2004), amended by the Office of Environmental Assessment, LR 31:1568 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 32:809 (May 2006), LR 33:1620 (August 2007).

§2199. Appendix A

Appendix A

An industry is considered a *Synthetic Organic Chemical Manufacturing Industry (SOCMI),* as defined in LAC 33:III.111, if it produces, as intermediates or final products, one or more of the chemicals listed in the following table.

Table 8. SOCMI Chemicals

CAS No[a]	Chemical
105-57-7	Acetal
75-07-0	Acetaldehyde
107-89-1	Acetaldol
60-35-5	Acetamide
103-84-4	Acetanilide
64-19-7	Acetic acid
108-24-7	Acetic anhydride
67-64-1	Acetone
75-86-5	Acetone cyanohydrin
75-05-8	Acetonitrile
98-86-2	Acetophenone
75-36-5	Acetyl chloride
74-86-2	Acetylene
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
124-04-9	Adipic acid
111-69-3	Adiponitrile
([b])	Alkyl naphthalenes
107-18-6	Allyl alcohol
107-05-1	Allyl chloride
1321-11-5	Aminobenzoic acid
111-41-1	Aminoethylethanolamine
123-30-8	p-aminophenol
628-63-7, 123-92-2	Amyl acetates
71-41-0[c]	Amyl alcohols
110-58-7	Amyl amine
543-59-9	Amyl chloride
110-66-7[c]	Amyl mercaptans
1322-06-1	Amyl phenol
62-53-3	Aniline
142-04-1	Aniline hydrochloride
29191-52-4	Anisidine
100-66-3	Anisole
118-92-3	Anthranilic acid
84-65-1	Anthraquinone
100-52-7	Benzaldehyde
55-21-0	Benzamide
71-43-2	Benzene
98-48-6	Benzenedisulfonic acid
98-11-3	Benzenesulfonic acid
134-81-6	Benzil
76-93-7	Benzilic acid
65-85-0	Benzoic acid
119-53-9	Benzoin
100-47-0	Benzonitrile
119-61-9	Benzophenone

Table 8. SOCMI Chemicals	
CAS No[a]	**Chemical**
98-07-7	Benzotrichloride
98-88-4	Benzoyl chloride
100-51-6	Benzyl alcohol
100-46-9	Benzylamine
120-51-4	Benzyl benzoate
100-44-7	Benzyl chloride
98-87-3	Benzyl dichloride
92-52-4	Biphenyl
80-05-7	Bisphenol A
10-86-1	Bromobenzene
27497-51-4	Bromonaphthalene
106-99-0	Butadiene
106-98-9	1-butene
123-86-4	n-butyl acetate
141-32-2	n-butyl acrylate
71-36-3	n-butyl alcohol
78-92-2	s-butyl alcohol
75-65-0	t-butyl alcohol
109-73-9	n-butylamine
13952-84-6	s-butylamine
75-64-9	t-butylamine
98-73-7	p-tert-butyl benzoic acid
107-88-0	1,3-butylene glycol
123-72-8	n-butyraldehyde
107-92-6	Butyric acid
106-31-0	Butyric anhydride
109-74-0	Butyronitrile
105-60-2	Caprolactam
75-1-50	Carbon disulfide
558-13-4	Carbon tetrabromide
56-23-5	Carbon tetrachloride
9004-35-7	Cellulose acetate
79-11-8	Chloroacetic acid
108-42-9	m-chloroaniline
95-51-2	o-chloroaniline
106-47-8	p-chloroaniline
35913-09-8	Chlorobenzaldehyde
108-90-7	Chlorobenzene
118-91-2, 535-80-8, 74-11-3[c]	Chlorobenzoic acid
2136-81-4, 2136-89-2, 5216-25-1[c]	Chlorobenzotrichloride
1321-03-5	Chlorobenzoyl chloride
25497-29-4	Chlorodifluoromethane
75-45-6	Chlorodifluoroethane
67-66-3	Chloroform
25586-43-0	Chloronapthalene
88-73-3	o-chloronitrobenzene
100-00-5	p-chloronitrobenzene
25167-80-0	Chlorophenols
126-99-8	Chloroprene
7790-94-5	Chlorosulfonic acid
108-41-8	m-chlorotoluene
95-49-8	o-chlorotoluene
106-43-4	p-chlorotoluene
75-72-9	Chlorotrifluoromethane
108-39-4	m-cresol
95-48-7	o-cresol
106-44-5	p-cresol
1319-77-3	Mixed cresols
1319-77-3	Cresylic acid
4170-30-0	Crotonaldehyde
3724-65-0	Crotonic acid
98-82-8	Cumene
80-15-9	Cumene hydroperoxide
372-09-8	Cyanoacetic acid
506-77-4	Cyanogen chloride

Table 8. SOCMI Chemicals	
CAS No[a]	**Chemical**
108-80-5	Cyanuric acid
108-77-0	Cyanuric chloride
110-82-7	Cyclohexane
108-93-0	Cyclohexanol
108-94-1	Cyclohexanone
110-83-8	Cyclohexene
108-91-8	Cyclohexylamine
111-78-4	Cyclooctadiene
112-30-1	Decanol
123-42-2	Diacetone alcohol
27576-04-1	Diaminobenzoic acid
95-76-1, 95-82-9, 554-00-7, 608-27-5, 608-31-1, 626-43-7, 27134-27-6, 57311-92-9[c]	Dichloroaniline
541-73-1	m-dichlorobenzene
95-50-1	o-dichlorobenzene
106-46-7	p-dichlorobenzene
75-71-8	Dichlorodifluoromethane
111-44-4	Dichloroethyl ether
107-06-2	1,2-dichloroethane (EDC)
96-23-1	Dichlorohydrin
26952-23-8	Dichloropropene
101-83-7	Dicyclohexylamine
109-89-7	Diethylamine
111-46-6	Diethylene glycol
112-36-7	Diethylene glycol diethyl ether
111-96-6	Diethylene glycol dimethyl ether
112-34-5	Diethylene glycol monobutyl ether
124-17-7	Diethylene glycol monobutyl ether acetate
111-90-0	Diethylene glycol monoethyl ether
112-15-2	Diethylene glycol monoethyl ether acetate
111-77-3	Diethylene glycol monomethyl ether
64-67-5	Diethyl sulfate
75-37-6	Difluoroethane
25167-70-8	Diisobutylene
26761-40-0	Diisodecyl phthalate
27554-26-3	Diisooctyl phthalate
674-82-8	Diketene
124-40-3	Dimethylamine
121-69-7	N,N-dimethylaniline
115-10-6	N,N-dimethyl ether
68-12-2	N,N-dimethylformamide
57-14-7	Dimethylhydrazine
77-78-1	Dimethyl sulfate
75-18-3	Dimethyl sulfide
67-68-5	Dimethyl sulfoxide
120-61-6	Dimethyl terephthalate
99-34-3	3,5-dinitrobenzoic acid
51-28-5	Dinitrophenol
25321-14-6	Dinitrotoluene
123-91-1	Dioxane
646-06-0	Dioxilane
122-39-4	Diphenylamine
101-84-8	Diphenyl oxide
102-08-9	Diphenyl thiourea
25265-71-8	Dipropylene glycol
25378-22-7	Dodecene
28675-17-4	Dodecylaniline
27193-86-8	Dodecylphenol
106-89-8	Epichlorohydrin
64-17-5	Ethanol
141-43-5[c]	Ethanolamines
141-78-6	Ethyl acetate
141-97-9	Ethyl acetoacetate
140-88-5	Ethyl acrylate
75-04-7	Ethylamine

Table 8. SOCMI Chemicals	
CAS No[a]	Chemical
100-41-4	Ethylbenzene
74-96-4	Ethyl bromide
9004-57-3	Ethylcellulose
75-00-3	Ethyl chloride
105-39-5	Ethyl chloroacetate
105-56-6	Ethylcyanoacetate
74-85-1	Ethylene
96-49-1	Ethylene carbonate
107-07-3	Ethylene chlorohydrin
107-15-3	Ethylenediamine
106-93-4	Ethylene dibromide
107-21-1	Ethylene glycol
111-55-7	Ethylene glycol diacetate
110-71-4	Ethylene glycol dimethyl ether
111-76-2	Ethylene glycol monobutyl ether
112-07-2	Ethylene glycol monobutyl ether acetate
110-80-5	Ethylene glycol monoethyl ether
111-15-9	Ethylene glycol monoethyl ether acetate
109-86-4	Ethylene glycol monomethyl ether
110-49-6	Ethylene glycol monomethyl ether acetate
122-99-6	Ethylene glycol monophenyl ether
2807-30-9	Ethylene glycol monopropyl ether
75-21-8	Ethylene oxide
60-29-7	Ethyl ether
104-76-7	2-ethylhexanol
122-51-0	Ethyl orthoformate
95-92-1	Ethyl oxalate
41892-71-1	Ethyl sodium oxalacetate
50-00-0	Formaldehyde
75-12-7	Formamide
64-18-6	Formic acid
110-17-8	Fumaric acid
98-01-1	Furfural
56-81-5	Glycerol
26545-73-7	Glycerol dichlorohydrin
25791-96-2	Glycerol triether
56-40-6	Glycine
107-22-2	Glyoxal
118-74-1	Hexachlorobenzene
67-72-1	Hexachloroethane
36653-82-4	Hexadecyl alcohol
124-09-4	Hexamethylenediamine
629-11-8	Hexamethylene glycol
100-97-0	Hexamethylenetetramine
74-90-8	Hydrigen cyanide
123-31-9	Hydroquinone
99-96-7	p-hydroxybenzoic acid
26760-64-5	Isoamylene
78-83-1	Isobutanol
110-19-0	Isobutyl acetate
115-11-7	Isobutylene
78-84-2	Isobutyraldehyde
79-31-2	Isobutyric acid
25339-17-7	Isodecanol
26952-21-6	Isooctyl alcohol
78-78-4	Isopentane
78-59-1	Isophorone
121-91-5	Isophthalic acid
78-79-5	Isoprene
67-63-0	Isopropanol
108-21-4	Isopropyl acetate
75-31-0	Isopropylamine
75-29-6	Isopropyl chloride
25168-06-3	Isopropylphenol
463-51-4	Ketene
([b])	Linear alkyl sulfonate

Table 8. SOCMI Chemicals	
CAS No[a]	Chemical
123-01-3	Linear alkylbenzene (linear dodecylbenzene)
110-16-7	Maleic acid
108-31-6	Maleic anhydride
6915-15-7	Malic acid
141-79-7	Mesityl oxide
121-47-1	Metanilic acid
79-41-4	Methacrylic acid
563-47-3	Methallyl chloride
67-56-1	Methanol
79-20-9	Methyl acetate
105-45-3	Methyl acetoacetate
74-89-5	Methylamine
100-61-8	n-methylaniline
74-83-9	Methyl bromide
37365-71-2	Methyl butynol
74-87-3	Methyl chloride
108-87-2	Methylcyclohexane
1331-22-2	Methylcyclohexanone
75-09-2	Methylene chloride
101-77-9	Methylene dianiline
101-68-8	Methylene diphenyl diisocyanate
78-93-3	Methyl ethyl ketone
107-31-3	Methyl formate
108-11-2	Methyl isobutyl carbinol
108-10-1	Methyl isobutyl ketone
80-62-6	Methyl methacrylate
77-75-8	Methylpentynol
98-83-9	a-methylstyrene
110-91-8	Morpholine
85-47-2	a-naphthalene sulfonic acid
120-18-3	b-naphthalene sulfonic acid
90-15-3	a-naphthol
135-19-3	b-naphthol
75-98-9	Neopentanoic acid
88-74-4	o-nitroaniline
100-01-6	p-nitroaniline
91-23-6	o-nitroanisole
100-17-4	p-nitroanisole
98-95-3	Nitrobenzene
27178-83-2[c]	Nitrobenzoic acid (o, m, and p)
79-24-3	Nitroethane
75-52-5	Nitromethane
88-75-5	2-Nitrophenol
25322-01-4	Nitropropane
1321-12-6	Nitrotoluene
27215-95-8	Nonene
25154-52-3	Nonylphenol
27193-28-8	Octylphenol
123-63-7	Paraldehyde
115-77-5	Pentaerythritol
109-66-0	n-pentane
109-67-1	1-pentene
127-18-4	Perchloroethylene
594-42-3	Perchloromethyl mercaptan
94-70-2	o-phenetidine
]156-43-4	p-phenetidine
108-95-2	Phenol
98-67-9, 585-38-6, 609-46-1, 1333-39-7[c]	Phenolsulfonic acids
91-40-7	Phenyl anthranilic acid
([b])	Phenylenediamine
75-44-5	Phosgene
85-44-9	Phthalic anhydride
85-41-6	Phthalimide
108-99-6	b-picoline
110-85-0	Piperazine

Table 8. SOCMI Chemicals	
CAS No[a]	Chemical
9003-29-6, 25036-29-7[c]	Polybutenes
25322-68-3	Polyethylene glycol
25322-69-4	Polypropylene glycol
123-38-6	Propional dehyde
79-09-4	Propionic acid
71-23-8	n-propyl alcohol
107-10-8	Propylamine
540-54-5	Propyl chloride
115-07-1	Propylene
127-00-4	Propylene chlorohydrin
78-87-5	Propylene dichloride
57-55-6	Propylene glycol
75-56-9	Propylene oxide
110-86-1	Pyridine
106-51-4	Quinone
108-46-3	Resorcinol
27138-57-4	Resorcylic acid
69-72-7	Salicylic acid
127-09-3	Sodium acetate
532-32-1	Sodium benzoate
9004-32-4	Sodium carboxymethyl cellulose
3926-62-3	Sodium chloroacetate
141-53-7	Sodium formate
139-02-6	Sodium phenate
110-44-1	Sorbic acid
100-42-5	Styrene
110-15-6	Succinic acid
110-61-2	Succinonitrile
121-57-3	Sulfanilic acid
126-33-0	Sulfolane
1401-55-4	Tannic acid
100-21-0	Terephthalic acid
79-34-5[c]	Tetrachloroethanes
117-08-8	Tetrachlorophthalic anhydride
78-00-2	Tetraethyl lead
119-64-2	Tetrahydronapthalene
85-43-8	Tetrahydrophthalic anhydride
75-74-1	Tetramethyl lead
110-60-1	Tetramethylenediamine
110-18-9	Tetramethylethylenediamine
108-88-3	Toluene
95-80-7	Toluene-2,4-diamine
584-84-9	Toluene-2,4-diisocyanate
26471-62-5	Toluene diisocyanates (mixture)
1333-07-9	Toluenesulfonamide
104-15-4[c]	Toluenesulfonic acids
98-59-9	Toluenesulfonyl chloride
26915-12-8	Toluidines
87-61-6, 108-70-3, 120-82-1[c]	Trichlorobenzenes
71-55-6	1,1,1-trichloroethane
79-00-5	1,1,2-trichloroethane
79-01-6	Trichloroethylene
75-69-4	Trichlorofluoromethane
96-18-4	1,2,3-trichloropropane
76-13-1	1,1,2-trichloro-1,2,2-trifluoroethane
121-44-8	Triethylamine
112-27-6	Triethylene glycol
112-49-2	Triethylene glycol dimethyl ether
7756-94-7	Triisobutylene
75-50-3	Trimethylamine
108-05-4	Vinyl acetate
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride
25013-15-4	Vinyl toluene
1330-20-7	Xylenes (mixed)
956-47-6	o-xylene
106-42-3	p-xylene
1300-71-6	Xylenol
1300-73-8	Xylidine

[a] CAS numbers refer to the Chemical Abstracts Registry numbers assigned to specific chemicals, isomers, or mixtures or chemicals. Some isomers or mixtures that are covered by the standards do not have CAS numbers assigned to them. The standards apply to all of the chemicals listed, whether CAS numbers have been assigned or not.

[b] No CAS number(s) have been assigned to this chemical, its isomers, or mixtures containing these chemicals.

[c] CAS numbers for some of the isomers are listed; the standards apply to all of the isomers and mixtures, even if CAS numbers have not been assigned.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, LR 11:529 (May 1985) amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 23:1508 (November 1997).

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

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

A. Applicability

1. The provisions of this Chapter shall apply to any affected facility in the Baton Rouge Nonattainment Area (i.e., the entire parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge) and the Region of Influence (i.e., affected facilities in the attainment parishes of East Feliciana, Pointe Coupee, St. Helena, and West Feliciana).

2. The provisions of this Chapter shall apply during the ozone season (May 1 to September 30) of each year.

3. All affected facilities shall be in compliance as expeditiously as possible, but by no later than the dates specified in Subsection J of this Section.

B. Definitions. Unless specifically defined in this Subsection or in LAC 33:III.111 or 502, the words, terms, and abbreviations in this Chapter shall have the meanings commonly used in the field of air pollution control. For purposes of this Chapter only, the following definitions shall supersede any definitions in LAC 33:III.111 or 502.

Administrator—the *administrator*, or an authorized representative, of the U. S. Environmental Protection Agency (EPA).

Administrative Authority—the secretary of the Department of Environmental Quality or his designee or the appropriate assistant secretary or his designee.

Affected Facility—any facility within the Baton Rouge Nonattainment Area with one or more affected point sources that collectively emit or have the potential to emit 25 tons or more per year of NO_x, unless exempted in Subsection C of this Section, or any facility within the Region of Influence

with one or more affected point sources that collectively emit or have the potential to emit 50 tons or more per year of NO_x, unless exempted in Subsection C of this Section.

Affected Point Source—any point source located at an affected facility and subject to an emission factor listed in Paragraph D.1 of this Section or used as part of an alternative plan in accordance with Subsection E of this Section, unless exempted in Subsection C of this Section.

Ammonia Reformer—a type of process heater/furnace located in an ammonia production plant that is designed to heat a mixture of natural gas and steam to produce hydrogen and carbon oxides.

Averaging Capacity—the average actual heat input rate in million British thermal units per hour (MMBtu/hour) at which an affected point source operated during the ozone season of the two calendar years of 2000 and 2001 (e.g., the total heat input for the period divided by the actual hours of operation for the same period). Another period may be used to calculate the averaging capacity if approved by the department. For units with permit revisions that legally curtailed capacity or that were permanently shut down after 1997, the averaging capacity is the average actual heat input during the last two ozone seasons of operation before the curtailment or shutdown.

Baton Rouge Nonattainment Area—the entire parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge.

Biomass—defined as bagasse, rice-husks, wood, or other combustible, vegetation-derived material that is suitable for use as fuel.

Boiler—any combustion equipment fired with any solid, liquid, and/or gaseous fuel that is primarily used to produce steam, or heat water, or any other heat transfer medium for power generation or for heat to an industrial, institutional, or commercial operation. Equipment that is operated primarily for waste treatment and that incidentally produces steam shall not be regulated under this Chapter as a *boiler*.

Cap—a system for demonstrating compliance whereby an affected facility, a subset of affected sources at an affected facility, or a group of affected facilities under common control are operated to stay below a mass emission rate expressed as mass per unit of time. The allowable mass emission rate is calculated by adding the allowable emissions for each affected point source. The allowable emission is the product of the source's average hourly heat input in MMBtu/hour (not to exceed any applicable permit limitations) based on the highest consecutive 30-day period during the ozone seasons of 2000 and 2001 and the applicable factor in Paragraph D.1 of this Section.

Chemical Processing Gas Turbine—a gas turbine that vents its exhaust gases into the operating stream of a chemical process.

Coal—all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials, Designation D388-77. For the purposes of this Chapter, *coal* shall also include petroleum coke, solid carbon residues from the processing of petroleum products and coal-derived synthetic fuels, including but not limited to, solvent refined coal, coal-oil mixtures, and coal-water mixtures.

Combined Cycle—a combustion equipment configuration that generates electrical or mechanical power with a stationary gas or liquid-fired turbine and/or a stationary internal combustion engine and that recovers heat from the discharge within equipment to heat water or generate steam.

Continuous Emissions Monitoring System (CEMS)—the total equipment that may be required to meet the data acquisition and availability requirements, used to sample, condition, if applicable, analyze, and provide a record of emissions.

Daily Average—an average of the hourly data for one calendar day starting at 12-midnight and continuing until the following 12-midnight.

Department—the Louisiana Department of Environmental Quality.

Elapsed Run-Time Meter—an instrument designed to measure and record the time that an affected point source has run during a designated period.

Electric Power Generating System—all boilers, stationary internal combustion engines, stationary gas turbines, and other combustion equipment within an affected facility that are used to generate electric power and that are owned or operated by a municipality, an electric cooperative, an independent power producer, a public utility, or a Louisiana Public Service Commission regulated utility company, or any of its successors.

Emergency Standby Gas Turbine or Engine—a gas turbine or engine operated as an electrical or a mechanical power source for an affected facility when the primary source has been disrupted or discontinued during an emergency due to circumstances beyond the control of the owner or operator of the affected facility and that is operated only during such an emergency or when normal testing procedures, as recommended by the manufacturer, are being performed. The definition includes a stationary gas turbine or a stationary internal combustion engine that is used at a nuclear power plant as an emergency generator that is subject to Nuclear Regulatory Commission (NRC) regulations and a stationary internal combustion engine that is used for the emergency pumping of water for either fire protection or flood relief. This term does not include an electric generating unit in peaking service.

Facility—a contiguous area under common control that contains various types of equipment that emit or have the potential to emit NO_x.

Facility-Wide Averaging Plan—an alternative emission plan whereby an affected facility (or affected facilities with a common owner or operator) with multiple affected point sources of NO_x emissions achieves the required reduction by

a different mix of controls from that mandated by Subsection D of this Section. Some affected point sources may be over-controlled (more restrictive than the regulation) or shut down in order to offset other affected point sources that are under-controlled (less restrictive than the regulation) or not controlled, provided the required overall NO_x reduction is met.

Facility-Wide Emission Factor—the total average allowable NO_x emission factor in pound NO_x/MMBtu for affected point sources when firing at their averaging capacities.

F Factor—the ratio of the gas volume of the products of combustion to the heat content of the fuel, typically expressed in dry standard cubic feet (dscf) per MMBtu.

Flare—a type of equipment specifically designed for combusting gaseous vents at an above-ground location.

Fluid Catalytic Cracking Unit Regenerator—a unit in a refinery where catalyst is recovered (regenerated) by burning off coke and other deposits with hot air. The term includes the associated equipment for controlling air pollutant emissions and for heat recovery.

Gas—any gaseous substance that can be used as a fuel to create heat and/or mechanical energy including natural gas, synthetically produced gas from coal or oil, gaseous substances from the decomposition of organic matter, and gas streams that are by-products of a manufacturing process.

Heat Input—the heat released due to fuel combustion in an affected point source, using the higher heating value of the fuel, excluding the sensible heat of the incoming combustion air.

Higher Heating Value—a measurement of the heat evolved during the complete combustion of a substance, including the latent heat of condensation of any water that is produced.

Horsepower Rating—the engine manufacturer's maximum continuous load rating at the lesser of the engine or driven equipment's maximum published continuous speed.

Incinerator—same as defined in LAC 33:III.111.

International Standards Organization (ISO) Conditions—standard conditions of 59°F, 1.0 atmosphere, and 60 percent relative humidity.

Kilns and Ovens—combustion equipment used for drying, baking, cooking, and calcining. *Kilns* can also be used for the treatment of solid wastes.

Lean-Burn Engine—a spark-ignited or compression-ignited, Otto cycle, diesel cycle, or two-stroke engine that is not capable of being operated with an exhaust stream oxygen concentration equal to or less than 1.0 percent, by volume on a dry basis, as originally designed by the manufacturer. The exhaust gas oxygen concentration shall be determined from the uncontrolled exhaust stream.

Liquid Fuel—any substance in a liquid state that can be used as a fuel to create heat and/or mechanical energy including:

a. crude oil, petroleum oil, fuel oil, residual oil, distillate, or other liquid fuel derived from crude oil or petroleum;

b. liquid by-products of a manufacturing process or a petroleum refinery; and

c. any other liquid fuel.

Low Ozone Season Capacity Factor Boiler or Process Heater/Furnace—a boiler or process heater/furnace in the Baton Rouge Nonattainment Area with maximum rated capacity greater than or equal to 40 MMBtu/hour and ozone season heat input less than or equal to 0.46×10^{11} Btu, or in the Region of Influence with maximum rated capacity greater than or equal to 80 MMBtu/hour and ozone season heat input less than or equal to 0.92×10^{11} Btu.

Malfunction—any sudden and unavoidable failure, as defined in LAC 33:III.111.

Maximum Rated Capacity—the maximum annual design capacity, as determined by the equipment manufacturer or as proven by actual maximum annual performance in the field, unless the affected point source is limited by permit condition to a lesser annual capacity, in which case the limiting condition shall be used as the maximum rated capacity. Where the capacity of a point source is limited by an operating cap applicable to a group of point sources (e.g., several units capped to a combined total firing rate), the total firing rate cap shall be divided by the number of point sources in the cap to arrive at an equivalent maximum rated capacity. This equivalent *maximum rated capacity* shall be used only to determine the applicability of the emission factors and monitoring provisions of this Chapter.

Megawatt (MW) Rating—the continuous power rating or mechanical equivalent by a stationary gas turbine manufacturer at ISO conditions, without consideration to the increase in turbine shaft output and/or decrease in turbine fuel consumption by the addition of energy recovered from exhaust heat.

Nitric Acid Production Unit—a facility that produces nitric acid by any process.

Nitrogen Oxides (NO_x)—the sum of the nitric oxide and nitrogen dioxide in a stream measured in accordance with Subsection G of this Section.

Number 6 Fuel Oil—fuel oil of the grade that is classified Number 6, according to ASTM Standard Specification for classification of fuel oil by ASTM D396-84.

Ozone Season—May 1 to September 30, inclusively.

Peaking Service—a stationary gas turbine that is operated intermittently to produce energy. To be in *peaking service*, the annual electric output (MW-hour) for the affected point source shall be less than the product of 2500 hours and the MW rating of the turbine.

Permanent Shutdown—a shutdown of an affected point source where the owner or operator has filed a notice of *permanent shutdown* with the department or where the department, through a permit revision or final permit, has removed the affected point source from the applicable permit. (To maintain temporary shutdown status, a source must be maintained in good working order and not dismantled or cannibalized, must still be listed in the applicable permit, must still be listed on the department's emission inventory, and must continue to pay appropriate fees.)

Predictive Emissions Monitoring System (PEMS)—a system that uses process and other parameters as inputs to a computer program or other data reduction system to produce values in terms of the applicable emission limitation or standard.

Process Heater/Furnace—any combustion equipment fired with solid, liquid, and/or gaseous fuel that is used to transfer heat to a process fluid, superheated steam, or water for the purpose of heating the process fluid or causing a chemical reaction. The term *process heater/furnace* does not apply to any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment, or to *boilers* as defined in this Subsection.

Pulp Liquor Recovery Furnace—either a straight Kraft recovery furnace or a cross recovery furnace as defined in 40 CFR 60 Subpart BB.

Region of Influence—an area to the north of the Baton Rouge Nonattainment Area that encompasses affected facilities in the attainment parishes of East Feliciana, Pointe Coupee, St. Helena, and West Feliciana.

Rich-Burn Engine—all stationary reciprocating engines that do not fit the definition of lean-burn.

Sensible Heat—the heat energy stored in a substance as a result of an increase in its temperature.

Stationary Gas Turbine—any turbine system that is gas and/or liquid fuel fired and that is either attached to a foundation at an affected facility or is portable equipment operated at a specific affected facility for more than 60 days in any ozone season.

Stationary Internal Combustion Engine—a reciprocating engine that is either gas and/or liquid fuel fired and that is either attached to a foundation or is portable equipment operated at a specific affected facility for more than six months at a time. This term does not include locomotive engines or self-propelled construction engines.

Supplemental Firing Unit—a unit with burners that is installed in the exhaust duct of a stationary gas turbine or internal combustion engine for the purpose of supplying supplemental heat to a downstream heat recovery unit.

Thirty-Day (30-Day) Rolling Average—an average, calculated for each day that fuel is combusted, of hourly emissions data for the preceding 30 days that fuel is combusted in an affected point source.

Totalizing Fuel Meter—a meter or metering system that provides a cumulative measure of fuel consumption.

Trading Allowances—the tons of NO_x emissions that result from over-controlling, permanently reducing the operating rate of, or permanently shutting down, an affected point source located within the Baton Rouge Nonattainment Area or the Region of Influence. The allowances are determined in accordance with LAC 33:III.607.C and from the emission factors required by Subsection D of this Section for the affected point source and the enforceable emission factor assigned by the owner or operator in accordance with Subsection E of this Section. Baseline emissions shall be the lower of *actual emissions* or adjusted *allowable emissions*, as defined in LAC 33:III.605. *Trading allowances* will be granted only for reductions that are real, quantifiable, permanent, and federally enforceable. NO_x reductions that are used in a facility-wide averaging plan cannot also be used in a trading plan.

Wood—wood, wood residue, bark, or any derivative fuel or residue thereof in any form, including but not limited to, sawdust, sander dust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

C. Exemptions. The following categories of equipment or processes located at an affected facility within the Baton Rouge Nonattainment Area or the Region of Influence are exempted from the provisions of this Chapter:

1. boilers and process heater/furnaces with a maximum rated capacity of less than 40 MMBtu/hour in the Baton Rouge Nonattainment Area or less than 80 MMBtu/hour in the Region of Influence;

2. stationary gas turbines with a megawatt rating based on heat input of less than 5 MW in the Baton Rouge Nonattainment Area or less than 10 MW in the Region of Influence;

3. stationary internal combustion engines as follows:

a. rich-burn engines with a rating of less than 150 horsepower (Hp) in the Baton Rouge Nonattainment Area or less than 300 Hp in the Region of Influence; and

b. lean-burn engines with a rating of less than 150 Hp in the Baton Rouge Nonattainment Area or less than 1500 Hp in the Region of Influence;

4. low ozone season capacity factor boilers and process heater/furnaces, in accordance with Paragraph H.11 of this Section;

5. stationary gas turbines and stationary internal combustion engines, that are:

a. used in research and testing;

b. used for performance verification and testing;

c. used solely to power other engines or turbines during start-ups;

d. operated exclusively for fire fighting or training and/or flood control;

e. used in response to and during the existence of any officially declared disaster or state of emergency;

f. used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl or animals; or

g. used as chemical processing gas turbines;

6. any point source, in accordance with Paragraph H.12 of this Section, that operates less than 400 hours during the ozone season;

7. *flares*, *incinerators*, and *kilns and ovens*, as defined in Subsection B of this Section;

8. any point source during start-up and shutdown as defined in LAC 33:III.111 or during a malfunction as defined in 40 CFR Section 60.2 (This exemption does not apply to units that are shut down intentionally on a routine basis—more than once per month.);

9. any point source used solely to start up a process;

10. any point source firing biomass fuel that supplies greater than 50 percent of the heat input on a monthly basis;

11. any point source at a sugar mill;

12. fluid catalytic cracking unit regenerators;

13. pulp liquor recovery furnaces;

14. diesel-fired stationary internal combustion engines;

15. any affected point source that is required to meet a more stringent state or federal NO_x emission limitation, whether by regulation or permit (In this case, the monitoring, reporting, and recordkeeping requirements shall be in accordance with the more stringent regulation or permit and not this Chapter. If the applicable regulation or permit does not specify monitoring, reporting, and recordkeeping requirements, the provisions of this Chapter shall apply.);

16. wood-fired boilers that are subject to 40 CFR 60, Subpart Db;

17. nitric acid production units that are subject to 40 CFR 60, Subpart G or LAC 33:III.2307;

18. any affected point source firing Number 6 Fuel Oil during a period of emergency and approved by the administrative authority;

19. boilers and industrial furnaces treating hazardous waste and regulated under LAC 33:V.Chapter 30 or 40 CFR Part 264, 265, or 266, including halogen acid furnaces and sulfuric acid regeneration furnaces; and

20. high efficiency boilers or other combustion devices regulated under the Toxic Substance Control Act PCB rules under 40 CFR Part 761.

D. Emission Factors

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

Table D-1A. Emission Factors for Sources in the Baton Rouge Nonattainment Area

Category	Maximum Rated Capacity	NO_x Emission Factor [a]
Electric Power Generating System Boilers:		
Coal-fired	>/= 40 to <80 MMBtu/Hour	0.50 pound/MMBtu
	>/= 80 MMBtu/Hour	0.21 pound/MMBtu
Number 6 Fuel Oil-fired	>/= 40 to <80 MMBtu/Hour	0.30 pound/MMBtu
	>/= 80 MMBtu/Hour	0.18 pound/MMBtu
All Others (gaseous or liquid)	>/= 40 to <80 MMBtu/Hour	0.20 pound/MMBtu
	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Industrial Boilers	>/= 40 to <80 MMBtu/Hour	0.20 pound/MMBtu
	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Process Heater/Furnaces:		
Ammonia Reformers	>/= 40 to <80 MMBtu/Hour	0.30 pound/MMBtu
	>/= 80 MMBtu/Hour	0.23 pound/MMBtu
All Others	>/= 40 to <80 MMBtu/Hour	0.18 pound/MMBtu
	>/= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines:		
Peaking Service, Fuel Oil-fired	>/= 5 to <10 MW	0.37 pound/MMBtu
	>/= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>/= 5 to <10 MW	0.27 pound/MMBtu
	>/= 10 MW	0.20 pound/MMBtu
All Others	>/= 5 to <10 MW	0.24 pound/MMBtu[b]
	>/= 10 MW	0.16 pound/MMBtu[c]
Stationary Internal Combustion Engines:		
Lean-burn	>/= 150 to <320 Hp	10 g/Hp-hour
	>/= 320 Hp	4 g/Hp-hour
Rich-burn	>/= 150 to <300 Hp	2 g/Hp-hour
	>/= 300 Hp	2 g/Hp-hour

[a] based on the higher heating value of the fuel
[b] equivalent to 65 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu
[c] equivalent to 43 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu

Table D-1B. Emission Factors for Sources in the Region of Influence

Category	Maximum Rated Capacity	NO_x Emission Factor [a]
Electric Power Generating System Boilers:		
Coal-fired	>/= 80 MMBtu/Hour	0.21 pound/MMBtu
Number 6 Fuel Oil-fired	>/= 80 MMBtu/Hour	0.18 pound/MMBtu
All Others (gaseous or liquid)	>/= 80 MMBtu/Hour	0.10 pound/MMBtu

Table D-1B. Emission Factors for Sources in the Region of Influence		
Category	**Maximum Rated Capacity**	**NO_x Emission Factor [a]**
Industrial Boilers	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Process Heater/Furnaces:		
Ammonia Reformers	>/= 80 MMBtu/Hour	0.23 pound/MMBtu
All Others	>/= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines:		
Peaking Service, Fuel Oil-fired	>/= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>/= 10 MW	0.20 pound/MMBtu
All Others	>/= 10 MW	0.16 pound/MMBtu[b]
Stationary Internal Combustion Engines:		
Lean-burn	>/= 1500 Hp	4 g/Hp-hour
Rich-burn	>/= 300 Hp	2 g/Hp-hour

[a] all factors are based on the higher heating value of the fuel
[b] equivalent to 43 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu

2. Any electric power generating system boiler that operates with a combination of fuels shall comply with an adjusted emission factor calculated as follows:

a. if a combination of fuels is used normally, the emission factor from Paragraph D.1 of this Section shall be adjusted by the weighted average heat input of the fuels based on the ozone season average usage in 2000 and 2001, or another period if approved by the department;

b. if the boiler is normally fired with a primary fuel and a secondary fuel is available for back-up, the unit shall comply with the emission factor for the primary fuel while firing the primary fuel and with the emission factor for the secondary fuel while firing the secondary fuel. In addition, the usage of the secondary fuel shall be limited to the ozone season average usage of the secondary fuel in 2000 and 2001, or another period if approved by the department; and

c. in either case, if the secondary fuel is less than 10 percent of the weighted average, the owner or operator may choose to comply with the unadjusted limit for the primary fuel.

3. For affected point sources in an electric power generating system, the emission factors from Subsection D of this Section shall apply as the mass of NO_x emitted per unit of heat input (pound NO_x per MMBtu), on a 30-day rolling average basis. Alternatively, a facility may choose to comply with a ton per day or a pound per hour cap provided that monitoring is installed, calibrated, maintained, and operated to demonstrate compliance with the cap. The cap for a facility or for multiple facilities under common control is calculated by adding the products of the factor from Paragraph D.1 of this Section and the average hourly heat input in MMBtu/hour (not to exceed any applicable permit limitations) based on the highest consecutive 30-day period during the ozone seasons of 2000 and 2001 for each affected point source as follows.

Equation D-1

$$Cap(tpd) = 0.012X \sum_{i=1}^{N} (R_{li} \; x \; HI_i)$$

where:

HI_i = the average hourly heat input based on the highest consecutive 30-day period during the ozone seasons of 2000 and 2001 of each point source (MMBtu/hour)

i = each point source included in the cap

N = the total number of point sources included in the cap

R_{li} = the limit for each point source from Subsection D of this Section (pound NO_x/MMBtu)

4. For all other affected point sources, the emission factors from Subsection D of this Section shall apply as the mass of NO_x emitted per unit of heat input (pounds NO_x per MMBtu or grams NO_x per Hp-hour), on a 30-day rolling average basis. Alternatively, a facility may choose to comply with a cap as detailed in Paragraph D.3 of this Section, provided that a system, approved by the department, is installed, calibrated, maintained, and operated to demonstrate compliance.

5. If one affected point source discharges in part or in whole to another affected point source, the portion discharging into the second point source shall be treated as emanating from the second point source and shall be controlled to the same limit as that specified for the second point source, while the portion discharging directly to the atmosphere from the first point source shall be controlled to the limit of the first point source. This term shall not include a combined cycle unit that discharges into a supplemental firing unit or other type of combustion equipment. For this type of point source, the emissions shall be controlled as follows:

a. for the turbines and/or engines, at the appropriate limits for the turbines and/or engines alone; and

b. for the supplemental firing unit or other type of combustion equipment, at the appropriate limit for the supplemental firing or combustion equipment with the measured emission values adjusted for the emissions coming from the turbines and/or engines.

6. Where a common stack is used to collect vents from affected point sources or affected point sources and exempt point sources and monitoring and/or testing of individual units is not feasible, the department, upon application from the owner or operator, shall specify alternative methods to demonstrate compliance with the emission factors of this Subsection.

7. Any affected point source firing gaseous fuel that contains hydrogen and/or carbon monoxide may apply a multiplier, as calculated below, to the appropriate emission factor given in Paragraph D.1 of this Section. The total

hydrogen and/or carbon monoxide volume in the gaseous fuel stream is divided by the total gaseous fuel flow volume to determine the volume percent of hydrogen and/or carbon monoxide in the fuel supply. In order to apply this multiplier, the owner or operator of the affected point source shall sample and analyze the fuel gas composition for hydrogen and/or carbon monoxide in accordance with Paragraph G.5 of this Section.

Equation D-2

$$\begin{gathered} If\ \ (Vol.\%\ H_2 + Vol.\%\ CO) = or < 50 \\ Then \\ fuel\ multiplier = 1 + \frac{0.5\,x\,(Vol.\%\ H_2 + Vol.\%\ CO)}{100} \\ Otherwise \\ fuel\ multiplier = 1.25 \end{gathered}$$

8. The owner or operator of a stationary gas turbine using a fuel that has an F factor different than 8710 dscf/MMBtu may adjust the allowable emission factor shown in Paragraph D.1 of this Section. The adjustment is made by dividing the actual F factor (dscf/MMBtu) of the fuel by 8710 and multiplying the result by 0.16 to get the adjusted allowable emission factor. The use of this option shall be detailed in the permit application or in the optional compliance plan described in Paragraph F.7 of this Section.

9. On a day that is designated as an Ozone Action Day by the department, a facility shall not fire an affected point source with Number 6 Fuel Oil or perform testing of emergency and training combustion units without prior approval of the administrative authority.

E. Alternative Plans

1. Facility-Wide Averaging Plan. A facility-wide averaging plan is established in this Chapter for single affected facilities and multiple affected facilities that are owned or operated by the same entity. For sources located within the Baton Rouge Nonattainment Area or the Region of Influence, an owner or operator of one or more affected facilities may use the facility-wide averaging plan as an alternative means of compliance with the emission factors from Subsection D of this Section. A request for approval to use a facility-wide averaging plan, that includes the details of the plan, shall be submitted to the department either separately or with the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. A facility-wide averaging plan submitted under this provision shall be approved if the department determines that it will provide emission reductions equivalent to or more than that required by the emission factors in Subsection D of this Section and the plan establishes satisfactory means for determining initial and continuous compliance, including appropriate monitoring and recordkeeping requirements. Approval of the alternative plans by the administrative authority does not necessarily indicate automatic approval by the administrator.

a. An owner or operator who elects to use a facility-wide averaging plan for compliance shall establish an emission factor for each applicable affected point source such that if each affected point source was operated at its averaging capacity, the cumulative emission factor in pounds NO_x/MMBtu from all point sources in the averaging group would not exceed the facility-wide emission factor, as shown in Equation E-3. The equations below shall be used to calculate the cumulative emission rate and the facility-wide emission factor.

Equation E-1

$$FL = \sum_{i=1}^{N} (R_{li} \times f_i)$$

where:

Equation E-2

$$f_i = HI_i / \sum_{i=1}^{N} HI_i$$

Equation E-3

$$\sum_{i=1}^{N} (R_{ai} \times f_i) \leq FL$$

where:

f_i = fraction of total system averaging capacity for point source i

HI_i = the averaging capacity of each point source (MMBtu/hour)

i = each point source in the averaging group

N = the total number of point sources in the averaging group

R_{ai} = the limit assigned by the owner to each point source in the averaging plan (pound NO_x/MMBtu)

R_{li} = the limit for each point source from Subsection D of this Section (pound NO_x/MMBtu)

FL = facility-wide emission factor (pound NO_x/MMBtu) of all point sources included in the averaging plan

b. An owner or operator of an electric power generating system that chooses to use an averaging plan shall demonstrate compliance by either of the following methods:

i. operating such that each affected point source does not exceed its assigned individual limit in pound NO_x/MMBtu on a 30-day rolling average basis; or

ii. complying with a cap as described in Paragraph D.3 of this Section, provided that a monitoring system is installed, calibrated, maintained, and operated to demonstrate compliance with the cap.

c. Owners or operators of all other affected point sources that choose to use an averaging plan shall demonstrate compliance by either of the following methods:

i. operating such that each affected point source does not exceed its assigned individual limit in pound NO_x/MMBtu on a 30-day rolling average basis; or

ii. complying with a cap as described in Paragraph D.3 of this Section, provided a system, approved by the department, is installed, calibrated, maintained, and operated to demonstrate compliance with the cap.

d. An owner or operator that chooses to use the provisions of Clause E.1.b.i or c.i of this Section to demonstrate compliance in an averaging plan shall include in the submitted plan a description of the actions that will be taken if any under-controlled unit is operated at more than 10 percent above its averaging capacity (HI_i in Subparagraph E.1.a of this Section). Such actions may include a comparison of the total current emissions from all units in the averaging plan to the total emissions that would result if the units in the plan were operated in accordance with Subsection D of this Section, other reviews, reporting, and/or mitigation actions. If the department determines that the actions are not adequate to prevent an increase of emissions over the total emissions that would result if the units were operated in accordance with Subsection D of this Section, the department shall require that the averaging plan and/or the action plan be revised or shall disallow the use of the averaging plan.

e. The owner or operator of affected point sources complying with the requirements of this Subsection can include in the plan either all of the affected point sources at the facility or select only certain sources to be included.

f. NO_x reductions accomplished after 1997 through curtailments in capacity of a point source with a permit revision or by permanently shutting down the point source may be included in the averaging plan. In order to include a unit with curtailed capacity in the averaging plan, the old averaging capacity, determined from the average of the two ozone seasons prior to the capacity curtailment or such other two-year period approved by the department, shall be used to calculate the unit's contribution to the term FL. The new averaging capacity, determined from the enforceable permit revision, shall be multiplied by the owner assigned limit to calculate the contribution of the curtailed unit to the cumulative emission factor for the averaging group.

g. NO_x reductions from exempted point sources, as defined in Subsection C of this Section, may be used in a facility-wide averaging plan. If a unit exempted in Subsection C of this Section is included in an averaging plan, the term R_{li} in Equation E-1 shall be established, in accordance with Subsection G of this Section, from a stack test or other determination of emissions approved by the department that was performed before the NO_x reduction project was implemented and the term R_{ai} shall be established from the owner-assigned emission factor in accordance with Subparagraph E.1.a of this Section.

h. Solely for the purpose of calculating the facility-wide emission factor, the allowable emission factor (pound NO_x/MMBtu) for each affected stationary internal combustion engine is the applicable NO_x emission factor from Subsection D of this Section (g/Hp-hour) divided by the product of the engine manufacturer's rated heat rate (expressed in Btu/Hp-hour) at the engine's Hp rating and 454 $x10^{-6}$.

i. The owner or operator of affected point sources complying with the requirements of this Subsection in accordance with an emissions averaging plan shall carry out recordkeeping that includes, but is not limited to, a record of the data on which the determination of each point source's hourly, daily, or 30-day, as appropriate, compliance with the facility-wide averaging plan is based.

2. Trading Plan. Trading is established in this Chapter as an alternate means of compliance with the emission factors from Subsection D of this Section. Within the Baton Rouge Nonattainment Area and the Region of Influence, *trading allowances*, as defined in Subsection B of this Section, may be traded between affected facilities owned by different companies in a manner consistent with LAC 33:III.617.C.3. The approval to use trading shall be requested in the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. A trading plan submitted under this provision shall be approved if the department determines that it will provide NO_x emission reductions equivalent to or more than that required by the emission factors of Subsection D of this Section and the plan establishes satisfactory means for determining ongoing compliance, including appropriate monitoring and recordkeeping requirements. Approval of trading plans by the administrative authority does not necessarily indicate automatic approval of the administrator.

F. Permits

1. Authorization to Install and Operate NO_x Control Equipment

a. An owner or operator may obtain approval to install and operate NO_x control equipment that does not result in ammonia emissions above the minimum emission rate (MER) in LAC 33:III.Chapter 51 by submitting documentation in accordance with LAC 33:III.511. This documentation shall include an estimate of any carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter (PM_{10}), and/or volatile organic compound (VOC) emission increases associated with the NO_x control technology. If approved, the administrative authority shall grant an authorization to construct and operate in accordance with LAC 33:III.501.C.3. Any appropriate permit application reflecting the emission reduction shall be submitted to the department and deemed administratively complete no later than 180 days after commencement of operation and in accordance with the procedures of LAC 33:III.Chapter 5.

b. In accordance with LAC 33:III.5111.C, installation of NO_x control equipment that results in ammonia emissions above the MER in LAC 33:III.Chapter 51 shall not commence until a permit or permit modification has been approved by the administrative authority. In accordance with LAC 33:III.5107.D.1, the administrative authority shall provide at least 30 days for public comment before issuing any such permit.

2. Alternatively to Subparagraph F.1.a of this Section, an owner or operator of an affected facility that is operating with a Louisiana air permit may submit a completed permit modification application for the changes proposed to comply with this Chapter.

3. Any owner or operator with an affected facility that has retained grandfathered status, as described in LAC 33:III.501.B.6, shall submit an application in accordance with LAC 33:III.501.C.1 for the changes proposed to comply with this Chapter.

4. Duty to Supplement. In accordance with LAC 33:III.517.C, if an owner or operator has a permit application on file with the department, but the department has not released the proposed permit, the applicant shall supplement the application as necessary to address this Chapter.

5. Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) Considerations. A significant net emissions increase in NO_x, CO, SO_2, PM_{10}, and/or VOC in accordance with LAC 33:III.504 or 509, that is a direct result of, and incidental to, the installation of NO_x control equipment or implementation of a NO_x control technique required to comply with the provisions of this Chapter shall be exempt from the requirements of LAC 33:III.509 and/or 504, as appropriate, provided the following conditions are met:

a. the project shall not:

i. cause or contribute to a violation of the national ambient air quality standard (NAAQS); or

ii. adversely affect visibility or other air quality related value (AQRV) in a class I area;

b. any increase in CO, SO_2, PM_{10}, and/or VOC emissions shall be:

i. quantified in the submittal required by Paragraphs F.1-4 of this Section; and

ii. tested in accordance with Subsection G of this Section, as applicable;

c. notwithstanding the requirements of LAC 33:III.504, Table 1, a significant net increase of VOC emissions at an affected facility located in the Baton Rouge Nonattainment Area shall be offset at a ratio of at least 1:1. Offsets shall be surplus, permanent, quantifiable, and federally enforceable and calculated in accordance with LAC 33:III.Chapter 6; and

d. a 30-day public comment period shall be provided in accordance with LAC 33:III.519.C prior to issuance of a permit or permit modification.

6. Increases above the MER in toxic air pollutant (TAP) emissions shall be subject to the applicable requirements of LAC 33:III.Chapter 51.

7. When pre-permit application approval of plans is desired by an owner or operator, a compliance plan may be submitted in accordance with this Subsection. The administrative authority shall approve the plan if it contains all of the required information to determine that the affected sources will be in compliance with this Chapter and is accurate. The compliance plan may address individual point sources, groups of point sources, or all point sources at the facility, as determined by the owner. The following information shall be submitted as appropriate:

a. the facility designation, as indicated by the identification number, submitted to the Office of Environmental Services;

b. a list of all units in the compliance plan, the emission point number as designated on the emission inventory questionnaire, the averaging capacity, and the maximum rated capacity;

c. identification of all combustion units with a claimed exemption in accordance with Subsection C of this Section, and the rule basis for the claimed exemption;

d. a list of any units that have been, or will be, curtailed or permanently shut down;

e. for each unit, the actual emission factor that will be used to achieve compliance;

f. the control technology to be applied for each unit subject to control, and an anticipated construction schedule for each control device including the dates for completion of engineering, submission of permit applications, start and finish of construction, and initial start-up; and

g. the calculations to demonstrate that each unit will achieve the required NO_x emission rate.

G. Initial Demonstration of Compliance

1. Emissions testing to demonstrate initial compliance with the NO_x emission factors of Subsection D of this Section, or with emission limits that are part of an alternative plan under Subsection E of this Section, for affected point sources operating with a CEMS or PEMS that has been certified in accordance with Subsection H of this Section is not required. The certification of the CEMS or PEMS shall be considered demonstration of initial compliance. Testing for initial compliance is not required for an existing CEMS or PEMS that meets the requirements of Subsection H of this Section.

2. Emissions testing is required for all point sources that are subject to the emission limitations of Subsection D of this Section or used in one of the alternative plans of Subsection E of this Section. Test results must demonstrate that actual NO_x emissions are in compliance with the appropriate limits of this Chapter. As applicable, CO, SO_2, PM_{10}, and VOC shall also be measured if modifications, done to comply with this Chapter, could cause an increase in emissions of any of these compounds. Performance testing of these point sources shall be performed in accordance with the schedule specified in Subsection J of this Section.

3. The tests required by Paragraph G.2 of this Section shall be performed by the test methods referenced in Paragraph G.5 of this Section, except as approved by the

administrative authority in accordance with Paragraph G.7 of this Section. Test results shall be reported in the units of the applicable emission factors and for the corresponding averaging periods.

4. Emission testing conducted in the three years prior to the initial demonstration of compliance date may be used to demonstrate compliance with the limits of Subsection D or E of this Section, if the owner or operator demonstrates to the department that the prior testing meets the requirements of this Subsection. The request to waive emissions testing according to this Paragraph shall be included in the permit application. The department reserves the right to request performance testing or CEMS performance evaluation upon 60 days notice.

5. Compliance with the emission specifications of Subsection D or E of this Section for affected point sources operating without CEMS or PEMS shall be demonstrated while operating at the maximum rated capacity, or as near thereto as practicable. The stack tests shall be performed according to emissions testing guidelines located on the department website in the technology section. Three minimum one-hour tests shall be performed and the following methods from 40 CFR Part 60, Appendix A shall be used:

a. Methods 1, 2, 3, and 4 or 19, with prior approval, for exhaust gas flow;

b. Method 3A or 20 for O_2 ;

c. Method 5 for PM;

d. Method 6C for SO_2;

e. Method 7E or 20 for NO_x;

f. Method 10 or 10A for CO;

g. Method 18 or 25A for VOC;

h. modified Method 5, or a department-approved equivalent, for NH_3; and/or

i. American Society of Testing and Materials (ASTM) Method D1945-96 or ASTM Method D2650-99 for fuel composition; ASTM Method D1826-94 or ASTM Method D3588-98 for calorific value.

6. All alternative or equivalent test methods, waivers, monitoring methods, testing and monitoring procedures, customized or correction factors, and alternatives to any design, equipment, work practices, or operational standards must be approved by both the administrative authority and the administrator, if applicable, before they become effective.

7. An owner or operator may request approval from the department for minor modifications to the test methods listed in Paragraph G.5 of this Section, including alternative sampling locations and testing a subset of similar affected sources, prior to actual stack testing.

8. The information required in this Subsection shall be provided in accordance with the effective dates in Subsection J of this Section.

H. Continuous Demonstration of Compliance. After the initial demonstration of compliance required by Subsection G of this Section, continuous compliance with the emission factors of Subsection D or E of this Section, as applicable, shall be demonstrated by the methods described in this Subsection. For any alternative method, the department's approval does not necessarily constitute compliance with all federal requirements nor eliminate the need for approval by the administrator.

1. The owner or operator of boilers that are subject to this Chapter shall demonstrate continuous compliance as follows:

a. for boilers with a maximum rated capacity less than 250 MMBtu/hour:

i. install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure fuel usage;

ii. install, calibrate, maintain, and operate an oxygen monitor to measure oxygen concentration; and

iii. in order to continuously demonstrate compliance with the NO_x limits of Subsection D or E of this Section, implement procedures to operate the boiler within the fuel and oxygen limits established during the initial compliance run in accordance with Subsection G of this Section; and

b. for boilers with a maximum rated capacity equal to or greater than 250 MMBtu/hour:

i. install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure gas and/or liquid fuel usage. For coal-fired boilers, belt scales or an equivalent device shall be provided;

ii. install, calibrate, maintain, and operate a diluent (either oxygen or carbon dioxide) monitor. The monitor shall meet all of the requirements of Performance Specification 3 of 40 CFR 60, Appendix B;

iii. install, calibrate, maintain, and operate a NO_x CEMS to demonstrate continuous compliance with the NO_x emission factors of Subsection D or E of this Section, as applicable. The CEMS shall meet all of the requirements of 40 CFR Part 60.13 and Performance Specification 2 of 40 CFR 60, Appendix B, or the requirements of 40 CFR Part 75 for units regulated under the Acid Rain Program; and

iv. install, calibrate, maintain, and operate a CO monitor. The monitor shall meet all of the requirements of Performance Specification 4 of 40 CFR 60, Appendix B; or

v. alternatively to Clauses H.1.b.ii-iv of this Section, for demonstration of continuous compliance, the owner or operator may install, calibrate, certify, maintain, and operate a PEMS to predict NO_x, diluent (O_2 or CO_2), and CO emissions for each affected point source. As an alternative to using the PEMS to monitor diluent (O_2 or CO_2), a monitor for diluent according to Clause H.1.b.ii of this Section or similar alternative method approved by the department may be used. The PEMS shall be certified while operating on primary boiler fuel and, separately, on any

alternative fuel. The certification shall be in accordance with EPA documents, "Example Specifications and Test Procedures for Predictive Emission Monitoring Systems" and "Predictive Emission Monitoring System to Determine NO_x and CO Emissions from an Industrial Furnace" that are located on the EPA website in the emission monitoring section, both with posting dates of July 31, 1997; or

vi. alternatively to Clauses H.1.b.ii-iv of this Section, the owner or operator may request approval from the administrator for an alternative monitoring plan that uses a fuel-oxygen operating window to demonstrate continuous compliance of NO_x and CO. The corners of the window shall be established during the initial compliance test required by Subsection G of this Section or similar testing at another time. The details for use of an alternative monitoring plan shall be submitted in the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. The plan shall become part of the facility permit and shall be federally enforceable.

2. The owner or operator of process heater/furnaces that are subject to this Chapter shall demonstrate continuous compliance as follows:

a. for process heater/furnaces with a maximum rated capacity less than 250 MMBtu/hour:

i. install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure fuel usage;

ii. install, calibrate, maintain, and operate an oxygen monitor to measure oxygen concentration; and

iii. in order to continuously demonstrate compliance with the NO_x limits of Subsection D or E of this Section, implement procedures to operate the process heater/furnace within the fuel and oxygen limits established during the initial compliance run in accordance with Subsection G of this Section; and

b. for process heater/furnaces with a maximum rated capacity equal to or greater than 250 MMBtu/hour:

i. install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure fuel usage;

ii. install, certify, maintain, and operate an oxygen or carbon dioxide diluent monitor in accordance with the requirements of Clause H.1.b.ii of this Section;

iii. install, certify, maintain, and operate a NO_x CEMS in accordance with the requirements of Clause H.1.b.iii of this Section; and

iv. install, certify, maintain, and operate a CO monitor in accordance with the requirements of Clause H.1.b.iv of this Section; or

v. alternatively to Clauses H.2.b.ii-iv of this Section, the owner or operator may install, calibrate, certify, maintain, and operate a PEMS in accordance with the requirements of Clause H.1.b.v of this Section; or

vi. alternatively to Clauses H.2.b.ii-iv of this Section, the owner or operator may request approval from the department for an alternative monitoring plan that uses a fuel-oxygen operating window, or other system, to demonstrate continuous compliance of NO_x and CO. The corners of the window shall be established during the initial compliance test required by Subsection G of this Section or similar testing at another time. The details for use of an alternative monitoring plan shall be submitted in the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. The plan shall become part of the facility permit and shall be federally enforceable.

3. The owner or operator of stationary gas turbines that are subject to this Chapter shall demonstrate continuous compliance as follows:

a. for stationary gas turbines with a megawatt rating based on heat input less than 30 MW:

i. if the stationary gas turbine uses steam or water injection to comply with the NO_x emission factors, install, calibrate, maintain, and operate a continuous system to monitor and record the average hourly fuel and steam or water consumption and the water or steam to fuel ratio. To demonstrate continuous compliance with the appropriate emission factor, the stationary gas turbine shall be operated at the required steam-to-fuel or water-to-fuel ratio as determined during the initial compliance test; and

ii. for other stationary gas turbines, install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure fuel usage. Compliance with the emission factors of Subsection D or E of this Section shall be demonstrated by operating the turbine within the fuel limits established during the initial compliance run in accordance with Subsection G of this Section and by annual testing for NO_x and CO with an approved portable analyzer; or

iii. alternatively to Clause H.3.a.i or ii of this Section, an owner or operator may choose to comply with the requirements of Clauses H.3.b.i-iv or v of this Section to demonstrate continuous compliance with the limits of Subsection D or E of this Section; and

b. for stationary gas turbines with a megawatt rating based on heat input of 30 MW or greater:

i. install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure fuel usage;

ii. install, certify, maintain, and operate an oxygen or carbon dioxide diluent monitor in accordance with the requirements of Clause H.1.b.ii of this Section;

iii. install, certify, maintain, and operate a NO_x CEMS in accordance with the requirements of Clause H.1.b.iii of this Section; and

iv. install, certify, maintain, and operate a CO monitor in accordance with the requirements of Clause H.1.b.iv of this Section; or

v. alternatively to Clauses H.3.b.ii-iv of this Section, the owner or operator may install, calibrate, certify,

maintain, and operate a PEMS in accordance with the requirements of Clause H.1.b.v of this Section; or

vi. alternatively to Clauses H.3.b.ii-iv of this Section, the owner or operator may request approval from the department for an alternative monitoring plan that complies with the provisions of Clause H.3.a.i of this Section, if the turbine uses steam or water injection for compliance, or Clause H.3.a.ii of this Section for other turbines. The alternative plan shall also require annual testing for NO_x and CO with an approved portable analyzer and triennial stack testing for NO_x and CO in accordance with the methods specified in Paragraph G.5 of this Section. The details for use of an alternative monitoring plan shall be submitted in the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. The plan shall become part of the facility permit and shall be federally enforceable.

4. The owner or operator of stationary internal combustion engines that are subject to this Chapter shall demonstrate continuous compliance as follows:

a. install, calibrate, maintain, and operate a totalizing fuel meter to continuously measure fuel usage and demonstrate continuous compliance by operating the engine within the fuel limits established during the initial compliance run and by annual testing for NO_x and CO with an approved portable analyzer and by triennial stack testing for NO_x and CO in accordance with the methods specified in Paragraph G.5 of this Section; or

b. alternatively to Subparagraph H.4.a of this Section, an owner or operator may choose to comply with the requirements of Clauses H.3.b.i-iv or v of this Section to demonstrate continuous compliance with the limits of Subsection D or E of this Section.

5. A CEMS unit may be used to monitor multiple point sources provided that each source is sampled at least once every 15 minutes and the arrangement is approved by the department.

6. Existing instrumentation for any requirement in this Subsection shall be acceptable upon approval of the department.

7. For any affected point source that uses a chemical reagent for reduction of NO_x, a NO_x CEMS, in accordance with Clause H.1.b.iii of this Section, and a CO monitor, in accordance with Clause H.1.b.iv of this Section, shall be provided.

8. Boilers or process heater/furnaces covered by this Chapter that discharge through a common stack shall meet the appropriate continuous monitoring requirements of Paragraph H.1 or 2 of this Section, or an alternative approved by the department.

9. The owner or operator of any affected point source firing gaseous fuel for which a fuel multiplier from Paragraph D.7 of this Section is used shall sample, analyze, and record the fuel gas composition on a daily basis or on an alternative schedule approved by the administrative authority. If an owner or operator desires to use an alternative sampling schedule, he shall specify a sampling frequency in his permit application and provide an explanation for the alternative schedule. Fuel gas analysis shall be performed according to the methods listed in Subparagraph G.5.g of this Section, or other methods that are approved by the department. A gaseous fuel stream containing 99 percent H_2 and/or CO by volume or greater may use the following procedure to be exempted from the sampling and analysis requirements of this Subsection:

a. a fuel gas analysis shall be performed initially using the test methods in Subparagraph G.5.g of this Section to demonstrate that the gaseous fuel stream is 99 percent H_2 and/or CO by volume or greater; and

b. the owner or operator shall certify that the fuel composition will continuously remain at 99 percent H_2 and/or CO by volume or greater during its use as a fuel to the point source.

10. All affected point sources that rely on periodic stack testing to demonstrate continuous compliance and use a catalyst to control NO_x emissions shall be tested after each occurrence of catalyst replacement. Portable analyzers shall be acceptable for this check. Documentation shall be maintained on-site, if practical, of the date, the person doing the test, and the test results. Documentation shall be made available for inspection upon request.

11. The owner or operator of any low ozone season capacity factor boiler or process heater/furnace for which an exemption is granted shall install, calibrate, and maintain a totalizing fuel meter, with instrumentation approved by the department, and keep a record of the fuel input for each affected point source during each ozone season. The owner or operator of any boiler or process heater/furnace covered under this exemption shall notify the administrative authority within seven days if the Btu-per-ozone season limit is exceeded. If the Btu-per-ozone season limit is exceeded, the exemption shall be permanently withdrawn. Within 90 days after receipt of notification from the administrative authority of the loss of the exemption, the owner or operator shall submit a permit modification detailing how to meet the applicable emission factor as soon as possible, but no later than 24 months, after exceeding the Btu-per-ozone season limit. Included with this permit modification, the owner or operator shall submit a schedule of increments of progress for the installation of the required control equipment. This schedule shall be subject to the review and approval of the department.

12. The owner or operator of any affected point source that is granted an exemption for operating less than 400 hours during the ozone season shall install, calibrate, and maintain a nonresettable, elapsed run-time meter to record the operating time in order to demonstrate compliance. The owner or operator shall notify the administrative authority within seven days if the hours-per-ozone season limit is exceeded. If the hour-per-ozone season limit is exceeded, the exemption shall be permanently withdrawn. Within 90 days after receipt of

notification from the administrative authority of the loss of the exemption, the owner or operator shall submit a permit modification detailing how to meet the applicable emission factor as soon as possible, but no later than 24 months, after exceeding the limit. Included with this permit modification, the owner or operator shall submit a schedule of increments of progress for the installation and operation of the required control equipment. This schedule shall be subject to the review and approval of the department.

I. Notification, Recordkeeping, and Reporting Requirements

1. The owner or operator of an affected point source shall notify the department at least 30 days prior to any compliance testing conducted under Subsection G of this Section and any CEMS or PEMS performance evaluation conducted under Subsection H of this Section in order to give the department an opportunity to conduct a pretest meeting and observe the emission testing. All necessary sampling ports and such other safe and proper sampling and testing facilities as required by LAC 33:III.913, or alternatives approved by the department, shall be provided for the testing. The test report shall be submitted to the department within 60 days after completing the testing.

2. The owner or operator of an affected point source required to demonstrate continuous compliance in accordance with Subsection H of this Section shall submit a written report within 90 days of the end of each quarter to the administrative authority for any noncompliance of the applicable emission limitations of Subsection D or E of this Section. The required information may be included in reports provided to the administrative authority to meet other requirements, so long as the report meets the deadlines and content requirements of this Paragraph. The report shall include the following information:

a. description of the noncompliance;

b. cause of the noncompliance;

c. anticipated time that the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance; and

d. steps taken to prevent recurrence of the noncompliance.

3. The owner or operator of an affected point source shall maintain records of all continuous monitoring, performance test results, hours of operation, and fuel usage rates for each affected point source. Such records shall be kept for a period of at least five years and shall be made available upon request by authorized representatives of the department. The emission monitoring (as applicable) and fuel usage records for each affected point source shall be recorded and maintained:

a. hourly for affected point sources complying with an emission factor on an hourly basis;

b. daily for affected point sources complying with an emission factor enforced on a daily average basis or on a 30-day rolling average basis; and

c. monthly for affected point sources exempt from the emission specifications based on ozone season heat input or hours of operation per ozone season.

4. The owner or operator shall maintain the following records:

a. records for a facility-wide averaging plan in accordance with Subparagraph E.1.i of this Section;

b. records approved for a trading plan in accordance with Paragraph E.2 of this Section; and

c. records in accordance with Paragraphs H.7, 8, 9, 10, 11, and 12 of this Section.

5. Ammonia emissions resulting from the operation of a NO_x control equipment system shall be reported annually in accordance with LAC 33:III.5107.A.

J. Effective Dates

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

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

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:290 (February 2002), repromulgated LR 28:451 (March 2002), amended LR 28:1578 (July 2002), LR 30:748 (April 2004), LR 30:1170 (June 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2441 (October 2005), LR 33:2088 (October 2007), LR 34:71 (January 2008).

§2202. Contingency Plan

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

B. Emission Factors. The emission factors for the sources listed below in Table B-1 shall supersede the factors for the like sources in Table D-1A of LAC 33:III.2201.D.1. All requirements of LAC 33:III.2201 shall remain applicable to such sources, except as superseded by this Section.

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

[a] based on the higher heating value of the fuel

C. Effective Dates

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

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

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 30:1170 (June 2004).

Chapter 23. Control of Emissions for Specific Industries[1]

[1]Regulation of emissions of volatile organic compounds for certain industries are presented in Chapter 21.

Subchapter A. Chemical Woodpulping Industry

§2301. Control of Emissions from the Chemical Woodpulping Industry

A. Purpose. The purpose of this Subchapter shall be to limit the quantity of emissions from pulp manufacturing plants.

B. Scope. This Subchapter applies to manufacturing facilities for the pulping of wood and the preparation and recovery of associated chemicals by the kraft process, including combined recovery systems serving other processes such as neutral sulfite pulping.

C. General. The pulp production rates referred to in this Subchapter shall be equivalent tons of unbleached air-dry kraft pulp. The equivalent production rate shall be calculated as actual tons of kraft pulp or on the basis that 3,000 pounds dry solids in spent liquor represents 1 ton equivalent kraft pulp, (1,500 kilograms equals 1 metric ton). Lime kiln load shall be rated on the basis of actual kraft pulp tons or on the basis that 550 pounds of reburned lime represents 1 ton equivalent kraft pulp, (275 kilograms equals 1 metric ton).

D. Emissions Limitations. No person shall cause, suffer, allow or permit emissions to the atmosphere in excess of the limitations stated in this Subchapter. Notwithstanding the specific limits set forth in this Subchapter, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control currently available shall be provided in every case of new construction and/or modernization.

1. Particulate Emissions. Emission of particulate matter shall not exceed the following limits:

a. for recovery furnaces, not more than 4.0 pounds per equivalent pulp ton, (2.0 kilograms per equivalent pulp metric ton);

b. for smelt dissolver vents, not more than 0.5 pounds per equivalent pulp ton, (0.25 kilograms per equivalent pulp metric ton);

c. for lime kilns, not more than 1.0 pound per equivalent pulp ton, (0.5 kilograms per equivalent pulp metric ton);

d. for boilers fueled by bark, alone or in combination with other fuels, the provisions of LAC 33:III.1313 shall apply.

2. Sulfur Oxides. Emission of sulfur oxides shall not exceed the limits set forth in LAC 33:III.1503.C.

3. Total Reduced Sulfur Emissions. Emissions of Total Reduced Sulfur (TRS) from existing sources specified below shall not exceed the following limits:

a. kraft recovery furnaces corrected to 8 percent oxygen by volume:

i. new design straight kraft recovery furnaces, 5 parts per million (ppm);

ii. old design straight kraft recovery furnaces, 20 ppm;

iii. cross-recovery furnaces, 25 ppm;

iv. recovery furnaces constructed prior to 1960: The department may establish emission limitations different from those specified above for the remaining useful life of the unit. The emissions limit established for each affected furnace will reflect the lowest levels of TRS emissions consistently achievable utilizing best practicable technology;

b. digester systems, 5 ppm;

c. multiple effect evaporator systems, 5 ppm;

d. lime kilns, corrected to 10 percent oxygen by volume, 20 ppm;

e. condensate stripper systems, 5 ppm;

f. smelt dissolving tanks, 0.016 grams per kilogram black liquor solids fired. Compliance with the particulate emission limits of LAC 33:III.2301.D.1.b by a scrubbing device employing fresh water as the scrubbing medium

make up will be accepted as evidence of adequate TRS control on smelt dissolving tanks. Emission limits are given in terms of 12-hour averages. For recovery furnaces, 1 percent, and for lime kilns, 2 percent of all 12-hour TRS averages per quarter year above the specified level, under conditions of proper operation and maintenance, in the absence of start-ups, shutdowns and malfunctions, are not considered to be violations of the emission limitation. These are not running averages, but are instead for discrete contiguous 12-hour periods of time;

g. in any facility with multiple sources subject to this Subchapter, alternative TRS emission limits from individual sources shall be established upon request, using the "Bubble Concept," provided that the total emissions from all the regulated sources do not exceed those permitted above;

h. the department may establish alternative limits consistent with the purposes of this Section.

i. Compliance. Affected sources shall achieve final compliance with the provisions of LAC 33:III.2301.D.3 as expeditiously as practicable but not more than six years from the effective date of this Subchapter of the regulations.

4. Opacity Limitation. The emission of smoke from the recovery furnace shall be controlled so that the shade or appearance of the emission is not darker than 40 percent average opacity as to obscure vision to a degree equivalent to the above (see LAC 33:III.1503.D.2, Table 4) except that emitted may have an average opacity in excess of 40 percent for not more than one six-minute period in any 60 consecutive minutes.

a. Compliance. Owner or operators shall conduct source tests of recovery furnaces pursuant to the provisions in LAC 33:III.1503.D.2, Table 4, to confirm particulate emissions are less than that specified in Paragraph D.1 of this Section. The results shall be submitted to the Office of Environmental Assessment as specified in LAC 33:III.919 and 918. The testing should be conducted as follows:

i. four tests at six month intervals within 24 months of promulgation of this regulation; and

ii. one test annually thereafter.

E. Exemptions. The total reduced sulfur limitations of Paragraph D.3 of this Section and the opacity limitation of Paragraph D.4 of this Section do not apply to affected facilities subject to 40 CFR 60, Subpart BB–Standards of Performance for Kraft Pulp Mills.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1564 (December 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2454 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2442 (October 2005), LR 32:1841 (October 2006), LR 33:2088 (October 2007).

Subchapter B. Aluminum Plants

§2303. Standards for Horizontal Stud Soderberg Primary Aluminum Plants and Prebake Primary Aluminum Plants

A. Purpose. The purpose of these regulations is to limit the quantity of particulate matter (suspended particulate matter) and fluorides emitted from all horizontal stud Soderberg primary aluminum plants and all prebake primary aluminum plants in Louisiana.

B. Scope. This Subchapter applies to the primary aluminum industry utilizing the horizontal stud Soderberg process and the prebake process.

C. General Definitions

1. Pot Line Primary Emission Control Systems. The system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is more directly related to the aluminum reduction cell.

2. Prebake Process Primary Aluminum Plants. Plants whose electrolytic cells require multiple consummable carbon electrodes in which the binder has been solidified by baking prior to insertion into the cell.

3. Horizontal Stud Soderberg Process Primary Aluminum Plant. Plants whose electrolytic cells have horizontal Soderberg (self baking) Anode(s).

D. Emission Limitations. No person shall cause, suffer, allow, or permit emissions to the atmosphere in excess of the limitations stated in this Subchapter. Notwithstanding the specific limits set forth in this Subchapter, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control currently available shall be provided in every case of new construction and/or major modifications at existing facilities.

1. Particulate Emissions—Horizontal Stud Soderberg Process

a. The total emission of particulate matter to the atmosphere from the reduction process (potlines) from the primary aluminum industry for the horizontal stud Soderberg process shall not exceed 20.0 pounds per ton (10 kilogram/metric ton) of aluminum produced based on the average of three 24-hour sampling periods.

b. The method of obtaining representative samples of particulate matter emitted to the atmosphere from the reduction process (potlines) shall be either:

i. that method which, at the time of determining emissions, is required for new primary aluminum plants under the New Source Performance Standards under the Federal Clean Air Act (42 U.S.C. 1857 c-6), or, if such method has not been promulgated; then

ii. that method which may be agreed upon by and between the department and the United States Environmental Protection Agency.

2. Particulate Emissions—Prebake Process

a. The total emission of particulate matter to the atmosphere from the reduction process (potlines) shall be reduced to the lowest level consistent with the highest and best practicable technology available to the primary aluminum industry for the prebake process, but in no case shall the emission of particulate matter exceed 17.0 pounds average per ton (8.5 kilograms average per metric ton) of aluminum produced.

b. The method of obtaining representative samples of particulate matter emitted to the atmosphere from the reduction process (potlines) shall be either:

i. that method which, at the time of determining emissions, is required for new primary aluminum plants under the New Source Performance Standards under the Federal Clean Air Act (42 U.S.C. 1857 c-6), or, if such method has not been promulgated; then

ii. that method which may be agreed upon by and between the department and the United States Environmental Protection Agency.

3. Fluoride Emissions—Horizontal Stud Soderberg Process. The fluoride emissions from horizontal Stud Soderberg process aluminum plants shall be abated by using a potline primary emission control system designed to have an average collection efficiency of 90 percent and an average removal efficiency of 98.5 percent of the fluorides collected.

4. Fluoride Emissions—Prebake Process. The fluoride emissions from prebake process aluminum plants shall be abated by using a potline primary emissions control system designed to have an average collection efficiency of 95 percent and an average removal efficiency of 98.5 percent of the fluorides collected.

E. Monitoring. Each horizontal stud Soderberg process primary aluminum plant and prebake process primary aluminum plant shall submit a detailed monitoring program subject to revision and approval by the Office of Environmental Assessment. The program shall include regularly scheduled monitoring for emissions of total particulates as well as ambient air sampling for suspended particulates.

[NOTE: Measurement of Concentrations. The methods listed in LAC 33:III.711.C, Table 2 and LAC 33:III.1503.D.2, Table 4, or such equivalent methods as may be approved by the department, shall be utilized to determine these particulate concentrations.]

F. Reporting

1. Data shall be periodically reported for each source and station included in the approved monitoring program as follows.

a. Ambient Air. Suspended particulate concentrations expressed as $\mu g/m^3$.

b. Particulate Emissions. Results of all emission sampling conducted for particulates, expressed in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates.

c. Compliance with LAC 33:III.2303.D.1 and 2 shall be determined by measurements of emissions from the potline primary control system plus measurements of emissions from the roof monitor and other points of emission to the atmosphere. Calculated emissions to the potrooms from the reduction cells based on hooding efficiency determined for gaseous fluoride may be substituted for roof monitor emission measurements in determining compliance with the regulation.

d. Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.

2. Every horizontal stud Soderberg process primary aluminum plant and prebake process primary aluminum plant shall furnish, upon request, to the department such other data as the administrative authority may require to evaluate the plant's emission control program. Such plants shall immediately report any unauthorized emissions of any air contaminants to SPOC in accordance with LAC 33:I.3923.

G. Operating Practices

1. All hood covers must be in good repair and properly positioned over the pots. The amount of time hood covers are removed during pot working operations must be minimized.

2. Any pot found emitting excess particulate and fluorides (fuming cell) will be scheduled for rework before the end of the shift.

3. If tapping crucibles are equipped with hoses which return aspirator air under the hood, the hoses will be maintained in good working order and the air return system must function properly.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2455 (November 2000), LR 30:1672 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2442 (October 2005), LR 33:2088 (October 2007).

Subchapter C. Phosphate Fertilizer Plants

§2305. Fluoride Emission Standards for Phosphate Fertilizer Plants

A. Purpose. The purpose of this Subchapter shall be to limit the quantity of atmospheric fluoride emissions from phosphate fertilizer plants.

B. Scope. This Subchapter applies to those phosphate fertilizer plants which were constructed, or under construction or modification, prior to August 6, 1975.

C. Reserved.

D. Emission Limitations. On and after the date on which each affected facility is required to be in compliance, no owner or operator subject to this regulation shall cause to be discharged into the atmosphere from any affected facility any gases which contain total fluorides in excess of the quantities listed below for each affected facility.

1. Wet-Process Phosphoric Acid Plants. 0.10 pounds of total fluorides per ton (50.0 grams/metric ton) of equivalent P_2O_5 feed.

2. Superphosphoric Acid Plants. 1.10 pounds of total fluorides per ton (550 grams/metric ton) of equivalent P_2O_5 feed.

3. Diammonium Phosphate Plants. 0.18 pounds of total fluorides per ton (90.0 grams/metric ton) of equivalent P_2O_5 feed.

E. Test Methods and Procedures. Test methods and procedures for determining compliance with this regulation shall be identical to those specified in 40 CFR 60 for corresponding types of plants or equivalent test methods and procedures approved by the administrative authority.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Environmental Assessment, LR 31:1062 (May 2005).

Subchapter D. Nitric Acid Industry

§2307. Emission Standards for the Nitric Acid Industry

A. Purpose. The purpose of this Subchapter shall be to limit the quantity of atmospheric emissions from nitric acid plants.

B. Scope. This Subchapter is applicable to all nitric acid production units not subject to NSPS in the state.

C. Exceptions

1. Start-Up Provision

a. A four-hour start-up exemption from emission regulations may be authorized by the administrative authority for plants not subject to 40 CFR Part 60, Subpart G, as incorporated by reference in LAC 33:III.Chapter 30, which have been shut down. It is recognized that existing nitrogen oxide abatement equipment is effective only at normal operating temperatures. This provision allows the necessary time to bring up a facility from a cold start to near steady state condition. A report, in writing, explaining the conditions and duration of the start-up and listing the steps necessary to remedy, prevent, and limit the excess emissions, shall be submitted to SPOC within seven calendar days of the occurrence using the procedures provided in LAC 33:I.3925.

b. This provision is applicable to infrequent start ups only. Before the exemption can be granted the administrative authority must determine the excess emissions were not the result of failure to maintain or repair equipment. In addition, the duration of excess emission must be minimized and no ambient air quality standard may be jeopardized.

2. On-Line Operating Adjustments

a. A four-hour exemption from emission regulations may be extended by the administrative authority to plants not subject to 40 CFR Part 60, Subpart G, as incorporated by reference in LAC 33:III.Chapter 30, where upsets have caused excessive emissions and on-line operating changes will eliminate a temporary condition. A report, in writing, explaining the conditions and duration of the upset and listing the steps necessary to remedy, prevent, and limit the excess emissions, shall be submitted to SPOC within seven calendar days of the occurrence using the procedures provided in LAC 33:I.3925.

b. This provision is applicable to infrequent on-line adjustments only. Before the exemption can be granted, the administrative authority must determine the excess emissions were not the result of failure to maintain or repair equipment.

c. In addition, the duration of excess emissions must be minimized and no ambient air quality standard may be jeopardized.

D. Emissions. The emission of nitrogen oxides, calculated as nitrogen dioxide, from nitric acid production units shall be limited to 6.5 pounds per ton (3.3 kilogram/metric ton) of 100 percent acid produced. This emission limitation is equivalent to a nitrogen dioxide concentration of approximately 500 ppm by volume.

E. Responsible Persons to Have Tests Made. The department may require any person responsible for emission of air contaminants to make or have made tests to determine the emission of air contaminants from any source, whenever the department has reason to believe that an emission in excess of that allowed by these regulations is occurring. The department may specify testing methods to be used in accordance with good professional practice. The department may observe the testing. All tests shall be conducted by reputable, qualified personnel. The department shall be given a copy of the test results in writing and signed by the person responsible for the tests.

F. The Department May Make Tests. The department may conduct tests of emissions of air contaminants from any source. Upon request of the department the person responsible for the source to be tested shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

G. Degradation of Existing Emission Quality Restricted. Emissions whose quality as of the effective date of these regulations is higher than the standards set forth herein shall be maintained at the higher quality unless it can be affirmatively demonstrated to the department that a change

in quality is justifiable and will not be contrary to the purpose of these regulations.

H. Measurement of Concentrations

1. The methods listed in LAC 33:III.1503.D.2, Table 4 or such equivalent method as may be approved by the department shall be utilized to determine oxide of nitrogen concentrations in stack gases.

2. Measurement equipment shall be periodically calibrated to comply with minimal American Bureau of Standards Criteria.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1680 (December 1997), LR 24:1286 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2455 (November 2000), LR 30:1672 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2442 (October 2005), LR 33:2088 (October 2007).

Chapter 25. Miscellaneous Incineration Rules

Subchapter A. Scope and General Provisions

§2501. Scope

A. This Chapter identifies the standards which apply to incineration activities regulated by the state of Louisiana.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1098 (October 1994).

Subchapter B. Biomedical Waste Incinerators

§2511. Standards of Performance for Biomedical Waste Incinerators

A. Applicability

1. This Subchapter applies to all incinerators installed and operated in Louisiana for the purpose of reducing potentially infectious medical waste generated in all health and medical care facilities as defined herein.

2. Crematories are exempt from this Subchapter.

B. Definitions. The words and terms used in this Subchapter are defined in LAC 33:III.Chapter 51, and LAC 33:III.111 and 40 CFR 60.2, as incorporated by reference in LAC 33:III.Chapter 30, unless otherwise specifically defined as follows.

Antineoplastic Agents—that portion of potentially infectious medical waste containing chemicals that are administered to deter the growth of abnormal cells and/or tumors.

Biomedical Waste Incinerator—any incinerator operated for reducing potentially infectious medical waste generated by health and medical care facilities.

Chemotherapeutic Waste—that portion of potentially infectious medical waste containing chemical substances that are administered in the treatment of diseases, especially cancer, and diseases caused by parasites.

Crematory—any furnace or incinerator used in the process of burning Type IV waste for the purpose of reducing the volume of the waste by removing combustible matter and vaporizing moisture through the application of heat.

Health and Medical Care Facilities—shall include, but not be limited to, hospitals, clinics, dialysis facilities, birthing centers, emergency medical services, physicians' offices, outpatient clinics, nursing homes, extended care facilities, podiatry offices, dental offices and clinics, medical research and diagnostic laboratories, home health care services, mortuaries, blood and plasma centers, blood collection mobile units, and veterinary medical centers.

Infectious Waste—that portion of potentially *infectious waste* which contains pathogens with sufficient virulence and quantity so that exposure to a susceptible host could result in contracting a disease.

Medical Waste—that portion of potentially infectious waste generated by operation of programs and offices in health and medical care facilities.

PM_{10}—particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in 40 CFR Part 50, Appendix J.

PM_{10} *Emissions*—finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by the methods specified in 40 CFR Part 52.

Potentially Infectious Medical Waste—a mixture of infectious waste, medical waste, and other waste which may potentially be infectious due to its physical characteristics or by how it was generated in the health care facilities. This includes, but is not limited to, the following types of waste:

a. cultures and stocks of infectious agents from laboratories;

b. pathological waste, including human tissue, organs, body parts, and fluids removed during surgery or autopsy;

c. blood, serum, blood collection bags, tubes, and vials;

d. needles, scalpels, syringes, pipettes, and other sharp objects used in health care or laboratory settings;

e. bandages, diapers, and other disposable materials that have been in contact with infected wounds or

contaminated by patients isolated to prevent the spread of infectious diseases; and

f. any other refuse that has been in contact with any potentially infectious medical waste.

Type IV Waste—human and/or animal remains consisting of corpses, carcasses, organs, and solid organic wastes consisting of up to 85 percent moisture and 5 percent incombustible solids.

C. Registration

1. Within 90 days after adoption of these regulations, all facilities operating incinerators designed or operated for the purpose of burning potentially infectious medical waste, shall submit a supplemental incinerator data form (SID-1) to SPOC.

2. All facilities operating unpermitted incinerators designed or operated for the purpose of burning potentially infectious medical waste, shall submit an Application for Approval of Emissions and Emissions Inventory Questionnaire with appropriate permitting information on or before October 20, 1994.

D. Incinerator Design Requirements

1. All biomedical waste incinerators (BWIs) shall be multi-chambered units with burners capable of maintaining minimum temperatures of 1500°F in the primary chamber and 1800°F in the secondary chamber. Units burning chemotherapeutic waste, antineoplastic agents, and/or potentially infectious medical waste generated off-site shall require burners capable of maintaining minimum temperatures of 1500°F in the primary chamber and 2000°F in the secondary chamber. Design capacity shall be based on 8500 Btu per pound of waste incinerated. A temperature indicator and/or recorder shall be installed to monitor gas temperatures at the exit of the primary chamber. Internal temperature of the secondary chamber shall be monitored and continuously recorded.

2. All BWIs shall have a minimum retention time of 1.5 seconds for gases in the secondary chamber. Incinerators burning antineoplastic agents, chemotherapeutic waste, and/or potentially infectious medical waste generated off-site shall require a minimum of 2.0 seconds retention time.

3. All BWIs shall be equipped with an interlock that prevents the charge door from opening for 10 minutes after the secondary burner is ignited, or until the secondary chamber exit gases reach 1800°F, whichever occurs first. A visual warning system shall alert the operator when the interlock is bypassed for service or cleaning.

E. Restrictions on Emissions

1. All BWIs designed for less than 500 pounds-per-hour charging rate shall not emit PM_{10} in excess of 0.08 grains per dry standard cubic foot of flue gas corrected to 7 percent oxygen. BWIs designed for 500 pounds-per-hour or greater charging rate shall not emit in excess of 0.04 grains of PM_{10} per dry standard cubic foot of flue gas corrected to 7 percent oxygen.

2. Emission limits for all BWIs shall include:

a. hydrogen chloride (HCl)—no more than 4 pounds-per-hour, unless controlled through an acid gas scrubber or other control device which achieves a 98 percent reduction of HCl:

i. incinerators designed for 500 pounds-per-hour or greater charging rate shall be equipped with an acid gas control device or shall continuously monitor flue gas to show compliance with HCl emission limits; and

ii. all BWIs which burn waste generated off-site shall be equipped with an acid gas control device of 98 percent efficiency;

b. sulfur dioxide—100 ppmv (dry basis) at 7 percent oxygen or 70 percent reduction through an acid gas control device;

c. carbon monoxide (one hour rolling average)—100 ppmv (dry basis) at 7 percent oxygen;

d. nitrogen oxide—250 ppmv (dry basis) at 7 percent oxygen;

e. speciated hydrocarbons and heavy metals emissions must meet the requirements of LAC 33:III.Chapter 51;

f. opacity of stack gases shall not exceed 10 percent; and

g. excess oxygen in flue gas—2 percent minimum by volume (dry basis).

3. All BWIs designed for 500 pounds-per-hour or greater charging rate shall have a continuous monitoring and recording system installed for oxygen and carbon monoxide.

4. Reserved.

5. All BWIs shall be designed with a stack emission point that controls to the maximum extent possible the discharge of air contaminents and which does not adversely impact air quality in the local area. All incinerator stack heights must be approved by the administrative authority.

6. All BWIs with a design charging rate in excess of 250 pounds-per-hour shall conduct emission tests to verify compliance with this Subsection for PM_{10} and HCl. In addition, BWIs with a design charging rate of 500 pounds or more per hour shall conduct emission tests to verify compliance with the standards for the following pollutants using the test methods from 40 CFR Part 60, Appendix A:

a. Method 5—Determination of Particulate Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

b. Method 6—Determination of Sulfur Dioxide Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

c. Method 7—Determination of Nitrogen Oxide Emissions from Stationary Sources (40 CFR Part 60,

Appendix A, as incorporated by reference at LAC 33:III.3003);

d. Method 26—Determination of Hydrogen Chloride Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003); and/or

e. other tests which may be added at pretest meetings.

7. A copy of all monitoring and tests results shall be submitted to the Office of Environmental Assessment for review and approval within 45 days of completion of testing.

F. Radioactive Materials. Incineration of radioactive materials shall comply with the requirements of LAC 33:XV.436.

G. Ash Removal and Disposal. The removal, handling, storage, and transportation of ashes from the BWIs shall not allow controllable particulate matter to become airborne in amounts that will cause a public nuisance or cause ambient air quality standards to be violated.

H. Maintenance of Equipment. The BWI, auxiliary equipment, accessories, pollution control devices, and monitoring instruments shall be maintained in proper working order and operated according to manufacturer's instructions at all times that the incinerator is in operation.

I. Restrictions. All batteries and chemotherapeutic waste listed under the Resource Conservation and Recovery Act, 40 CFR 261.33(f), shall be removed from the waste feed stream prior to incineration.

J. Circumvention. No owner or operator subject to the provisions of this Chapter shall build, install, erect, or use any machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an emissions standard and the installation of more than one incinerator to avoid coverage by a standard that applies only to incinerators with greater design charging capacities.

K. Prohibited Activities. No owner or operator shall operate any source subject to this standard in violation of the standards after October 20, 1994.

L. Recordkeeping/Reporting. The owner or operator of any BWI shall keep a daily record of the hours the unit was in operation and the amount of waste incinerated. A separate record shall be kept of all chemotherapeutic waste incinerated that is not listed under the Resource Conservation and Recovery Act, 40 CFR 261.33(f). This record shall show the name of the material, date and time incinerated, and amount burned. Records shall be submitted to the Office of Environmental Compliance by March 31 for the previous calendar year.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1098 (October 1994), amended LR 21:1081 (October 1995), LR 22:1212 (December 1996), LR 23:1680 (December 1997), LR 24:1286 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2455 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2442 (October 2005), LR 33:2089 (October 2007).

Subchapter C. Refuse Incinerators

§2521. Refuse Incinerators

A. Scope. The purpose of this Subchapter is to prevent the operation or construction of refuse incinerators in such a manner as to cause air pollution.

B. Applicability. This Subchapter applies to all incinerators operated or constructed in the state for the purpose of reducing refuse.

C. Determination of Incinerator Maximum Burning Capacity. The burning capacity of a refuse incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the department in accordance with good engineering practices. In case of conflict, the determination made by the department shall govern.

D. All Incinerators Must Be Approved Prior to Installation. All refuse incinerators must be approved by the department prior to installation. Any person planning to install or operate a refuse incinerator must make suitable application to the department. Forms are available from the department.

E. Allowable Emissions from Incinerator. The amount of particulate matter (PM_{10}) emitted by a refuse incinerator shall be determined using the test methods from 40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003: Method 5-Determination of Particulate Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003).

F. Restrictions on Emissions

1. No person shall cause or permit the emissions of PM_{10} from any refuse incinerator (with a capacity less than 250 pounds-per-hour) in excess of 0.10 grains per dry standard cubic foot of dry flue gas corrected to 7 percent excess oxygen or 12 percent carbon dioxide. PM_{10} emission limits for larger incinerators are:

Capacity	PM_{10}
250-499 pounds-per-hour	0.08
500-1000 pounds-per-hour	0.06
Over 1000 pounds-per-hour	0.04

2. All refuse incinerators must be multi-chambered or equivalent as determined by the department. All multi-chambered incinerators must be equipped with secondary burners of such a design as to assure a temperature in the secondary chamber of at least 1500°F for at least 0.5 seconds for incinerators with a capacity less than

250 pounds-per-hour. The minimum secondary chamber temperature for larger incinerators is:

Capacity	Temperature
250-499 pounds-per-hour	1500°F for at least 1 second
500-1000 pounds-per-hour	1600°F for at least 1 second
Over 1000 pounds-per-hour	1800°F for at least 1 second

3. All refuse incinerators shall be equipped with an interlock that prevents the charge door from opening for 10 minutes after the secondary burner is ignited, or until the secondary chamber exit gases reach 1500°F for incinerators with a capacity less than 500 pounds-per-hour, 1600°F with a capacity 500-1000 pounds-per-hour, and 1800°F for incinerators with a capacity greater than 1000 pounds-per-hour, whichever occurs first. A visual warning system shall alert the operator when the interlock is by-passed for service or cleaning.

4. No person shall burn or cause or permit the burning of refuse in any installation which was designed for the sole purpose of burning fuel without the authorization of the administrative authority.

5. All refuse incinerators shall be designed with a stack emission point which does not adversely impact the local area air quality. All incinerator stack heights must be approved by the administrative authority.

6. All secondary combustion chambers shall be equipped with a continuous temperature recorder to measure and record the exit flue gas temperature. All refuse incinerators with a capacity greater than 500 pounds-per-hour shall have a continuous monitoring and recording system installed for CO and O_2 concentration in the exit flue gas.

7. All refuse incinerators which burn waste generated off-site shall be equipped with an acid gas control device of 98 percent efficiency, have a continuous monitoring system for CO and O_2, and have a secondary combustion chamber burner capable of maintaining a minimum temperature of 1800°F for at least one second in the secondary chamber.

8. Emission limits for all refuse incinerators shall include:

a. hydrogen chloride (HCl)—no refuse incinerators shall emit hydrogen chloride in excess of 4 pounds-per-hour, or they shall operate a control device with a minimum efficiency of 98 percent. All incinerators over 500 pounds-per-hour design capacity shall be equipped with a 98 percent efficient HCl control device or shall continuously monitor flue gas to show compliance with HCl emission limits;

b. carbon monoxide—100 ppmv maximum (one hour rolling average) dry basis at 7 percent oxygen;

c. nitrogen dioxide—250 ppmv maximum dry basis at seven percent oxygen;

d. excess oxygen in flue gas—2 percent minimum by volume dry basis;

e. opacity of stack gases shall not exceed 10 percent; and

f. sulfur dioxide—100 ppmv maximum dry basis at 7 percent oxygen or 70 percent control.

9. All refuse incinerators with a design charging rate in excess of 250 pounds-per-hour shall conduct emission tests to verify compliance with this Subsection for PM_{10} and HCl. In addition, all refuse incinerators with a design charging rate of 500 pounds or more per hour shall conduct emission tests to verify compliance with the standards for the following pollutants using the test methods from 40 CFR Part 60, Appendix A:

a. Method 5—Determination of Particulate Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

b. Method 6—Determination of Sulfur Dioxide Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

c. Method 7—Determination of Nitrogen Oxide Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

d. Method 26—Determination of Hydrogen Chloride Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003); and/or

e. other tests which may be added at pretest meetings.

10. A copy of all monitoring and tests results shall be submitted to the Office of Environmental Assessment for review and approval within 45 days of completion of testing.

G. Control of Particulate Matter. No person shall cause or permit the handling, use, transport, or storage of any material in a manner which allows or may allow particulate matter, fly ash, etc., to become airborne in amounts that will cause a public nuisance or cause ambient air quality standards to be violated.

H. All Incinerator Equipment to be Kept in Good Working Condition. All equipment, accessories, and appurtenances, (i.e., secondary burners, etc.) of a refuse incinerator installation shall be maintained in proper working condition and shall be operational at all times when the refuse incinerator is in use. (See also LAC 33:III.905 and 915.E)

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1100 (October 1994), amended LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2456 (November 2000), amended by the Office of the Secretary,

Legal Affairs Division, LR 31:2443 (October 2005), LR 33:2089 (October 2007).

Subchapter D. Crematories

§2531. Standards of Performance for Crematories

A. The provisions of this Subchapter apply to all new, modified, and existing crematories used in the disposal of Type IV wastes and their appropriate containers.

B. Definitions. Terms used in this Section are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined below as follows.

Appropriate Containers—plastic bags used as containers for animal remains shall be nonchlorinated. Any other container shall be made of materials containing less than 0.5 percent chlorine by weight as demonstrated by the manufacturer's data sheet.

Crematory—any furnace or incinerator used in the process of burning Type IV waste for the purpose of reducing the volume of the waste by removing combustible matter and vaporizing of moisture through the application of heat.

Type IV Waste—human and animal remains consisting of carcasses, organs, and solid organic wastes comprising up to 85 percent moisture and 5 percent incombustible solids.

C. Wastes to be Incinerated

1. Animal Crematories. Facilities used for the incineration of animal remains shall incinerate only animal remains, their appropriate containers and, if applicable, bedding. Facilities subject to this regulation shall not incinerate dead animals which were used for biomedical or commercial experimentation. The bodies of animals used for these purposes shall only be incinerated in a biomedical waste incinerator.

2. Human Crematories. Facilities used for the incineration of human remains shall incinerate only human remains with their appropriate containers. Bodies may be clothed.

D. Compliance Schedule

1. Any new or modified facility regulated under Subsection A of this Section for which a complete application for a permit to construct was received after October 20, 1994, shall comply with all of the requirements of this Subchapter before operation may commence.

2. Any facility regulated under Subsection A of this Section which was constructed before October 20, 1994 must comply with all of the requirements of this Subchapter upon promulgation of this regulation with the following exceptions:

a. operating parameter requirements of Subsection F of this Section shall be complied with no later than one year after promulgation of this regulation;

b. control equipment requirements of Subsection G of this Section shall be complied with no later than one year after promulgation of this regulation; and

c. incinerator physical parameter requirements of Subsection H of this Section shall be complied with no later than two years after promulgation of this regulation.

E. Emission Limitations

1. Particulate matter (PM_{10}) emissions shall not exceed 0.08 grains per dry standard cubic foot of flue gas, corrected to 7 percent O_2.

2. Carbon monoxide (CO) emissions shall not exceed 100 ppm_v, dry basis, corrected to 7 percent O_2.

F. Operating Parameters

1. The incinerator shall operate with visible emissions not to exceed 5 percent average opacity, except that visible emissions not exceeding 20 percent average opacity are allowed for not more than one three-minute period in any 60 consecutive minutes.

2. The incinerator shall operate with no objectionable odors.

3. Incineration or ignition of waste shall not begin until the secondary (or last) combustion chamber temperature requirement is attained. All air pollution control and continuous emission monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. During shutdowns, the secondary (or last) combustion chamber temperature shall be maintained using auxiliary burners until the wastes are completely combusted.

4. A manufacturer's nameplate with the following information must be visible on the incinerator:

a. model number;

b. maximum design feed rate;

c. design operating temperatures for the primary and secondary chambers; and

d. design retention time in the secondary chamber.

5. All equipment, accessories, and appurtenances, (e.g., secondary burners, control equipment, etc.) of a crematory incinerator shall be maintained in proper working condition and shall be operational at all times when the crematory is in use.

G. Control Equipment

1. Each facility shall install, operate, and maintain continuous monitors to record temperature at the point where the 1.0 second gas residence time is obtained in the secondary chamber combustion zone in accordance with the manufacturer's instructions.

2. The incinerator shall be equipped with an interlock which prevents the primary burners from igniting when the secondary chamber temperature is below the required operating limits.

H. Incinerator Physical Parameters

1. Any facility regulated under Subsection A of this Section which commences construction or modification after October 20, 1994, shall provide design calculations to confirm a sufficient volume in the secondary (or last) chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800°F. Primary chamber and stack shall not be used in calculating this residence time. The actual operating temperature of the secondary (or last) chamber combustion zone will be not less than 1600°F throughout the combustion process. The primary chamber shall not be charged unless the secondary (or last) chamber combustion zone temperature is equal to or greater than 1600°F.

2. Any facility regulated under Subsection A of this Section which was constructed before October 20, 1994 shall provide design calculations to confirm a sufficient volume in the secondary (or last) chamber combustion zone to provide for at least a 1.0 second gas residence time at 1600°F. Primary chamber and stack shall not be used in calculating this residence time. The actual operating temperature of the secondary (or last) chamber combustion zone will be not less than 1400°F throughout the combustion process. The primary chamber shall not be charged unless the secondary (or last) chamber combustion zone temperature is equal to or greater than 1400°F.

I. Recordkeeping and Reporting

1. The facility owner/operator shall maintain the following records on the facility premises at all times, and present them to an authorized representative of the department upon request:

a. application approval records and permit to construct/operate;

b. all other necessary permits and authorizations from local and/or other state regulatory agencies;

c. equipment maintenance records;

d. copies of all test results;

e. daily record of the number of hours of operation; and

f. all records of upset conditions with time and duration of upset noted.

2. A copy of all test results shall be submitted to the Office of Environmental Assessment for review and approval within 45 days of completion of testing.

J. Testing

1. All crematories with a design charge rate greater than 500 pounds per hour shall conduct emissions testing within 180 days of initial start-up to verify compliance with Paragraphs E.1-2 and F.1 of this Section using the following test methods:

a. Method 5—Determination of Particulate Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

b. Method 10—Determination of Carbon Monoxide Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003);

c. Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III.3003); and

d. other tests which may be added at pretest meetings.

2. The owner/operator shall provide the Office of Environmental Assessment at least 30 days prior notice of any emission test to afford the department the opportunity to conduct a pretest conference and to have an observer present. The department has the authority to invalidate any testing where such notice is not provided.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:1107 (October 1994), amended LR 22:1127 (November 1996), LR 22:1212 (December 1996), LR 23:1509 (November 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2456 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2443 (October 2005), LR 33:2089 (October 2007).

Chapter 27. Asbestos-Containing Materials in Schools and State Buildings Regulation

§2701. Asbestos-Containing Materials in Schools and State Buildings

A. Purpose. The purpose of this Chapter is to provide for the identification, management, and abatement of asbestos-containing materials in schools and state buildings that may pose an unreasonable risk to students, school personnel, and the public.

B. Applicability

1. The provisions of this Chapter apply to all *local education agencies* and the state government as defined in LAC 33:III.2703.

2. State buildings built after 1978 are exempt from the requirements of this Chapter unless there is the possibility of the presence of asbestos or the building is used for education of grades kindergarten through post-graduate.

3. State buildings built prior to 1979 are exempt from the requirements of this Chapter provided that:

a. the building is not used for education of grades kindergarten through post-graduate;

b. an inspection conducted in accordance with LAC 33:III.2707.A reveals that no asbestos is contained in the building:

i. a copy of the inspection report must be submitted to the Office of Environmental Services within 90 days of the inspection; and

ii. a copy must be maintained at the building administrative office; and

c. no asbestos-containing material is added in renovations.

C. Scope

1. This regulation requires local education agencies and the state government to identify friable and nonfriable asbestos-containing material (ACM) in schools and state buildings by visually inspecting schools and state buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques referred to in this rule. The regulation requires local education agencies and the state government to submit management plans to the Office of Environmental Services on or before 90 days after promulgation of this regulation, to begin to implement the plans 180 days after promulgation of this regulation, and to complete implementation of the plans in a timely fashion. If an exemption is requested for a state building that contains no asbestos, an inspection report supporting that exemption should be submitted in accordance with Clause B.3.b.i of this Section. Management plans submitted to and approved by the Department of Environmental Quality prior to the promulgation of this regulation shall meet the inspection and assessment requirements of this Chapter. In addition, local education agencies and the state government are required to employ persons who have been accredited to conduct inspections, reinspections, develop management plans, or perform response actions. The regulation also includes recordkeeping requirements. Local education agencies and the state government may contractually delegate their duties under this rule, but they remain responsible for the proper performance of those duties. Local education agencies and the state government are encouraged to consult with the Office of Environmental Compliance of the Department of Environmental Quality for assistance in complying with this rule.

2. Local education agencies and the state government must provide for the transportation and disposal of asbestos in accordance with provisions of Subchapter M. Asbestos, of LAC 33:III.Chapter 51.

D. Reserved.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended LR 16:1056 (December 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:698 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2456 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2443 (October 2005), LR 33:2089 (October 2007).

§2703. Definitions

A. The terms used in this Chapter are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined in this Section as follows.

Accessible—when referring to asbestos-containing material, material that is subject to disturbance by school or state building occupants or custodial or maintenance personnel in the course of their normal activities.

Accredited or *Accreditation*—when referring to a person or laboratory, the *accreditation* of such person or laboratory by the Department of Environmental Quality under the provisions of LAC 33:III.2799.Appendix A—Agent Accreditation Plan.

Act—the Louisiana Asbestos Abatement Act.

Agent—any individual or entity (i.e., architect, industrial hygienist, consultant, etc.) who plans, executes, and/or monitors an asbestos project.

Air Erosion—the passage of air over friable asbestos-containing building material which may result in the release of asbestos fibers.

Asbestos—the asbestiform varieties of Chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite, and actinolite.

Asbestos Abatement Entity (AAE)—any individual, partnership, firm, association, corporation, sole proprietorship or other business concern, as well as any governmental, religious or social organization, or union with one or more employees or members involved in asbestos projects.

Asbestos Debris—pieces of ACBM that can be identified by color, texture, or composition, or dust, if the dust is determined by an accredited inspector to be ACM.

Asbestos-Containing Building Material (ACBM)—surfacing ACM, thermal system insulation ACM, or miscellaneous ACM in or on interior structural members or other parts of a school or state building.

Asbestos-Containing Material (ACM)—when referring to schools or state buildings, any material or product which contains more than 1 percent asbestos.

Damaged Friable Miscellaneous ACM—friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering or crumbling of the ACM surface; water damage; significant or repeated water stains; scrapes, gouges, or mars; or other

signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged Friable Surfacing ACM—friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; flaking, blistering, or crumbling of the ACM surface by water damage; significant or repeated water stains; scrapes, gouges, or mars; or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged or Significantly Damaged Thermal System Insulation ACM—thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, or the ACM is crushed, water stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges, or other signs of physical injury to ACM, occasional water damage on the protective coverings/jackets, or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

Encapsulation—the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers by the encapsulant creating a membrane over the surface (bridging encapsulant) or penetrating the material and binding its components together (penetrating encapsulant).

Enclosure—an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

Fiber Release Episode—any uncontrolled or unintentional disturbance of ACBM.

Friable—when referring to material in a school or state building, material that when dry may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

Friable Asbestos-Containing Building Material (ACBM)—any friable ACM that is in or on interior structural members or other parts of a school or state building.

Friable Asbestos-Containing Material (ACM)—any material containing more than 1 percent asbestos which has been applied on ceilings, walls, structural members, piping, duct work, or any other part of a building, which when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

Functional Space—a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, or hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

High-Efficiency Particulate Air (HEPA)—refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 μm in diameter or larger.

Homogeneous Area—an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

Inspection—any activity undertaken in a school building, or a state building, to determine the presence or location, or to assess the condition of, friable or nonfriable asbestos-containing material (ACBM), whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and nonfriable known or assumed ACBM which has been previously identified. The term does not include the following:

a. periodic surveillance of the type described in LAC 33:III.2721.B solely for the purpose of recording or reporting a change in the condition of known or assumed ACBM;

b. inspections performed by employees or agents of federal, state, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or

c. visual inspections of the type described in LAC 33:III.2717.I solely for the purpose of determining completion of response actions.

Local Education Agency—

a. a public board of education or other authority legally constituted within Louisiana for either administrative control or direction of, or to perform a service function for, public or private; profit or nonprofit; day, night, or residential schools; elementary or secondary schools, colleges or post-graduate education institutions;

b. the governing authority of any elementary or secondary school, college, or post-graduate education institution.

Major Fiber Release Episode—any uncontrolled or unintentional disturbance of ACBM, which involves the falling or dislodging of more than 3 square or linear feet of friable ACBM.

Minor Fiber Release Episode—any uncontrolled or unintentional disturbance of ACBM, which involves the falling or dislodging of 3 square or linear feet or less of friable ACBM.

Miscellaneous ACM—miscellaneous material that is ACM in a school or state building.

Miscellaneous Material—interior building material in structural components, structural members, or fixtures, such as floor and ceiling tiles, not including surfacing material or thermal system insulation.

Nonfriable—material in a school or state building that when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

Operations and Maintenance Program (O and M)—a program of work practices to maintain friable ACBM in good condition, ensure cleanup of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACBM disturbance or damage.

Potential Damage—refers to circumstances in which:

a. friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities;

b. there are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

Potential Significant Damage—refers to circumstances in which:

a. friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities;

b. there are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage;

c. the material is subject to major or continuing disturbance due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

Preventive Measures—actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

Removal—the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school or state building.

Repair—to return damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

Response Action—a planned and dated method, including removal, encapsulation, enclosure, repair, operations, and maintenance, that protects human health and the environment from friable ACBM.

Routine Maintenance Area—an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

School—any profit or nonprofit; public or private; day, night, or residential school that provides elementary, secondary, college, or post-graduate education as determined under state law, or any school of any agency of the United States.

School Building—

a. structures used for instruction, including classrooms, laboratories, libraries, research facilities, and administrative facilities;

b. school eating facilities and kitchens;

c. gymnasiums or other facilities used for athletic or recreational activities, or for courses in physical education;

d. dormitories or other living areas of residential schools;

e. maintenance, storage, administrative, or utility facilities including hallways used in the operation of the facilities described in this definition; and

f. any portico or covered exterior hallway or walkway and any exterior portion of a mechanical system used to condition interior space.

Significantly Damaged Friable Miscellaneous ACM—damaged friable miscellaneous ACM where the damage is extensive and severe.

Significantly Damaged Friable Surfacing ACM—damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

Small-Scale, Short-Duration Activities (SSSD)—tasks that involve less than or equal to 3 square feet or 3 linear feet of asbestos-containing material.

State Building—a building owned or leased by the state of Louisiana.

Surfacing ACM—surfacing material that is ACM.

Surfacing Material—material in a school or state building that is sprayed on, troweled on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal System Insulation—material in a school or state building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Thermal System Insulation ACM—thermal system insulation that is ACM.

Vibration—the periodic motion of friable ACBM which may result in the release of asbestos fibers.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:699 (August 1996).

§2705. General Local Education Agency, State, or Local Government Responsibilities

A. Each local education agency or the state government shall:

1. ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance; develop and update management plans; and develop and implement response actions, including operations and maintenance, are carried out in accordance with this Chapter;

2. ensure that all custodial and maintenance employees are properly trained as required by this Chapter and other applicable federal and/or state regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable state regulations);

3. ensure that workers and building occupants, or their legal guardians, are informed at least once each year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress;

4. ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school or state building are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM;

5. ensure that warning labels are posted in accordance with LAC 33:III.2727;

6. ensure that management plans are available for inspection and that notification of such availability has been provided as specified in the management plan under LAC 33:III.2723.F;

7. designate a person to ensure that requirements under this Section are properly implemented;

8. ensure that the person designated under Paragraph A.7 of this Section receives training from a recognized instructor to perform duties assigned under this Section. Such training shall provide, as necessary, basic knowledge of:

a. health effects of asbestos;

b. detection, identification, and assessment of ACM;

c. options for controlling ACBM;

d. asbestos management programs; and

e. relevant federal and state regulations concerning asbestos, including those in this Chapter, in Subchapter M of LAC 33:III.Chapter 51, and those of the Occupational Safety and Health Administration, U.S. Department of Labor, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency;

9. consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2707. Inspection and Reinspections

A. Inspection

1. Except as provided in Paragraph A.2 of this Section, local education agencies and the state government shall inspect each school or state building that they lease, own, or otherwise use as a school or state building to identify all locations of friable and nonfriable ACBM before the deadline specified in LAC 33:III.2701.C.1.

2. Any building leased or acquired on or after promulgation of this regulation that is to be used as a school or state building shall be inspected as described under Paragraphs A.3 and 4 of this Section prior to use as a school or state building. In the event that emergency use of an uninspected building as a school or state building is necessitated, such buildings shall be inspected within 30 days after the decision to use them.

3. Each inspection shall be made by an accredited inspector.

4. For each area of a school or state building, except as excluded under LAC 33:III.2735, each person performing an inspection shall:

a. visually inspect the area to identify the locations of all suspected ACBM;

b. touch all suspected ACBM to determine whether it is friable;

c. identify all homogeneous areas of friable suspected ACBM and all homogeneous areas of nonfriable suspected ACBM;

d. assume that some or all of the homogeneous areas are ACM, and for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under LAC 33:III.2709 and 2711;

e. assess, under LAC 33:III.2713, friable material in areas where samples are collected, friable material in areas that are assumed to be ACBM, and friable ACBM identified during a previous inspection; and

f. record the following and submit to the person designated under LAC 33:III.2705 a copy of such record for inclusion in the management plan within 30 days of the inspection:

i. an inspection report with the date of the inspection signed by each accredited person making the inspection;

ii. an inventory of the locations of the homogeneous areas where samples are collected, exact locations where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACBM is assumed to be ACM, and homogeneous areas where nonfriable suspected ACBM is assumed to be ACM;

iii. a description of the manner used to determine sampling locations, and the name and signature of each accredited inspector who collected the samples and their inspector accreditation numbers;

iv. a list of whether the homogeneous areas identified under Subparagraph A.4.d of this Section are surfacing material, thermal system insulation, or miscellaneous material; and

v. assessments made of friable material, the names and signatures of all accredited inspectors making the assessment, and their inspector accreditation numbers.

B. Reinspection

1. At least once every three years after a management plan is in effect, each local education agency shall conduct a reinspection of all friable and nonfriable known or assumed ACBM in each building that they lease, own, or otherwise use.

a. Review previous inspection data in the management plan and compare to existing school conditions and correct for any changes.

b. Review the management plan and ensure it meets the requirements of LAC 33:III.2723 and reflects current conditions.

2. Each inspection shall be made by an accredited inspector.

3. For each area of a school, each person performing a reinspection shall:

a. visually reinspect, and reassess, under LAC 33:III.2713, the condition of all friable known or assumed ACBM;

b. visually inspect material that was previously considered nonfriable ACBM and touch the material to determine whether it has become friable since the last inspection or reinspection;

c. identify any homogeneous areas with material that has become friable since the last inspection or reinspection;

d. for each homogeneous area of newly friable material that is already assumed to be ACBM, bulk samples may be collected and submitted for analysis in accordance with LAC 33:III.2709 and 2711;

e. visually inspect, sample, analyze, and assess the conditions of building materials that have been added to the school since the last inspection or reinspection;

f. assess, under LAC 33:III.2713, the condition of the newly friable material in areas where samples are collected and of newly friable material in areas assumed to be ACBM;

g. reassess, under LAC 33:III.2713, the condition of friable known or assumed ACBM previously identified;

h. record the following and submit to the person designated under LAC 33:III.2705 a copy of such record for inclusion in the management plan within 30 days of the reinspection:

i. the date of the reinspection, the name and signature of the person making the reinspection, state of accreditation, his or her accreditation number, and any changes in the condition of known or assumed ACBM;

ii. the exact locations where samples are collected during the reinspection, a description of the manner used to choose sampling locations, the name and signature of each accredited inspector who collected the samples, and his or her accreditation number; and

iii. any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, and his or her accreditation number.

C. General. Thermal system insulation that has retained its structural integrity and that has an undamaged protective jacket or wrap that prevents fiber release shall be treated as nonfriable and therefore is subject only to periodic surveillance and preventive measures as necessary.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:699 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1222 (August 2001).

§2709. Sampling

A. Surfacing Material. An accredited inspector shall collect, in a statistically random manner that will ensure that the samples are representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM. The inspector shall collect the samples as follows.

1. At least three bulk samples shall be collected from each homogeneous area that is 1,000 ft^2 or less, except as provided in LAC 33:III.2711.C.2.

2. At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft^2 but less than or equal to 5,000 ft^2, except as provided in LAC 33:III.2711.C.2.

3. At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft^2, except as provided in LAC 33:III.2711.C.2.

B. Thermal System Insulation

1. Except as provided in Paragraphs B.2-4 of this Section and LAC 33:III.2711.C, an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.

2. An accredited inspector shall collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.

3. In a manner sufficient to determine whether the material is ACM or not ACM, the accredited inspector shall collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves, except as provided under LAC 33:III.2711.C.2.

4. Bulk samples are not required to be collected from any homogeneous area where the accredited inspector has determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-ACBM.

C. Miscellaneous Material. In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.

D. Nonfriable Suspected ACBM. If any homogeneous area of nonfriable suspected ACBM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of nonfriable suspected ACBM that is not assumed to be ACM.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), repromulgated by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2711. Analysis

A. Local education agencies and the state government shall have bulk samples, collected under LAC 33:III.2709 and submitted for analysis, analyzed for asbestos using laboratories accredited by the National Institute for Standards Technology (NIST) or another U.S. EPA approved accrediting authority.

B. Bulk samples shall not be composited for analysis and shall be analyzed for asbestos content by polarized light microscopy (PLM), using the "Method for the Determination of Asbestos in Bulk Building Materials," (EPA/600/R.93/116).

C. The following applies to homogeneous areas.

1. A homogeneous area is considered not to contain ACM only if the results of all samples required to be collected from the area show asbestos in amounts of 1 percent or less.

2. A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent.

D. The name and address of each laboratory performing an analysis, the date of analysis, and the name and signature of the person performing the analysis shall be submitted to the person designated under LAC 33:III.2705 for inclusion into the management plan within 30 days of the analysis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), repromulgated by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), amended LR 22:699 (August 1996).

§2713. Assessment

A. The local education agency or government shall have an accredited inspector provide the following.

1. For each inspection and reinspection conducted under LAC 33:III.2707.A and B and previous inspections specified under LAC 33:III.2735, the local education agency or the state government shall have an accredited inspector provide a written assessment of all friable known or assumed ACBM in the school or state building.

2. Each accredited inspector providing a written assessment shall sign and date the assessment, note his or her state of accreditation and accreditation number, and submit a copy of the assessment to the person designated under LAC 33:III.2705 for inclusion in the management plan within 30 days of the assessment.

B. The inspector shall classify and give reasons in the written assessment for classifying the ACBM and suspected ACBM assumed to be ACM in the school or state building into one of the following categories:

1. damaged or significantly damaged thermal system insulation ACM;

2. damaged friable surfacing ACM;

3. significantly damaged friable surfacing ACM;

4. damaged or significantly damaged friable miscellaneous ACM;

5. ACBM with potential for damage;

6. ACBM with potential for significant damage; or

7. any remaining friable ACBM or friable suspected ACBM.

C. Assessment may include the following considerations.

1. Location and the amount of the material, both in total quantity and as a percentage of the functional space, may be considered.

2. Condition of the material, may be included, specifying:

a. type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage);

b. severity of damage (e.g., major flaking, severely torn jackets, as opposed to occasional flaking and minor tears to jackets); and

c. extent or spread of damage over large areas or large percentages of the homogeneous area.

3. Whether the material is accessible may be included.

4. The material's potential for disturbance may be considered.

5. Known or suspected causes of damage or significant damage may be included (e.g., air erosion, vandalism, vibration, water).

6. Preventative measures which might eliminate the reasonable likelihood of undamaged ACM from becoming significantly damaged may be considerations.

D. The local education agency or the state government shall select a person accredited to develop management plans to review the results of each inspection, reinspection, and assessment for the school building and to conduct any other necessary activities in order to recommend in writing to the local education agency or the state government appropriate response actions. The accredited person shall sign and date the recommendation, provide his or her accreditation number, and submit a copy of the recommendation to the person designated under LAC 33:III.2705.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2717. Response Actions

A. The local education agency or the state government shall select and implement in a timely manner the appropriate response actions in this Section consistent with the assessment conducted in LAC 33:III.2713. The response actions selected shall be sufficient to protect human health and the environment. The local education agency or the state government may then select, from the response actions which protect human health and the environment, that action which is the least burdensome method. Nothing in this Section shall be construed to prohibit removal of ACBM from a school or state building at any time, should removal be the preferred response action of the local education agency or the state government.

B. If damaged or significantly damaged thermal system insulation ACM is present in a building, the local education agency or the state government shall:

1. at least repair the damaged area;

2. remove the damaged material if it is not feasible, due to technological factors, to repair the damage; and

3. maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition.

C. Selection of Response Action

1. If damaged friable surfacing ACM or damaged friable miscellaneous ACM is present in a building, the local education agency or the state government shall select from among the following response actions: encapsulation, enclosure, removal, or repair of the damaged material.

2. In selecting the response action from among those which meet the definitional standards in LAC 33:III.2703, the local education agency or the state government shall determine which of these response actions protects human health and the environment. For purposes of determining which of these response actions are the least burdensome, the local education agency or the state government may then consider local circumstances, including occupancy and use patterns within the school or state building, and its economic concerns, including short- and long-term costs.

D. If significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM is present in a building, the local education agency or the state government shall:

1. immediately isolate the functional space and restrict access, unless isolation is not necessary to protect human health and the environment; and

2. remove the material in the functional space or, depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.

E. If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that has potential for damage is present in a building, the local education agency or the state government shall at least implement an operations and maintenance (O and M) program, as described under LAC 33:III.2719.

F. If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that has potential for significant damage is present in a building, the local education agency or the state government shall:

1. implement an O and M program, as described under LAC 33:III.2719;

2. institute preventive measures appropriate to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated; and

3. remove the material as soon as possible if appropriate preventive measures cannot be effectively

implemented, unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary to avoid an imminent and substantial endangerment to human health or the environment.

G. Response actions including removal, encapsulation, enclosure, or repair, other than small-scale, short-duration repairs, shall be designed and conducted by persons accredited to design and conduct response actions.

H. The requirements of this Chapter in no way supersede the worker protection and work practice requirements under 29 CFR 1926.58 (Occupational Safety and Health Administration [OSHA] asbestos worker protection standards for construction), 40 CFR 763, Subpart G (EPA asbestos worker protection standards for public employees), LAC 33:III.2799.Appendix A, and LAC 33:III.Chapter 51.Subchapter M.

I. Completion of Response Actions

1. At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person designated by the local education agency or the state government, shall visually inspect each functional space where such action was conducted to determine whether the action has been properly completed.

2. The following requirements apply to collection and analysis of air samples.

a. A person designated by the local education agency or the state government shall collect air samples using aggressive sampling as described in Appendix A of 52 FR, pp. 41857 to 41894, October 30, 1987, to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for small-scale, short-duration projects.

b. Local education agencies and the state government shall have air samples collected under this Section analyzed for asbestos using laboratories accredited by the National Institute for Standards Technology to conduct such analysis using transmission electron microscopy (TEM) equipped with an energy dispersive X-ray analysis system or, under circumstances permitted in this Section, laboratories enrolled in the American Industrial Hygiene Association Proficiency Analytical Testing Program for phase contrast microscopy (PCM).

3. Except as provided in Paragraph I.4 or 5 of this Section, an action to remove, encapsulate, or enclose ACBM shall be considered complete when the average concentration of asbestos of five air samples collected within the affected functional space and analyzed by the TEM method in Appendix A of 52 FR, pp. 41857 to 41894, October 30, 1987, is not statistically significantly different, as determined by the Z-test calculation found in Appendix A of 52 FR, pp. 41857 to 41894, October 30, 1987, from the average asbestos concentration of five air samples collected at the same time outside the affected functional space and analyzed in the same manner, and the average asbestos concentration of the three field blanks described in Appendix A of 52 FR, pp. 41857 to 41894, October 30, 1987, is below the filter background level of 70 structures per square millimeter (70 s/mm^2).

4. An action may also be considered complete if the volume of air drawn for each of the five samples collected within the affected functional space is equal to or greater than 1,199 L of air for a 25-mm filter or equal to or greater than 2,799 L of air for a 37-mm filter, and the average concentration of asbestos as analyzed by the TEM method in Appendix A of 52 FR, pp. 41857 to 41894, October 30, 1987, for the five air samples does not exceed the filter background level of 70 structures per square millimeter (70 s/mm^2). If the average concentration of asbestos of the five air samples within the affected functional space exceeds 70 s/mm^2, or if the volume of air in each of the samples is less than 1,199 L of air for a 25-mm filter or less than 2,799 L of air for a 37-mm filter, the action shall be considered complete only when the requirements of Paragraph I.3 or 5 of this Section are met.

5. At any time, a local education agency or the state government may analyze air monitoring samples collected for clearance purposes by phase contrast microscopy (PCM) to confirm completion of removal, encapsulation, or enclosure of ACBM that is greater than small-scale, short-duration and less than or equal to 160 square feet or 260 linear feet. The action shall be considered complete when the results of samples collected in the affected functional space and analyzed by PCM using the National Institute for Occupational Safety and Health (NIOSH) Method 7400 entitled "Fibers" published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987, show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantitation for PCM (0.01 fibers per cubic centimeter [0.01 f/cm^3] of air). A description of the method is available at the Office of the Federal Register Information Center, 11th and L St., NW., Room 8401, Washington, DC, 20408, and the EPA OPTS Reading Room, Rm. G004 Northeast Mall, 401 M St., SW., Washington, DC 20460. The method is incorporated as it exists on the effective date of this rule, and a notice of any change to the method will be published in the *Louisiana Register*.

6. To determine the amount of ACBM affected under Paragraph I.5 of this Section, the local education agency or the state government shall add the total square or linear footage of ACBM within the containment barriers used to isolate the functional space for the action to remove, encapsulate, or enclose the ACBM. Contiguous portions of material subject to such action conducted concurrently or at approximately the same time within the same school or state building shall not be separated to qualify under Paragraph I.5 of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:699 (August 1996).

§2719. Operations and Maintenance

A. Applicability. The local education agency or the state government shall implement an operations, maintenance, and repair (O and M) program under this Section whenever any friable ACBM is present or assumed to be present in a building that it leases, owns, or otherwise uses as a school or state building. Any material identified as nonfriable ACBM or nonfriable assumed ACBM must be treated as friable ACBM for the purposes of this Section when the material is about to become friable as a result of activities performed in the school or state building.

B. Worker Protection. The protection provided by the agencies listed in LAC 33:III.2717.H for workers during asbestos abatement projects is extended to employees of local education agencies and the state government who perform operations, maintenance, and repair (O and M) activities involving ACM and who are not covered by the OSHA asbestos construction standard at 29 CFR 1926.58, or an asbestos worker approved by OSHA under Section 19 of the Occupational Safety and Health Act. Local education agencies and the state government may consult Appendix B of 52 FR, pp. 41894 to 41897 if their employees are performing small-scale operations, maintenance, and repair activities of short-duration.

C. Cleaning

1. Initial Cleaning. Unless the building has been cleaned using equivalent methods within the previous six months, all areas of a school or state building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM is present shall be cleaned at least once after the completion of the inspection required by LAC 33:III.2707.A and before the initiation of any response action, other than O and M activities or repair, according to the following procedures.

a. HEPA-vacuum or steam-clean all carpets.

b. HEPA-vacuum or wet-clean all other floors and all other horizontal surfaces.

c. Dispose of all debris, filters, mopheads, and cloths in sealed, leak-tight containers.

2. Additional Cleaning. The accredited management planner shall make a written recommendation to the local education agency or the state government on whether additional cleaning is needed, and if so, the methods and frequency of such cleaning.

D. Operations and Maintenance Activities. The local education agency or the state government shall ensure that the procedures described below to protect building occupants shall be followed for any operations and maintenance activities disturbing friable ACBM.

1. Restrict entry into the area by persons other than those necessary for the maintenance project, either by physically isolating the area or by scheduling.

2. Post signs to prevent entry by unauthorized persons.

3. Shut off or temporarily modify the air-handling system and restrict other sources of air movement.

4. Use work practices or other controls, such as wet methods, protective clothing, HEPA-vacuums, mini-enclosures, and glove bags, as necessary to inhibit the spread of any released fibers.

5. Clean all fixtures or other components in the immediate work area.

6. Place the asbestos debris and other cleaning materials in sealed, clear, leak-tight containers.

E. Maintenance Activities Other Than Small-Scale, Short-Duration. The response action for any maintenance activities disturbing friable ACBM, other than small-scale, short-duration maintenance activities, shall be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

F. Fiber Release Episodes

1. Minor Fiber Release Episode. The local education agency or the state government shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., the falling or dislodging of 3 square or linear feet or less of friable ACBM).

a. Thoroughly saturate the debris using wet methods.

b. Clean the area, as described in Subsection C of this Section.

c. Place the asbestos debris in a sealed, leak-tight container.

d. Repair the area of damaged ACM with materials such as asbestos-free spackling, plaster, cement, or insulation, or seal with latex paint or an encapsulant, or immediately have the appropriate response action implemented as required by LAC 33:III.2717.

2. Major Fiber Release Episode. The local education agency or the state government shall ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., the falling or dislodging of more than 3 square or linear feet of friable ACBM).

a. Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.

b. Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building.

c. Provide a prompt notification to SPOC of the major fiber release episode in accordance with LAC 33:I.3923 within 24 hours of the discovery of such an episode, and in writing as specified in LAC 33:I.3925 within seven calendar days after the initial notification.

d. The response action for any major fiber release episode must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

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§2721. Training and Periodic Surveillance

A. Training

1. The local education agency or the state government shall ensure, prior to the implementation of the O and M provisions of the management plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive at least two hours of awareness training whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment. Training shall include, but not be limited to:

a. information regarding asbestos and its various uses and forms;

b. information on the health effects associated with asbestos exposure;

c. locations of ACBM identified throughout each school or state building in which they work;

d. recognition of damage, deterioration, and delamination of ACBM; and

e. name and telephone number of the person designated to carry out general local education agency or the state government responsibilities under LAC 33:III.2705 and the availability and location of the management plan.

2. The local education agency or the state government shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of 3 square or linear feet of ACBM or less shall receive the training described in Paragraph A.1 of this Section and 14 hours of additional training. Additional training shall include, but not be limited to:

a. descriptions of the proper methods of handling ACBM;

b. information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry, September 1986 (EPA 560/OPTS-86-001), available from TSCA Assistance Office (TS-799), Office of Toxic Substances, Environmental Protection Agency, RM. E-543, 401 M St., S.W., Washington, D.C. 20460, and other personal protection measures;

c. the provisions of this Section and LAC 33:III.2717, LAC 33:III.2799.Appendix A, regulations contained in LAC 33:III, Chapter 51.Subchapter M, EPA regulations contained in 40 CFR 763, Subpart G, and OSHA regulations contained in 29 CFR 1926.58; and

d. hands-on training in the use of respiratory protection, other personal protection measures, and good work practices.

3. The local education agency or the state government shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of more than 3 square or linear feet of ACBM shall receive the training described in LAC 33:III.2739.B.3.

4. Local education agency or the state government maintenance and custodial staff who have attended accredited asbestos training or received equivalent training for O and M and periodic surveillance activities involving asbestos shall be considered trained for the purposes of this Section.

B. Periodic Surveillance

1. At least once every six months after a management plan is in effect, each local education agency or the state government shall conduct periodic surveillance in each building that it leases, owns, or otherwise uses as a school or state building that contains ACBM or is assumed to contain ACBM.

2. Each person performing periodic surveillance shall:

a. visually inspect all areas that are identified in the management plan as ACBM or assumed ACBM;

b. record the date of the surveillance, his or her name, and any changes in the condition of the materials; and

c. submit to the person designated to carry out general local education agency or state government responsibilities under LAC 33:III.2705 a copy of such record for inclusion in the management plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1222 (August 2001).

§2723. Management Plans

A. Local education agencies or the state government shall develop management plans for the following buildings.

1. Each local education agency or the state government shall develop an asbestos management plan for each school, including all buildings that are leased, owned,

or otherwise used as school or state buildings, and submit the plan to the Office of Environmental Services. After June 20, 1994, each plan must include Form AAC-8, Required Elements for Management Plans (latest revised form can be obtained from the Office of Environmental Services or through the department's website). The plan may be submitted in stages that cover portions of the school or state building under the authority of the local education agency or the state government before the deadline specified in

LAC 33:III.2701.C.

2. If a building to be used as part of a school or state building is leased or otherwise acquired more than 90 days after promulgation of this regulation, the local education agency or the state government shall include the new building in the management plan for the school or state building prior to its use as a school or state building. The revised portions of the management plan shall be submitted to the Office of Environmental Services.

3. If a local education agency or the state government begins to use a building as a school or state building more than 90 days after promulgation of this regulation, the local education agency or the state government shall submit a management plan for the school or state building to the Office of Environmental Services prior to its use as a school or state building. Each plan developed or modified after June 20, 1994 must include Form AAC-8, Required Elements for Management Plans.

B. Each local education agency or the state government must begin implementation of its management plan on or before 180 days after promulgation of this regulation, and complete implementation in a timely fashion.

C. Each local education agency or the state government shall maintain and update its management plan to keep it current with ongoing operations and maintenance, periodic surveillance, inspection, reinspection, and response action activities. All provisions required to be included in the management plan under this Section shall be retained as part of the management plan, as well as any information that has been revised to bring the plan up-to-date.

D. The management plan shall be developed by an accredited management planner and shall include the following.

1. The name and address of each school and state building shall be listed and whether the school and state building contains friable ACBM, nonfriable ACBM, and friable and nonfriable suspected ACBM assumed to be ACM shall be specified.

2. The following shall be included for each inspection conducted before December 14, 1987:

a. the date of the inspection;

b. a blueprint, diagram, or written description of each school or state building that identifies clearly each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM, and, if possible, the exact locations where bulk samples were collected and the dates of collection;

c. a copy of the analyses of any bulk samples, dates of analyses, and a copy of any other laboratory reports pertaining to the analyses;

d. a description of any response actions or preventive measures taken to reduce asbestos exposure, including if possible, the names and addresses of all contractors involved, start and completion dates of the work, and results of any air samples analyzed during and upon completion of the work; and

e. a description of assessments, required under LAC 33:III.2713, of material that was identified before December 14, 1987, as friable ACBM or friable suspected ACBM assumed to be ACM, and the name and signature, state of accreditation, and accreditation number of each accredited person making the assessments.

3. The following shall be included for each inspection and reinspection conducted under LAC 33:III.2707:

a. the date of the inspection or reinspection, and the name and signature, state of accreditation, and the accreditation number of each accredited inspector performing the inspection or reinspection;

b. a blueprint, diagram, or written description of each school or state building that clearly identifies each location and approximate square or linear footage of homogeneous areas where material was sampled for ACM, the exact location where each bulk sample was collected, date of collection, homogeneous areas where friable suspected ACBM is assumed to be ACM, and areas where nonfriable suspected ACBM is assumed to be ACM;

c. a description of the manner used to determine sampling locations, and the name and signature of each accredited inspector collecting samples, and his or her accreditation number;

d. a copy of the analyses of any bulk samples collected and analyzed, the name and address of any laboratory that analyzed bulk samples, a statement that the laboratory meets the applicable requirements of LAC 33:III.2711.A, the date of analysis, and the name and signature of the person performing the analysis; and

e. a description of assessments, required under LAC 33:III.2713, of all ACBM and suspected ACBM assumed to be ACM, and the name, signature, and accreditation number of each accredited person making the assessments.

4. The name, address, and telephone number of the person designated under LAC 33:III.2705 to ensure that the duties of the local education agency are carried out, and the course name, and dates and hours of training taken by that person to carry out the duties shall be included.

5. The recommendations made to the local education agency regarding response actions under LAC 33:III.2713.D, and the name, and signature of each

person making the recommendations, and his or her accreditation number shall be included.

6. A detailed description of preventive measures and response actions to be taken for any friable ACBM, including methods to be used, the locations where such measures and action will be taken, reasons for selecting the response action or preventive measure, and a schedule for beginning and completing each preventive measure and response action shall be included.

7. With respect to the person or persons who inspected for ACBM and who will design or carry out response actions, except for operations and maintenance, with respect to the ACBM, statement that the person(s) is accredited under the provisions in LAC 33:III.2799.Appendix A must be included.

8. A detailed description in the form of a blueprint, diagram, or in writing of any ACBM or suspected ACBM assumed to be ACM that remains in the school or state building once response actions are undertaken pursuant to LAC 33:III.2717 must be included. This description shall be updated as response actions are completed.

9. A plan for reinspection under LAC 33:III.2707, a plan for operations and maintenance activities under LAC 33:III.2719, and a plan for periodic surveillance under LAC 33:III.2721; a description of the recommendation made by the management planner regarding additional cleaning under LAC 33:III.2719.C.2 as part of an operations and maintenance program; and the response of the local education agency or the state government to that recommendation shall be included.

10. A description of steps taken to inform workers and building occupants, or their legal guardians, about inspections, reinspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress shall be included.

11. An evaluation of the resources needed to complete response actions successfully and carry out reinspection, operations and maintenance activities, periodic surveillance, and training shall be included.

12. With respect to each consultant who contributed to the management plan, the name of the consultant and a statement that the consultant is accredited according to the provisions in LAC 33:III.2799.Appendix A shall be included.

E. A local education agency or the state government may require each management plan to contain a statement signed by an accredited management plan developer that such person has prepared or assisted in the preparation of such plan or has reviewed such plan, and that such plan is in compliance with this Chapter. Such statement may not be signed by a person who, in addition to preparing or assisting in preparing the management plan, also implements (or will implement) the management plan.

F. Copies of the management plan shall be made available, and notification of their availability shall be given as follows.

1. Upon submission of a management plan for review, a local education agency or state government shall keep a copy of the plan in its administrative office. The management plans shall be available, without cost or restriction, for inspection by representatives of EPA and the state, and the public, including parents, teachers, other school or public personnel, and their representatives. The local education agency or the state government may charge a reasonable cost to make copies of management plans.

2. Each local education agency or the state government shall maintain in its administrative office a complete, updated copy of a management plan for each school or state building under its administrative control or direction. The management plans shall be available, during normal business hours, without cost or restriction, for inspection by representatives of EPA and the state and the public, including teachers, other school personnel and their representatives, and parents. The local education agency or the state government may charge a reasonable cost to make copies of management plans.

3. Each school or state building shall maintain in its administrative office, or in a central location approved by the administrative authority, a complete, updated copy of the management plan for that school or state building. Management plans shall be available for inspection, without cost or restriction, to workers before work begins in any area of a school or state building. The school or state building shall make management plans available for inspection to representatives of EPA and the state and to the public, including parents, teachers, and other school or public personnel and their representatives within five working days after receiving a request for inspection. The school or state building may charge a reasonable cost to make copies of the management plan.

4. Upon submission of its management plan and at least once each year, the local education agency or the state government shall notify, in writing, parent, teacher, and employee organizations of the availability of management plans and shall include in the management plan a description of the steps taken to notify such organizations and a dated copy of the notification. In the absence of any such organizations for parents, teachers, or employees, the local education agency or the state government shall provide written notice to that relevant group of the availability of management plans and shall include in the management plan a description of the steps taken to notify such groups and a dated copy of the notification.

G. Records required under LAC 33:III.2725 shall be made by local education agencies and the state government and maintained as part of the management plan.

H. Each management plan must contain a true and correct statement, signed by the individual designated by the local education agency or the state government under LAC 33:III.2705, which certifies that the general, local

education agency or the state government responsibilities, as stipulated by LAC 33:III.2705, have been met or will be met.

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§2725. Recordkeeping

A. Records required under this Section shall be maintained in a centralized location in the administrative office of the school, state building, local education agency, or state government as part of the management plan. For each homogeneous area where all ACBM has been removed, the local education agency or the state government shall ensure that such records are retained for three years after the next reinspection required under LAC 33:III.2707.B.1, or for an equivalent period.

B. For each preventive measure and response action taken for friable and nonfriable ACBM and friable and nonfriable suspected ACBM assumed to be ACM, the local education agency or the state government shall provide:

1. a detailed written description of the measure or action, including methods used, the location where the measure or action was taken, reasons for selecting the measure or action, start and completion dates of the work, names and addresses of all contractors involved, accreditation numbers of contractors, and if ACBM is removed, the name and location of the storage or disposal site of the ACM; and

2. the name and signature of any person collecting any air sample required to be collected at the completion of certain response actions specified by LAC 33:III.2717.I, the locations where samples were collected, date of collection, the name and address of the laboratory analyzing the samples, the date of analysis, the results of the analysis, the method of analysis, the name and signature of the person performing the analysis, and a statement that the laboratory meets the applicable requirements of LAC 33:III.2717.I.2.b.

C. For each person required to be trained under LAC 33:III.2721.A.1, 2 and 3, and for supervisors who direct workers who may disturb ACM, the local education agency or the state government shall provide the person's name and job title, the date that training was completed by that person, the location of the training, the name of the person who conducted the training, and the number of hours completed in such training.

D. For each time that periodic surveillance under LAC 33:III.2721.B is performed, the local education agency or the state government shall record the name of each person performing the surveillance, the date of the surveillance, and any changes in the conditions of the materials.

E. For each time that cleaning under LAC 33:III.2719.C is performed, the local education agency or the state government shall record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning.

F. For each time that operations and maintenance activities under LAC 33:III.2719.D are performed, the local education agency or the state government shall record the name of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of the storage or disposal site of the ACM.

G. For each time that major asbestos activity under LAC 33:III.2719.E is performed, the local education agency or the state government shall provide the name, signature, and accreditation number of each person performing the activity, and the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of the storage or disposal site of the ACM.

H. For each fiber release episode under LAC 33:III.2719.F, the local education agency or the state government shall provide the date and location of the episode, the method of repair, preventive measures or response action taken, the name of each person performing the work, and if ACBM is removed, the name and location of the storage and disposal site of the ACM.

I. For the person designated under LAC 33:III.2705.A.7, the local education agency or state government shall provide the person's name, job title, the date training was received, the name of the training organization that conducted the training, and a certificate of training.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2727. Warning Labels

A. The local education agency or the state government shall attach a warning label immediately adjacent to any friable and nonfriable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school or state building. This shall include:

1. friable ACBM that was responded to by a means other than removal; and

2. ACBM for which no response action was carried out.

B. All labels shall be prominently displayed in readily visible locations and shall remain posted until the ACBM that is labeled is removed.

C. The warning label shall read, in print which is readily visible because of large size or bright color, as follows:

CAUTION: ABSBESTOS. HAZARDOUS.

DO NOT DISTURB WITHOUT PROPER TRAINING

AND EQUIPMENT.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2731. Compliance and Enforcement

A. For failing to comply with the regulations of this Chapter, knowingly submitting false or inaccurate information, or directing others in such actions, civil and criminal penalties may be assessed under R.S. 30:2025.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended LR 16:397 (May 1990).

§2735. Exclusions

A. A local education agency or the state government shall not be required to perform an inspection under LAC 33:III.2707.A in any sampling area as defined in LAC 33:III.2703 or homogeneous area of a school or state building where the following conditions exist.

1. An accredited inspector has determined that, based on sampling records, friable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under LAC 33:III.2705 for inclusion in the management plan. However, an accredited inspector shall assess the friable ACBM under LAC 33:III.2713.

2. An accredited inspector has determined that, based on sampling records, nonfriable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under LAC 33:III.2705 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable has become friable since that previous inspection and shall assess the newly friable ACBM under LAC 33:III.2713.

3. Based on sampling records and inspection records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area, and the records show that the area was sampled before December 14, 1987, in substantial compliance with LAC 33:III.2707.A, which for the purposes of this Section means in a random manner and with a sufficient number of samples to reasonably ensure that the area is not ACBM.

a. The accredited inspector shall sign and date a statement, with his or her accreditation number, that the homogeneous or sampling area determined not be ACBM was sampled in substantial compliance with LAC 33:III.2707.A.

b. Within 30 days after the inspector's determination, the local education agency or the state government shall submit a copy of the inspector's statement to the Office of Environmental Services and shall include the statement in the management plan for that school or state building.

4. The Department of Environmental Quality has determined that, based on sampling records and inspection records, no ACBM is present in the homogeneous or sampling area, and the records show that the area was sampled before December 14, 1987, in substantial compliance with LAC 33:III.2707.A. Such determination shall be included in the management plan for that school or state building.

5. An accredited inspector has determined that, based on records of an inspection conducted before December 14, 1987, suspected ACBM identified in that homogeneous or sampling area is assumed to be ACM. The inspector shall sign and date a statement to that effect, with his or her accreditation number, and, within 30 days of such determination, submit a copy of the statement to the person designated under LAC 33:III.2705 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable suspected ACBM assumed to be ACM has become friable since the previous inspection and shall assess the newly friable material and previously identified friable suspected ACBM assumed to be ACM under LAC 33:III.2713.

6. Based on inspection records and contractor and clearance records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area where asbestos removal operations have been conducted before December 14, 1987, and shall sign and date a statement to that effect and include his or her accreditation number. The local education agency or the state government shall submit a copy of the statement to the Office of Environmental Services and shall include the statement in the management plan for that school or state building.

7. An architect or project engineer responsible for the construction of a new school building built after October 12,

1988, or an accredited inspector signs a statement that no ACBM was specified as a building material in any construction document for the building or, to the best of his or her knowledge, no ACBM was used as a building material in the building. The local education agency or the state government shall submit a copy of the signed statement of the architect, project engineer, or accredited inspector to the Office of Environmental Services and shall include the statement in the management plan for that school or state building.

B. The exclusion, under Paragraphs A.1-4 of this Section, from conducting the inspection under LAC 33:III.2707.A shall apply only to homogeneous or sampling areas of a school building that were inspected and sampled before October 17, 1987. The local education agency or the state government shall conduct an inspection under LAC 33:III.2707.A of all areas inspected before October 17, 1987, that were not sampled or were not assumed to be ACM.

C. If ACBM is subsequently found in a homogeneous or sampling area of a local education agency or the state government that had been identified as receiving an exclusion by an accredited inspector under Paragraph A.3, 4, or 5 of this Section, or an architect, project engineer, or accredited inspector under Paragraph A.7 of this Section, the local education agency or the state government shall have 180 days following the date of identification of ACBM to comply with this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:700 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2457 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2444 (October 2005), LR 33:2090 (October 2007).

§2739. Agent Accreditation

A. Applicability. The provisions of this Section are applicable to all persons who are involved in abatement, disposal, and/or maintenance involving friable ACM in schools and state buildings.

B. Requirements

1. Except as provided in Paragraph B.2 of this Section, all personnel who design, supervise, or perform response actions; work as management planners; inspect sites; or maintain materials involving friable ACM shall be accredited in accordance with LAC 33:III.2799.Appendix A.

2. Except for contracted abatement workers, workers who are engaged in maintenance that may disturb 3 square or linear feet of ACBM or less shall receive the training described in LAC 33:III.2721.A.2 of this Chapter and must work under the close direction of an accredited supervisor during any work they perform which may disturb asbestos.

3. Workers who are engaged in maintenance that disturbs more than 3 square or linear feet of ACBM which does involve its actual removal, enclosure, repair, or encapsulation shall receive their initial and refresher training from a training organization recognized by the Department of Environmental Quality. This training should be in accordance with the asbestos abatement worker course as described in LAC 33:III.2799.Appendix A, Paragraph A.5, Initial Training. Workers who participate in the type of project described in this Paragraph must be accredited in accordance with LAC 33:III.2799.Appendix A and must work under the close direction of an accredited supervisor during any work they perform.

4. Supervisors who are directing workers who may disturb ACM shall receive their initial and refresher training in accordance with LAC 33:III.2799.Appendix A, Paragraph A.4, from a training organization recognized by the Department of Environmental Quality. Supervisors who participate in the type of project referenced in this Paragraph are responsible for ensuring that:

a. all personnel are properly trained as specified in LAC 33:III.2721;

b. training records are available within the facility where the work is performed; and

c. all work is performed in accordance with LAC 33:III.Chapter 51.Subchapter M; LAC 33:III.Chapter 27; 40 CFR 763, Subpart G, and other applicable state and federal regulations.

5. Readily available proof of accreditation for workers and supervisors shall be at the job site or within the facility's confines.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended LR 16:397 (May 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:700 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2457 (November 2000).

§2799. Appendix A—Agent Accreditation Plan

Appendix A—Agent Accreditation Plan

The duration of initial and refresher training courses is specified in numbers of days. A day of training equals eight consecutive hours, including breaks and lunch.

In several instances, initial training courses for a specific discipline (e.g., workers, inspectors) require hands-on training. For asbestos abatement supervisors and workers, hands-on training should include working with asbestos-substitute materials, fitting and using respirators, use of glove-bags, donning protective clothing, constructing a decontamination unit, as well as other abatement work activities. Hands-on training must permit all supervisors and workers to have actual experience performing tasks associated with asbestos abatement. For inspectors, hands-on

training should include conducting a simulated building walk-through inspection and respirator fit testing.

Training requirements for each of the five accredited disciplines are outlined below. Persons in each discipline perform a different job function and distinct role. Inspectors identify and assess the condition of ACBM, or suspect ACBM. Management planners use data gathered by inspectors to assess the degree of hazard posed by ACBM in schools to determine the scope and timing of appropriate response actions needed for schools. Project designers determine how asbestos abatement work should be conducted. Lastly, workers and contractor/supervisors carry out and oversee abatement work. Each accredited discipline and training curriculum is separate and distinct from the others. A person seeking accreditation in any of the five accredited MAP disciplines cannot attend two or more courses concurrently, but may attend such courses sequentially. All courses, both initial and refresher, shall be completed within 14 days of the commencement of the course.

A. Initial Training. The following are the initial training course requirements for persons required to have accreditation under LAC 33:III.2799.Appendix A, Paragraph E.1.

1. Inspectors. All persons who inspect for ACBM in schools and state buildings must be accredited. All persons seeking accreditation as inspectors shall complete a three-day training course as outlined below. The three-day program shall include lectures, demonstrations, four hours of hands-on training, individual respirator fit testing, course review, and a written examination. The use of audiovisual materials is recommended to complement lectures, where appropriate. The inspector training course shall adequately address the following topics. Hands-on training should include conducting a simulated building walk-through inspection and respirator fit testing.

a. Background Information on Asbestos: identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.

b. Potential Health Effects Related to Asbestos Exposure: the nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency period for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancer of other organs.

c. Functions/Qualifications and Role of Inspectors: discussions of prior experience and qualifications for inspectors and management planners; discussions of the functions of an accredited inspector as compared to those of an accredited management planner; discussion of the inspection process including inventory of ACM and physical assessment.

d. Legal Liabilities and Defenses: responsibilities of the inspector and management planner; a discussion of comprehensive general liability policies, claims made and occurrence policies, environmental and pollution liability policy clauses; state liability insurance requirements; bonding and the relationship of insurance availability to bond availability.

e. Understanding Building Systems: the interrelationship between building systems, including an overview of common building physical plant layouts; heat, ventilation, and air conditioning (HVAC) system types-physical organization and where asbestos is found on HVAC components; building mechanical systems, their types and organization, and where to look for asbestos on such systems; inspecting electrical systems, including appropriate safety precautions; reading blueprints and as-built drawings.

f. Public/Employee/Building Occupant Relations: notifying employee organizations about the inspection; signs to warn building occupants; tact in dealing with occupants and the press; scheduling of inspections to minimize disruption; and education of building occupants about actions being taken.

g. Pre-Inspection Planning and Review of Previous Inspection Records: scheduling the inspection and obtaining access; building record review; identification of probable homogeneous areas from blueprints or as-built drawings; consultation with maintenance or building personnel; review of previous inspection, sampling, and abatement records of a building; the role of the inspector in exclusions for previously performed inspections.

h. Inspecting for Friable and Nonfriable Asbestos-Containing Material (ACM) and Assessing the Condition of Friable ACM: procedures to follow in conducting visual inspections for friable and nonfriable ACM; types of building materials that may contain asbestos; touching materials to determine friability; open return air plenums and their importance in HVAC systems; assessing damage, significant damage, potential damage, and potential significant damage; amount of suspected ACM, both in total quantity and as a percentage of the total area; type of damage; accessibility; material's potential for disturbance; known or suspected causes of damage or significant damage; deterioration algorithm methods as assessment factors.

i. Bulk Sampling/Documentation of Asbestos in Buildings: detailed discussion of the "Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/585-030a October 1985)"; techniques to ensure that sampling is randomly distributed for other than friable surfacing materials; sampling of nonfriable materials; techniques for bulk sampling; sampling equipment the inspector should use; additional sampling requirements and chain-of-custody forms if litigation is anticipated; patching or repair of damage done in sampling; an inspector's repair kit; discussion of polarized light microscopy; choosing an accredited laboratory to analyze bulk samples; quality control and quality assurance procedures. EPA recommends that all bulk samples collected from school or public and

commercial buildings be analyzed by a laboratory accredited under the NVLAP (National Voluntary Laboratory Accreditation Program) administered by NIST (National Institute of Standards Technology).

j. Inspector Respiratory Protection and Personal Protective Equipment: classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-mouth seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures and their applicability; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and use, storage, and handling of nondisposable clothing.

k. Recordkeeping and Writing the Inspection Report: labeling of samples and keying sample identification to sampling location; recommendations on sample labeling; detailing of ACM inventory; photographs of selected sampling areas and examples of ACM condition; information required for inclusion in the management plan by LAC 33:III.2723.

l. Regulatory Review: EPA Worker Protection Rule in 40 CFR 763, Subpart G, TSCA Title II; OSHA Asbestos Construction Standard 29 CFR 1926.58; OSHA respirator requirements found at 29 CFR 1910.134; the Asbestos-Containing Materials in Schools and State Buildings Regulation found at LAC 33:III.Chapter 27; LAC 33:III.Chapter 51.Subchapter M; and differences in federal/state requirements where they apply and the effects, if any, on public and nonpublic schools, state and commercial or public buildings.

m. Field Trip: inclusion of a field exercise including a walk-through inspection; on-site discussion on information gathering and determination of sampling locations; on-site practice in physical assessment; classroom discussion of field exercise.

n. Course Review: review of key aspects of the training course.

2. Management Planners. All persons who prepare management plans for schools and state buildings must be accredited. Possession of current and valid inspector accreditation shall be a prerequisite for admission to the management planner training course. All persons seeking accreditation as management planners must complete an inspection training course as outlined above and a two-day management planning training course. The two-day training program shall include lectures, demonstration, course review, and a written examination. The use of audiovisual materials is recommended to complement lectures, where appropriate. The management planner training course shall adequately address the following topics.

a. Course Overview: the role of the management planner; operations and maintenance programs; setting work priorities; protecting building occupants.

b. Evaluation/Interpretation of Survey Results: review of TSCA Title II requirements for inspection and management plans as given in LAC 33:III.2723; summarized field data and laboratory results; comparison of field inspector's data sheet with laboratory results and site survey.

c. Hazard Assessment: amplification of the difference between physical assessment and hazard assessment; the role of the management planner in hazard assessment; explanation of significant damage, damage, potential damage, and potential significant damage; use of a description (or decision tree) code for assessment of ACM; assessment of friable ACM; relationship of accessibility, vibration sources, use of adjoining space, and air plenums and other factors to hazard assessment.

d. Legal Implications: liability; insurance issues specific to planners; liabilities associated with interim control measures, in-house maintenance, repair, and removal; use of results from previously performed inspections.

e. Evaluation and Selection of Control Options: overview of encapsulation, enclosure, interim operations and maintenance, and removal; advantages and disadvantages of each method; response actions described via a decision tree or other appropriate method; work practices for each response action; staging and prioritizing of work in both vacant and occupied buildings; the need for containment barriers and decontamination in response actions.

f. Roles of Other Professionals: use of industrial hygienists, engineers, and architects in developing technical specifications for response actions; any requirements that may exist for architect sign-off of plans; team approach to design of high-quality job specifications.

g. Developing an Operations and Maintenance (O and M) Plan: purpose of the plan; discussion of applicable EPA guidance documents; what actions should be taken by custodial staff; proper cleaning procedures; steam cleaning and high-efficiency particulate aerosol (HEPA) vacuuming; reducing disturbance of ACM; scheduling O and M for off-hours; rescheduling or canceling renovation in areas with ACM; boiler room maintenance; disposal of ACM; in-house procedures for ACM—bridging and penetrating encapsulants; pipe fittings; metal sleeves; polyvinyl chloride (PVC), canvas, and wet wraps; muslin with straps; fiber mesh cloth; mineral wool, and insulating cement; discussion of employee protection programs and staff training; case study in developing an O and M plan (development, implementation process, and problems that have been experienced).

h. Regulatory Review: focusing on the OSHA Asbestos Construction Standard in 29 CFR 1926.58; LAC 33:III.Chapter 51.Subchapter M; LAC 33:III.Chapter 27; EPA Worker Protection Rule in 40 CFR 763, Subpart G.

i. Recordkeeping for the Management Planner: use of field inspector's data sheet along with laboratory results; ongoing recordkeeping as a means of tracking asbestos disturbance; procedures for recordkeeping.

j. Assembling and Submitting the Management Plan: plan requirements in LAC 33:III.2723; the management plan as a planning tool; the proper completion and submittal of Required Elements for Management Plans, Form AAC-8.

k. Financing Abatement Actions: economic analysis and cost estimates; development of cost estimates; present costs of abatement versus future operations and maintenance costs; Asbestos School Hazard Abatement Act grants and loans.

l. Course Review: review of key aspects of the training course.

3. Abatement Project Designers. A person must be accredited as a project designer to design any of the following activities with respect to friable ACBM in a school or state building: (1) a response action other than a SSSD maintenance activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as abatement project designers shall complete a three-day abatement project designer training course as outlined below. The three-day abatement project designer training program shall include lectures, demonstrations, a field trip, course review, and a written examination. The use of audiovisual materials to complement lecturers, where appropriate, is recommended. The three-day abatement project designer training course shall adequately address the following topics.

a. Background Information on Asbestos: identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.

b. Potential Health Effects Related to Asbestos Exposure: nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency period of asbestos-related diseases; a discussion of the relationship between asbestos exposure and asbestosis, lung cancer, mesothelioma, and cancer of other organs.

c. Overview of Abatement Construction Projects: abatement as a portion of a renovation project; OSHA requirements for notification of other contractors on a multi-employer site (29 CFR 1926.58).

d. Safety System Design Specifications: construction and maintenance of containment barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lock-out; proper working techniques for minimizing fiber release; entry and exit procedures for the work area; use of wet methods; use of negative pressure exhaust ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper cleanup and disposal of asbestos; work practices as they apply to encapsulation, enclosure, and repair; use of glove bags and a demonstration of glove-bag use.

e. Field Trip: visit to an abatement site or other suitable building site, including on-site discussions of abatement design, building walk-through inspection, and discussion of rationale for the concept of functional spaces during the walk-through.

f. Employee Personal Protective Equipment: the classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); components of a proper respiratory protection program; selection and use of personal protective clothing, including use, storage, and handling of nondisposable clothing; regulations covering personal protective equipment.

g. Additional Safety Hazards: hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire, and explosion hazards.

h. Fiber Aerodynamics and Control: aerodynamic characteristics of asbestos fibers; importance of proper containment barriers; settling time for asbestos fibers; wet methods in abatement; aggressive air monitoring after abatement; aggressive air movement and negative pressure exhaust ventilation as a cleanup method.

i. Designing Abatement Solutions: discussions of removal, enclosure, and encapsulation methods; asbestos waste disposal.

j. Final Clearance Process: discussion of the need for a written sampling rationale for aggressive final air clearance; requirements of a complete visual inspection; the relationship of the visual inspection to final air clearance; and discussion of the use of TEM analysis in the final clearance process.

k. Budgeting/Cost Estimation: development of cost estimates; present costs of abatement versus future operations and maintenance costs; setting priorities for abatement jobs to reduce cost.

l. Writing Abatement Specifications: preparation of and need for a written project design; means and methods specifications versus performance specifications; design of abatement in occupied buildings; modification of guide specifications to fit a particular building; worker and building occupant health/medical considerations; replacement of ACM with nonasbestos substitutes; clearance of work area after abatement; air monitoring for clearance.

m. Preparing Abatement Drawings: significance and need for drawings, use of as-built drawings; use of inspection photographs and on-site reports; methods of

preparing abatement drawings; diagraming containment barriers; relationship of drawings to design specifications; particular problems with abatement drawings.

n. Contract Preparation and Administration

o. Legal/Liabilities/Defenses: insurance considerations; bonding; hold harmless clauses; use of abatement contractor's liability insurance; claims-made versus occurrence policies.

p. Replacement: replacement of asbestos with asbestos-free substitutes.

q. Roles of Other Consultants: development of technical specification sections by industrial hygienists or engineers; the multidisciplinary team approach to abatement design.

r. Occupied Buildings: special design procedures required in occupied buildings; education of occupants; extra monitoring recommendations; staging of work to minimize occupant exposure; scheduling of renovation to minimize exposure.

s. Relevant Federal, State, and Local Regulatory Requirements: procedures and standards, including:

i. requirements of TSCA Title II;

ii. LAC 33:III.Chapter 51.Subchapter M, Asbestos;

iii. LAC 33:III.Chapter 27, Asbestos-Containing Material in Schools and Public Buildings;

iv. OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respiratory protection (29 CFR 1910.134);

v. Worker Protection Rule, in 40 CFR 763 Subpart G; and

vi. OSHA Asbestos Construction Standard in 29 CFR 1926.58 and OSHA Hazard Communication Standard found at 29 CFR 1926.59.

t. Course Review: a review of key aspects of the training course.

4. Asbestos Abatement Contractor/Supervisors. A person must be accredited as a contractor/supervisor to supervise any of the following activities with respect to friable ACBM in a school or state building: (1) a response action other than a SSSD activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement supervisors shall complete a five-day training course as outlined below. The training course shall include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review, and a written examination. The use of audiovisual materials is recommended to complement lectures, where appropriate. For purposes of Louisiana state accreditation, asbestos abatement supervisors include those persons who provide supervision and direction to workers engaged in asbestos removal, encapsulation, enclosure, or repair. Supervisors may include those individuals with the position title of foreman, working foreman, or leadman pursuant to collective bargaining agreements. At least one supervisor is required to be at the worksite at all times while work is in progress. Asbestos workers must have access to accredited supervisors throughout the duration of the project. Contracted air-monitoring personnel must be accredited contractors/supervisors. Hands-on training must permit supervisors to have actual experience performing tasks associated with asbestos abatement. The supervisor's training course shall adequately address the following topics.

a. The Physical Characteristics of Asbestos and Asbestos-Containing Materials: identification of asbestos; aerodynamic characteristics; typical uses; physical appearance; a review of hazard assessment considerations; summary of abatement control options.

b. Potential Health Effects Related to Asbestos Exposure: the nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; synergism between cigarette smoking and asbestos exposure; latency period for disease.

c. Employee Personal Protective Equipment: classes and characteristics of respirator types; limitations of respirators and their proper selection, inspection, donning, use, maintenance, and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing, including use, storage, and handling of nondisposable clothing; regulations covering personal protective equipment.

d. State-of-the-Art Work Practices: proper work practices for asbestos abatement activities, including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lockout; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper cleanup and disposal procedures; work practices for removal, encapsulation, enclosure, and repair; emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; recommended and prohibited work practices. Discussion of new abatement-related techniques and methodologies may be included.

e. Personal Hygiene: entry and exit procedures for the work area; use of showers; avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area. Potential exposures, such as family exposure, shall also be included.

f. Additional Safety Hazards: hazards encountered during abatement activities and how to deal with them,

including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips, and falls, and confined spaces.

g. Medical Monitoring: OSHA and EPA Worker Protection Rule requirements for physical examinations, including a pulmonary function test, chest x-rays, and a medical history for each employee.

h. Air Monitoring: procedures to determine airborne concentrations of asbestos fibers, including a description of aggressive sampling, sampling equipment and methods, reasons for air monitoring, types of samples, and interpretation of results, specifically from analysis performed by polarized light, phase-contrast, and electron microscopy analyses.

i. Relevant Federal, State, and Local Regulatory Requirements: procedures and standards, including:

i. requirements of TSCA Title II;

ii. LAC 33:III.Chapter 51.Subchapter M. Asbestos;

iii. LAC 33:III.Chapter 27, Asbestos-Containing Material in Schools and State Buildings Regulation;

iv. OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respiratory protection (29 CFR 1910.134);

v. OSHA Asbestos Construction Standard (29 CFR 1926.58); and

vi. 40 CFR 763 Subpart G, Worker Protection Rule.

j. Respiratory Protection Programs and Medical Surveillance Programs

i. OSHA standards for respiratory protection (29 CFR 1910.134);

ii. OSHA protection factors for respirators (29 CFR 1910.1001(g) and 29 CFR 1926.58(h)); and

iii. EPA protection factors for respirators (40 CFR 763, Subpart G, Section g).

k. Insurance and Liability Issues: contractor issues; worker's compensation coverage and exclusions; third-party liabilities and defenses; insurance coverage and exclusions.

l. Recordkeeping for Asbestos Abatement Projects: records required by federal, state, and local regulations; records recommended for legal and insurance purposes.

m. Supervisory Techniques for Asbestos Abatement Activities: supervisory practices to enforce and reinforce the required work practices and discourage unsafe work practices.

n. Contract Specifications: discussion of key elements that are included in contract specifications.

o. Course Review: review of key aspects of the training course.

5. Asbestos Abatement Workers. A person must be accredited as a worker to carry out any of the following activities with respect to friable ACBM in a school or state building: (1) response action other than a SSSD activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement workers shall complete at least a four-day training course as outlined below. The worker training course shall include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review, and an examination. The use of audiovisual materials is recommended to complement lectures, where appropriate. Hands-on training must permit workers to have actual experience performing tasks associated with asbestos abatement. A person who is otherwise accredited as a contractor/supervisor may perform in the role of a worker without possessing separate accreditation as a worker. The training course shall adequately address the following topics.

a. Physical Characteristics of Asbestos: identification of asbestos, aerodynamic characteristics, typical uses, and physical appearance, and a summary of abatement control options.

b. Potential Health Effects Related to Asbestos Exposure: the nature of asbestos-related diseases, routes of exposure, dose-response relationships, and the lack of a safe exposure level; synergism between cigarette smoking and asbestos exposure; latency period for disease and a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.

c. Employee Personal Protective Equipment: classes and characteristics of respirator types; limitations of respirators and their proper selection, inspection, donning, use, maintenance, and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of nondisposable clothing; and regulations covering personal protective equipment.

d. State-of-the-Art Work Practices: proper work practices for asbestos abatement activities including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lockout; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper cleanup and disposal procedures; work practices for removal, encapsulation, enclosure, and repair, emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices.

e. Personal Hygiene: entry and exit procedures for the work area; use of showers; avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area; potential exposures, such as family exposure.

f. Additional Safety Hazards: hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips, and falls, and confined spaces.

g. Medical Monitoring: OSHA and EPA Worker Protection Rule requirements for a pulmonary function test, chest x-rays, and a medical history for each employee.

h. Air Monitoring: procedures to determine airborne concentrations of asbestos fibers, focusing on how personal air sampling is performed and the reasons for it.

i. Relevant Federal, State and Local Regulatory Requirements, Procedures, and Standards: particular attention directed at relevant EPA, OSHA, and state regulations concerning asbestos abatement workers.

j. Establishment of Respiratory Protection Programs.

k. Course Review: review of key aspects of the training course.

B. Examination. A closed-book examination shall be given to all persons seeking accreditation who have completed an initial training course. A person seeking accreditation in a specific discipline shall pass the examination for that discipline prior to receiving a training certificate. For example, a person seeking accreditation as an inspector must pass the inspector's accreditation examination given by the training organization. Each examination shall adequately cover the topics included in the training course for that discipline. Persons who pass and fulfill other associated requirements will receive a certificate indicating that they are trained in a specific discipline. The following are the requirements for examinations in each area:

1. Inspectors:

a. 50 multiple choice questions

b. Passing score: 70 percent

2. Management Planners:

a. 50 multiple choice questions

b. Passing score: 70 percent

3. Abatement Project Designers:

a. 100 multiple choice questions

b. Passing score: 70 percent

4. Asbestos Abatement Contractors and Supervisors:

a. 100 multiple choice questions

b. Passing score: 70 percent

5. Asbestos Abatement Workers:

a. 50 multiple choice questions

b. Passing score: 70 percent

C. Refresher Training Courses. For all disciplines except inspectors, a one-day annual refresher training course is required for reaccreditation. Refresher courses for inspectors shall be a half-day length. Management planners shall attend the inspector refresher course, plus an additional half-day on management planning. The refresher course shall be specific to each discipline. Refresher courses shall be conducted as separate and distinct courses and not combined with any other training during the period of the refresher course. For each discipline, the refresher course shall review and discuss changes in federal and state regulations, developments in state-of-the-art procedures, and a review of key aspects of the initial training course as determined by the state. After completing the annual refresher course, persons shall have their training extended an additional year. If a refresher course is not completed within two years of the last course completion date, the initial training course has to be retaken for reaccreditation.

D. Qualifications. In addition to training and an examination, inspectors, management planners, and abatement project designers must meet the requirements listed below:

1. Inspectors. Qualifications—possess a high school diploma or GED.

2. Management Planners. Qualifications—registered architect, engineer, certified industrial hygienist, or bachelor's degree in a related scientific field.

3. Abatement Project Designer. Qualifications—registered architect, engineer, or a certified industrial hygienist.

E. Accreditation of Agents

1. Accreditation is required for:

a. persons who inspect for the presence of asbestos in schools and/or state buildings;

b. persons who develop management plans for schools and/or state buildings;

c. persons who design or carry out response actions for schools and/or state buildings involving friable asbestos (other than small-scale, short-duration activities);

d. persons contracted to perform air monitoring;

e. persons contracted to strip, remove, or otherwise handle or disturb friable asbestos.

2. Application for Accreditation. The applicant for accreditation must submit the following items:

a. A completed Asbestos Accreditation Affidavit, Form AAC-1 (which may be obtained from the Office of Environmental Services or through the department's website) that contains:

i. the applicant’s name, address, and telephone number;

ii. the applicant's driver's license or state identification number and the issuing state;

iii. the name, address, and telephone number of the applicant's employer;

iv. an identification of the disciplines in which accreditation is sought;

v. completed statements of regulation possession and understanding and of regulatory enforceability;

vi. the applicant's previous accreditation number, if applicable; and

vii. the applicant's signature and the date of application.

b. A copy of the current class training certificate. First time applicants must also submit copies of initial training and all subsequent refresher (update) certificates.

i. The training course(s) must have at least contingent approval from EPA or be approved by a state authorized by the EPA to approve training courses.

ii. Applicants receiving training from providers not recognized by Louisiana must also submit proof of training in current Louisiana regulations from a Louisiana recognized training provider.

c. Applications for inspector, management planner, and project designer must include, where applicable:

i. high school diploma or the highest level of education achieved; and

ii. registration as an architect, or certified industrial hygienist, or engineering degree.

d. Applicable fees (LAC 33:III.223).

e. A 1" x 1¼" photograph of the applicant's face.

3. The completed application with applicable fees (LAC 33:III.223) is to be sent to the Office of Environmental Services.

4. Persons shall be considered accredited upon receipt of a certificate of accreditation or identification card issued by the department.

5. Applications may be denied for:

a. incomplete applications;

b. inaccurate or falsified information; or

c. failure to comply with applicable federal, state, and local regulations.

6. Approved Applications

a. Accreditation numbers will be issued to all approved agents.

b. Beginning September 1, 1996, a qualified individual seeking accreditation shall be issued accreditation certificates, which expire one year after the last day of his or her most recent training course. Accreditation certificates that expire before December 31, 1996, will not require a fee. A qualified individual can maintain continuous accreditation with the same annual expiration/renewal date, provided the individual submits the required documents and receives refresher training within 60 days of his or her expiration/renewal date. If an individual seeking reaccreditation has received refresher training earlier than within 60 days of his or her existing expiration/renewal date or receives training after his or her expiration/renewal date, his or her new expiration/renewal date will be one year after the last day of his or her most current training, provided the applicant has received initial or refresher training in the past year.

7. Agents who are supervisor accredited are responsible for ensuring that maintenance personnel in schools and state-owned or state-leased buildings are properly trained as defined in LAC 33:III.2721 and that workers trained to meet LAC 33:III.2739.B.3 are accredited.

8. Revocation of Accreditation. Accredited agents may have accreditation revoked:

a. for failure to comply with or direct others to comply with LAC 33:III.Chapters 27 and 51, and other applicable federal, state, and local regulations;

b. for failure to notify the Office of Environmental Services of changes in status;

c. for failure to operate safely and/or protect the environment;

d. for failure to allow a department representative to inspect and review sites and documentation;

e. for failure to submit valid and accurate accreditation application documents and/or training documents;

f. for performing work requiring accreditation at a job site without being in physical possession of initial and current accreditation certificates;

g. for permitting the duplication or use of one's own accreditation certificate by another;

h. for performing work for which accreditation has not been received; or

i. for obtaining accreditation from a training provider that does not have approval to offer training for the particular discipline from either EPA or from a State that has a contractor accreditation plan at least as stringent as the EPA MAP.

9. To renew accreditation, all persons shall comply with the requirements of Paragraph E.2 of this Appendix.

10. Prohibitions

a. The alteration or possession of altered certificates is prohibited.

b. The submission of any false statement, representation, or certification in any form, application,

report, plan, or any other document filed or required to be maintained by the department is prohibited.

c. Trainers shall not participate both as a student and as an instructor in their own asbestos training courses for certification.

F. Recognition of Training Organizations and Their Trainers. Trainers who conduct asbestos courses in Louisiana must do so in association with a training organization recognized by this department. Trainers associated with a recognized training organization must also be recognized by this department prior to conducting approved courses. Asbestos training organizations may be recognized to train provided the organization does the following.

1. Submit the latest revision of the Asbestos Training Organization Recognition Application, Form AAC-3, (which may be obtained from the Office of Environmental Services or through the department's website) requesting approval to train asbestos agents.

2. The application will as a minimum include the following:

a. the name, address, and telephone number of the training organization's corporate offices and the representative serving as the contact for the organization for the scheduling of training courses and for other training activities. The application must be signed by the person who is responsible for the training organization;

b. a listing of which courses are requested to be approved;

c. when requested, a copy of a certificate, and copies of printed training materials used for every course to be taught including texts, syllabi, and outlines, but not including any exams:

i. if the latest version of training material was submitted with the last application, a note to that effect is sufficient;

ii. when training material is updated within a year, the latest copy of training material should be submitted;

d. the résumés of the instructors attached to an Asbestos Trainer Recognition Form, AAC-4:

i. instructors must be experienced in the subjects that they teach;

ii. experience is considered as:

(a). a degree or certification in the subject being taught; or

(b). working in the subject for two or more years;

iii. two or more instructors must be listed for each initial training course;

e. a copy of the EPA letter recognizing full approval of the training organization's course or approval from a state authorized by EPA to approve training courses, if applicable;

f. a letter from the provider of the training course that clearly indicates how the course meets the requirements of this Appendix for:

i. length of training in days;

ii. amount and type of hands-on training;

iii. examination (length, format, and passing score); and

iv. topics covered in the course;

g. a detailed statement about the development of the examination used in the course.

3. The completed application with applicable fees for organization and trainer recognition (LAC 33:III.223) are to be sent to the Office of Environmental Services.

4. Applications for recognition may be denied for:

a. incomplete applications;

b. inaccurate or falsified information; or

c. failure to comply with applicable federal, state, and local regulations.

5. Training organizations and trainers shall be considered recognized upon written confirmation from the department or upon receipt of a certificate of recognition from the department. Training recognition numbers will be issued to all recognized training organizations and training instructors. The recognition is effective for one year. A recognized training organization or trainer may have their recognition revoked for failure to meet the following criteria.

a. Unique sequentially-numbered certificates must be issued to students who successfully pass the training course. The numbered certificate must indicate the student's name, his or her driver's license or state identification number and the issuing state, the course completed, and the dates of the course and the examination when applicable. The certificate must also include an expiration date for training that is one year after the date on which the student completed the course. The name, address, and telephone number of the training organization must also be indicated on the certificate. The discipline for which training was received shall be stated on each certificate, and a statement must be included that the person receiving the certificate has completed the requisite training for asbestos accreditation as required under TSCA Title II. States or training providers who reaccredit persons based upon completion of required refresher training must also provide accreditation certificates with all of the above information, except the examination date may be omitted.

b. The recognized training organization must keep the Office of Environmental Services informed of any change in status of the training organization, such as pending fines, notices of violation, changes in instructor status, etc.

c. A notification of which courses will be taught, including where, when, and who will conduct the class, must be submitted to the Office of Environmental Services.

i. The notification must be received in writing by the Office of Environmental Services at least five days prior to class commencement. (Notification must be made at least three days prior to a course when only the state regulations are to be taught.)

ii. Cancellation of classes must be received by the Office of Environmental Services before the class should have commenced.

d. Within 10 days of the completion of a class a complete roster of trainees, their driver's license or state identification numbers and the issuing states, and their examination grades, with a 1" x 1 1/4" photograph of the face of each trainee, must be submitted to the Office of Environmental Services on a form approved by the department.

e. The Office of Environmental Services must be notified by phone or in writing of changes in class schedules prior to the date when the course was to have commenced.

f. The organization and its instructors must comply with and direct others to comply with LAC 33:III.Chapters 27 and 51 and other applicable federal, state, and local regulations.

g. Louisiana regulations LAC 33:III.Chapters 27 and 51 must be taught for a minimum of two hours in each approved initial course.

h. Training course providers shall permit representatives of EPA or the Louisiana Department of Environmental Quality to attend, evaluate, and monitor any training course without charge.

i. Courses must be taught at least according to the criteria and length of training specified in LAC 33:III.2799.Appendix A.

j. Only recognized trainers may teach courses.

k. Additionally, training course approval may be withdrawn for:

i. misrepresentation of the extent of a training course's approval by a state or EPA;

ii. failure to submit required information or notifications in a timely manner;

iii. failure to maintain requisite records;

iv. falsification of accreditation records, instructor qualifications, or other accreditation information;

v. failure to adhere to the training standards and requirements of the agent accreditation plan.

6. Applications for trainer recognition shall be completed using the latest revision of the Asbestos Trainer Recognition Form, AAC-4 (latest revision of the form may be obtained from the Office of Environmental Services or through the department's website). A résumé indicating proof of experience as described in Clause F.2.d.ii of this Appendix must be attached. The completed application with applicable fees (LAC 33:III.223) is to be sent to the Office of Environmental Services.

7. Courses may be given contingent approval based upon the review of course materials and inclusion of those topics required under Subsection A of this Appendix when applicable. Full approval may be given upon completion of an audit of the course for which approval is requested.

a. Initial training courses must be held for at least the length specified in Subsection A of this Appendix.

b. Refresher training courses must be held for at least the length of time as specified in Subsection C of this Appendix.

8. Recognition of trainers and training organizations is effective for one year from the date issued. Recognition of training organizations and trainers may be renewed annually by submitting the latest revision of Form AAC-3 and AAC-4 respectively along with the applicable fees (LAC 33:III.223) to the department.

9. Recordkeeping Requirements of Training Providers. All approved providers of accredited asbestos training courses must comply with the following minimum recordkeeping requirements.

a. Training Course Materials. A training provider must retain copies of all instructional materials used in the delivery of the classroom training such as student manuals, instructor notebooks and handouts.

b. Instructor Qualifications. A training provider must retain copies of all instructors' résumés, and the documents approving each instructor issued by the department in advance whenever it changes course instructors. Records must accurately identify the instructors that taught each particular course for each date that a course is offered.

c. Examinations. A training provider must document that each person who receives an accreditation certificate for an initial training course has achieved a passing score on the examination. These records must clearly indicate the date upon which the exam was administered, the training course and discipline for which the exam was given, the name of the person who proctored the exam, a copy of the exam, and the name and test score of each person taking the exam. The topic and dates of the training course must correspond to those listed on that person's accreditation certificate.

d. Accreditation Certificates. The training providers shall maintain records that document the names of all persons who have been awarded certificates, their certificate numbers, the disciplines for which accreditation was conferred, training and expiration dates, and the training location. The training provider shall maintain the records in a manner that allows verification by telephone of the required information.

e. Records Retention and Access

i. The training provider shall maintain all required records for a minimum of three years. The training provider, however, may find it advantageous to retain these records for a longer period of time.

ii. The training provider must allow reasonable access to all of the records required by this Appendix, and to any other records which may be required for the approval of asbestos training providers or the accreditation of asbestos training courses, to both EPA and to state agencies, on request. EPA encourages training providers to make this information equally accessible to the general public.

iii. If a training provider ceases to conduct training, the training provider shall notify the Office of Environmental Services and give it the opportunity to take possession of that providers asbestos training records.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended LR 16:397 (May 1990), LR 16:1057 (December 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:700 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2458 (November 2000), amended by the Office of Environmental Assessment, LR 30:2022 (September 2004), LR 30:2803 (December 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2444 (October 2005), LR 33:2090 (October 2007).

Chapter 28. Lead-Based Paint Activities—Recognition, Accreditation, Licensure, and Standards for Conducting Lead-Based Paint Activities

§2801. Scope and Applicability

A. This Chapter contains procedures and requirements for the recognition of lead-based paint activities training providers, procedures and requirements for the accreditation of individuals, and licensure of contractors engaged in lead-based paint activities, project notifications, and work practice standards for performing such activities. Except as discussed below, all *lead-based paint activities*, as defined in this Chapter, must be performed by accredited individuals and licensed contractors.

B. This Chapter applies to all persons and contractors who are engaged in lead-based paint activities in *target housing* and *child-occupied facilities*, as defined in LAC 33:III.2803, except persons who perform these activities within residential dwellings that they own, unless the residential dwelling is occupied by a person or persons other than the owner or the owner's immediate family while these activities are being performed, or a child residing in the building has been identified as having an elevated blood lead level.

C. Public entities are exempt from the requirements for licensure; however, employees of public entities must be accredited in the appropriate disciplines. Public entities shall not be required to pay accreditation fees or notification fees.

D. The provisions of this Chapter shall not apply to lead-based paint activities or to persons performing such activities when such activities are performed wholly within an industrial facility and are performed by persons who are subject to the training requirements of the Occupational Safety and Health Administration's hazard communication standard.

E. All modifications to facilities or structures and to their component systems that may occur in conjunction with a lead abatement activity shall be designed in accordance with applicable state and municipal building codes.

F. Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the federal government having jurisdiction over any property or facility or engaged in any activity resulting, or which may result, in a lead-based paint hazard, and each officer, agent, or employee thereof shall be subject to, and comply with, all federal, state, interstate, and local requirements, both substantive and procedural, including the requirements of this Chapter regarding lead-based paint, lead-based paint activities, and lead-based paint hazards.

G. While this Chapter establishes specific requirements for performing lead-based paint activities should they be undertaken, nothing in this Chapter requires that the owner or occupant undertake any particular lead-based paint activity.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1662 (December 1997), amended LR 24:1686 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:2335 (November 2002).

§2803. Definitions

A. The terms used in this Chapter are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined in this Section as follows.

Abatement—any measure or set of measures designed to permanently eliminate lead-based paint hazards. *Abatement* includes, but is not limited to:

a. the removal of paint and dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of painted surfaces or fixtures, or the removal or permanent covering of soil when lead-based paint hazards are present in such paint, dust, or soil; and

b. all preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures.

Accreditation Certificate—a document issued by the department affirming that the person has successfully

completed the training and other requirements for lead-based paint activities.

Accredited Lead Inspector—an individual who has been trained by a recognized training provider and certified by the department to conduct inspections. An accredited inspector also samples for the presence of lead in dust and soil for the purposes of abatement clearance testing.

Accredited Lead Project Designer—an individual who has been trained by a recognized training provider and certified by the department to prepare abatement project designs, occupant and worker protection plans, and abatement reports. For the purposes of this Chapter, *lead project designer* is equivalent to *lead hazard reduction planner* in R.S. 30:2351.1.

Accredited Lead Project Supervisor—an individual who has been trained by a recognized training provider and certified by the department to supervise and conduct abatements and to prepare occupant and worker protection plans and abatement reports.

Accredited Lead Risk Assessor—an individual who has been trained by a recognized training provider and certified by the department to conduct risk assessments. A risk assessor also samples for the presence of lead in dust and soil for the purposes of abatement clearance testing.

Accredited Lead Worker—an individual who has been trained by a recognized training provider and certified by the department to perform abatements.

Adequate Quality Control—a plan or design to ensure the authenticity, integrity, and accuracy of lead-based paint samples, including dust, soil, and paint chip or paint film samples. *Adequate quality control* also includes provisions for representative sampling.

Arithmetic Mean—the algebraic sum of data values divided by the number of data values (e.g., the sum of the concentration of lead in several soil samples divided by the number of samples).

Bare Soil—any exposed earth not covered with grass, sod, or other vegetation.

Chewable Surface—an interior or exterior surface painted with lead-based paint that a young child can mouth or chew. Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

Child-Occupied Facility—a building or portion of a building or common area, other than the child's principal residence, constructed prior to 1978, that:

a. is visited regularly by the same child, age 6 years and under, on at least two different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least three hours, the combined weekly visit lasts at least six hours, and the combined annual visits last at least 60 hours. Examples of child-occupied facilities/common areas include, but are not limited to, schools attended by children, age 6 years and under, day care centers, parks, playgrounds, and community centers;

b. has been determined by the department, in conjunction with the state health officer, to be a significant risk because of its contribution to lead poisoning or lead exposure to children, age 6 years and under; or

c. is a child-occupied unit and common area in a multi-use building.

Clearance Levels—values that indicate the maximum amount of lead permitted in soil or dust on a surface following completion of an abatement activity. *Clearance levels* that are appropriate for the purposes of this Chapter are listed in LAC 33:III.2811.A.4.

Common Area—a portion of a building generally accessible to all occupants/users including, but not limited to, hallways, stairways, laundry and recreational rooms, playgrounds, community centers, garages, and boundary fences.

Component or Building Component—specific design or structural elements or fixtures of a building, residential dwelling, or child-occupied facility that are distinguished from each other by form, function, and location. These include, but are not limited to, interior components such as: ceilings, crown molding, walls, chair rails, doors, door trim, floors, fireplaces, radiators and other heating units, shelves, shelf supports, stair treads, stair risers, stair stringers, newel posts, railing caps, balustrades, windows and trim (including sashes, window heads, jambs, sills or stools, and troughs), built-in cabinets, columns, beams, bathroom vanities, counter tops, and air conditioners; and exterior components such as: painted roofing, chimneys, flashing, gutters and downspouts, ceilings, soffits, fascias, rake boards, corner boards, bulkheads, doors and door trim, fences, floors, joists, lattice work, railings and railing caps, siding, handrails, stair risers and treads, stair stringers, columns, balustrades, window sills or stools and troughs, casings, sashes and wells, and air conditioners.

Composite Sample—a collection of more than one sample of the same medium (such as dust, soil, or paint) from the same type surface (such as floor, interior window sill, or window trough), such that multiple samples can be analyzed as a single sample.

Concentration—the relative content of a specific substance contained within a larger mass, such as the amount of lead (in micrograms per gram or parts per million by weight) in a sample of dust or soil.

Containment—a barrier system to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during an abatement.

Course Agenda—an outline of the key topics to be covered during a training course, including the time allotted to teaching each topic.

Course Test—an evaluation of the overall effectiveness of the training that shall test the trainees' knowledge and retention of the topics covered during the course.

Course Test Blue Print—written documentation identifying the proportion of course test questions devoted to each major topic in the course curriculum.

Deteriorated Paint—any interior or exterior paint or other coating that is chalking, cracking, flaking, chipping, peeling, or otherwise separating from the substrate of a building component.

Discipline—one of the specific types or categories of lead-based paint activities identified in this Chapter for which individuals may receive training from recognized providers and become accredited by the department. For example, lead worker is a *discipline*.

Distinct Painting History—the application history, as indicated by its visual appearance or a record of application, over time, of paint or other surface coatings to a component or room.

Documented Methodologies—methods or protocols used to sample for the presence of lead in paint, dust, and soil. *Documented methodologies* that are appropriate to use for target housing and child-occupied facilities may be found in the American Society of Testing and Materials procedures, ASTM E1727, E1728, and E1792; the U.S. Department of Housing and Urban Development (HUD) *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (HUD-006700); the EPA *Guidance on Identification of Lead-Based Paint Hazards; Notice (FR 47248, Volume 60, Number 175)*; the EPA *Residential Sampling for Lead: Protocols for Dust and Soil Sampling* (EPA report number 747-R-95-001); and other EPA or HUD guidance.

Dripline—the area within 3 feet surrounding the perimeter of a building.

Dry Sanding or Dry Scraping—sanding or scraping without moisture and includes both hand and machine sanding. These practices are prohibited when removing lead-based paint (see LAC 33:III.2811.E.6).

Dust-Lead Hazard—surface dust in a residential building or child-occupied facility, or their exteriors, that contains a mass-per-area concentration of lead equal to or exceeding 40 micrograms per square foot or 250 micrograms per square foot on window sills based on wipe samples.

Elevated Blood Lead Level (EBL)—an excessive absorption of lead that is a confirmed concentration of lead in whole blood of 20 μg/dl (micrograms of lead per deciliter of whole blood) for a single venous test or of 15-19 μg/dl in two consecutive tests taken three to four months apart.

Encapsulant—a substance that forms a barrier between lead-based paint and the environment using a liquid-applied coating (with or without reinforcement materials) or an adhesively bonded covering material. For the purposes of this Chapter, only coatings or materials determined to be *encapsulants* by ASTM procedures are acceptable.

Enclosure—the use of rigid, durable construction materials that are mechanically fastened to the substrate in order to act as a barrier between lead-based paint and the environment.

Friction Surface—an interior or exterior surface that is subject to abrasion or friction including, but not limited to, certain window, floor, and stair surfaces.

Guest Instructor—an individual with expertise in a specific field who is designated by the training provider manager or principal instructor to provide instruction specific to certain course topics.

Hands-On Skills Assessment—an evaluation that tests the trainees' ability to perform specified work practices and procedures satisfactorily.

Impact Surface—an interior or exterior surface that is subject to damage by repeated sudden force, such as certain parts of door frames.

Inspection—a surface-by-surface investigation to determine the presence of lead-based paint and the provision of a report explaining the results of the investigation.

Interim Controls—a set of measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards, including specialized cleaning, repairs, maintenance, painting, temporary containment, ongoing monitoring of lead-based paint hazards or potential hazards, and the establishment and operation of management and occupant education programs.

Lead Contractor—any person, including self-employed individuals, who bid and/or perform lead-based paint abatements.

Lead Hazard Screen—a limited risk assessment activity conducted by an accredited risk assessor in target housing and child-occupied facilities that involves limited paint and dust sampling to determine the absence of a lead-based paint hazard as described in LAC 33:III.2811.D.

Lead Project Notification (LPN)—the notification document required by the department to report lead abatement projects. For the purposes of this Chapter, a completed notification, approved by the department and returned to the lead contractor, serves as a permit to proceed with the abatement project.

Lead-Based Paint—paint or other surface coatings that contain lead equal to or in excess of 1.0 milligrams per square centimeter or more than 0.5 percent by weight.

Lead-Based Paint Activities—in the case of *target housing* and *child-occupied facilities*, *inspection*, *lead hazard screen*, *risk assessment*, and *abatement* as defined by this Chapter. For the purposes of this Chapter, *lead-based paint activities* is equivalent to *lead hazard reduction activities* as defined in R.S. 30. 2351.1.

Lead-Based Paint Hazard—paint-lead hazards, *dust-lead hazards*, or *soil-lead hazards* as defined in this Section. For the purposes of this Chapter, *lead-based paint hazard* is equivalent to *lead hazard* as defined in R.S. 30:2351.1.

Lead-Contaminated Dust—surface dust in residential dwellings or child-occupied facilities that contains an area or mass concentration of lead at or in excess of clearance levels established by this Chapter.

Lead-Contaminated Soil—bare soil on residential real property and on the property of a child-occupied facility that contains lead at or in excess of clearance levels as established by this Chapter.

Lead-Contaminated Waste—any discarded material resulting from an abatement activity that fails the toxicity characteristic (LAC 33:V.4903.E) due to the presence of lead or any material that is a mixture of discarded material resulting from an abatement activity and some other material.

Living Area—any area of a residential dwelling used by one or more children age 6 years and under including, but not limited to, living rooms, kitchen areas, dens, play rooms, and children's bedrooms.

Loading—the quantity of a specific substance present per unit of surface area, such as the amount of lead in micrograms contained in the dust collected from a certain surface area divided by the surface area in square feet or square meters.

Mid-Yard—an area of residential yard approximately midway between the dripline of a residential building and the nearest property boundary or between driplines of a residential building and another building on the same property.

Multi-Family Dwelling—a building that has more than one residential dwelling unit.

Owner/Operator—any person who owns, leases, operates, controls, or supervises the building where an abatement occurs, or any person who owns, leases, operates, controls, or supervises an abatement.

Paint in Poor Condition—more than 10 square feet of deteriorated paint on exterior components with large surface areas; or more than 2 square feet of deteriorated paint on interior components with large surface areas (e.g., walls, ceilings, floors, doors); or more than 10 percent of the total surface area of the component is deteriorated on interior or exterior components with small surface areas (window sills, baseboards, soffits, trim).

Paint-Lead Hazard—

a. any lead-based paint on a friction surface that is subject to abrasion and where the lead dust levels on the nearest horizontal surface underneath the friction surface (e.g., the window sill or floor) are equal to or greater than the dust-lead hazard levels identified in this Chapter;

b. any damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component (such as a door knob that knocks into a wall or a door that knocks against its door frame);

c. any chewable lead-based painted surface on which there is evidence of teeth marks; and

d. any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

Permanently Covered Soil—soil that has been separated from human contact by the placement of a barrier consisting of solid, relatively impermeable materials, such as asphalt, pavement, or concrete. Grass, mulch, and other landscaping materials that are permeable are not considered permanent covering.

Person—any individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, governmental body, including the state and the federal government and its agencies, or any other legal entity or their legal representatives, agents, or assignees.

Personal Protection Equipment (PPE)—specialized clothing and equipment including, but not limited to, respirators, masks, and gloves designed to protect workers against chemical and physical hazards.

Play Area—an area of frequent soil contact by children 6 years of age or less as indicated by, but not limited to, such factors including the following: the presence of play equipment (e.g., sandboxes, swing sets, and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided by parents, residents, care givers, or property owners.

Principal Instructor—the individual who has the primary responsibility for organizing and teaching a particular course.

Public Entity—the state, any of its political subdivisions, or any agency or instrumentality of either.

Recognized Laboratory—an environmental laboratory recognized by EPA, in accordance with Toxic Substances Control Act (TSCA) Section 405(b), as being capable of performing an analysis for lead compounds in paint, soil, and dust.

Recognized Training Provider—a person approved by the department, in accordance with this Chapter, to provide training in lead-based paint activities.

Reduction—measures designed to reduce or eliminate human exposure to lead-based paint hazards through methods including interim controls and abatement.

Residential Building—a building containing one or more residential dwellings.

Residential Dwelling—a detached single family dwelling unit, including attached structures such as porches and stoops, or a single family dwelling unit in a structure that contains more than one separate residential dwelling unit, which is used or occupied or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons.

Risk Assessment—an on-site investigation conducted by an accredited risk assessor to determine the existence, nature, severity, and location of lead-based paint hazards and the provision of a report explaining the results of the investigation and providing options for reducing lead-based paint hazards.

Room—a separate part of the inside of a building, such as a bedroom, living room, dining room, kitchen, bathroom, laundry room, or utility room. To be considered a separate room, the *room* must be separated from adjoining rooms by built-in walls or archways that extend at least 6 inches from an intersecting wall. Half walls or bookcases count as room separators if built-in. Movable or collapsible partitions or partitions consisting solely of shelves or cabinets are not considered built-in walls. A screened in porch that is used as a living area is a *room*.

Soil-Lead Hazard—bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 parts per million (micrograms per gram) in a play area or average of 1,200 parts per million of bare soil in the rest of the yard based on soil samples.

Soil Sample—a sample collected in a representative location using ASTM E1727, *Standard Practice for Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques*, or equivalent method.

Substrate—the material directly beneath the painted surface out of which the components are constructed, including wood, drywall, plaster, brick, concrete, and metal.

Target Housing—any housing constructed prior to 1978, except housing for the elderly or persons with disabilities, unless any child who is six years of age or under resides or is expected to reside in such housing for the elderly or persons with disabilities, or any zero-bedroom dwelling.

Training Curriculum—an established set of course topics for instruction in a recognized training program for a particular discipline designed to provide specialized knowledge and skills.

Training Hour—at least 50 minutes of actual teaching including, but not limited to, time devoted to lecture, learning activities, small group activities, demonstrations, evaluations, and/or hands-on experience.

Training Manager—the individual responsible for administering a training program and monitoring the performance of the principal instructors and guest instructors.

Visual Inspection for Clearance Testing—the visual examination of the abatement site following an abatement action by an accredited inspector or accredited risk assessor for evidence that the abatement has been successfully completed, as indicated by the absence of visible residue, dust, and debris.

Visual Inspection for Risk Assessment—the visual examination by an accredited risk assessor to determine the existence of deteriorated lead-based paint or other potential sources of lead-based paint hazards.

Weighted Arithmetic Mean—the arithmetic mean of sample results weighted by the number of subsamples in each sample. Its purpose is to give influence to a sample relative to the surface area it represents. A single surface sample is comprised of a single subsample. A composite sample may contain from two to four subsamples of the same area as each other and of each single surface sample in the composite. The *weighted arithmetic mean* is obtained by summing, for all samples, the product of the sample's result multiplied by the number of subsamples in the sample and dividing the sum by the total number of subsamples contained in all samples. For example, the *weighted arithmetic mean* of a single surface sample containing 60 micrograms per square foot, a composite sample (three subsamples) containing 100 micrograms per square foot, and a composite sample (4 subsamples) containing 110 micrograms per square foot is 100 micrograms per square foot. This result is based on the equation [60+(3*100)+(4*110)]/(1+3+4).

Wet Sanding or Wet Scraping—a process to remove loose paint in which the painted surface to be sanded or scraped is kept wet to minimize the dispersal of paint chips and airborne dust.

Window Sill—the portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed.

Window Trough—the portion of the horizontal window sill that receives the window sash when the window is closed, often located between the storm window and the interior window sash (sometimes called the window well). If there is no storm window, the *window trough* is the portion of horizontal window trim that receives both the upper and lower window sash when the sashes are closed.

Wipe Sample—a sample collected by wiping a representative surface of known area, as determined by ASTM E1728, *Standard Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques*, or equivalent method, with an acceptable wipe material as defined in ASTM E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust, or equivalent method.

XRF Analyzer—an instrument that determines the amount of lead in a given area using the principle of x-ray fluorescence.

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§2805. Recognition and Standards for Training Providers

A. Application Process. A training provider shall not provide, offer, or claim to provide lead training courses for accreditation purposes without receiving recognition from the department. For a training provider to receive recognition for itself and its courses from the department, the following procedures shall be followed.

1. A training provider may seek recognition to offer initial and refresher training courses in the following disciplines: lead inspector, risk assessor, lead project supervisor, lead project designer, and lead worker.

2. A training provider seeking recognition shall submit to the Office of Environmental Services the appropriate fees, as required in LAC 33:III.223, a completed LPF-4 form, and a completed LPF-5 form for each trainer to be recognized, containing the following information:

a. the training provider's name, address, and telephone number;

b. a list of initial and refresher training courses for which recognition is sought;

c. a statement signed by the training manager that certifies that the training provider meets the minimum requirements established in Subsection B of this Section;

d. a signed statement by the training manager certifying that each instructor meets the qualifications described in Paragraph B.2 of this Section;

e. a statement signed by the training manager that certifies that the provider will use, if available, EPA-developed and EPA-authorized model training materials. Alternatively, if a training provider does not use EPA-developed and EPA-authorized training materials, its application for accreditation shall include a copy of the student and instructor manuals to be used for each course and a copy of the course agenda, which includes the time allocation for each course topic;

f. a copy of the test blueprint, which describes the proportion of course test questions devoted to each major course topic;

g. a description of the facilities and equipment available for lecture and hands-on training;

h. a description of the procedures for conducting the assessment of hands-on skills;

i. a copy of the quality control plan as described in Paragraph B.10 of this Section; and

j. an example of numbered certificates, as described in Paragraph B.8 of this Section, to be issued to students who successfully complete the training course.

3. The department shall approve or disapprove a request for recognition within 30 days of receiving the application from a training provider. Approved applicants will be notified in writing. Recognition will expire one year from the date on the approval letter. If the application is not approved, a letter describing the reasons for disapproval shall be sent to the applicant. The department may require submission of additional information, as needed. If a training provider's application is disapproved, the provider may reapply for recognition at any time.

4. A training provider may seek recognition for additional initial or refresher training courses at any time as long as the provider can demonstrate that it meets the minimum requirements of Subsection B of this Section.

B. Requirements for the Recognition of Training Providers. For a training provider to obtain recognition from the department to offer lead-based paint activities courses, the provider shall demonstrate, through its application materials, that it meets the following requirements for each course for which the provider is seeking recognition:

1. the training provider shall employ a training manager who has the primary responsibility for ensuring that the provider complies with the requirements of this Chapter. The training manager shall have:

a. at least two years of experience, education, or training in teaching adults; or

b. a bachelor's or graduate degree in building construction technology, science, engineering, industrial hygiene, safety, public health, education, business administration, or program management; or

c. two years of experience in managing a program specializing in environmental hazards; and

d. at least one year of experience, education, or training in the construction industry, including lead or asbestos abatement, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene;

2. all lead courses shall be organized and taught by qualified principal instructors. The training provider shall employ qualified principal instructors for each course who have:

a. at least one year of experience, education, or training in teaching adults;

b. training in the lead courses they are teaching;

c. current accreditation in the disciplines in which they instruct (lead worker course instructors shall maintain supervisor accreditation); and

d. at least one year of experience, education, or training in lead or asbestos abatement, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene;

3. the training manager may employ qualified guest instructors to provide instruction in specific areas of expertise, such as legal issues, health effects, insurance and technology, or equipment demonstrations;

4. the following items shall be recognized by the department as evidence that training managers and principal instructors have the relevant education, work experience,

training requirements, accreditations, and demonstrated experience:

a. official academic transcripts or diploma, as evidence of meeting the educational requirements;

b. résumés, letters of reference, or documentation of work experience, as evidence of meeting the work experience requirements; and

c. certificates from train-the-trainer courses, lead-specific training courses, and accreditations, as evidence of meeting the training requirements;

5. the training provider shall provide adequate facilities for lecture, course tests, hands-on training, and assessment. This includes providing training equipment that reflects current work practices and maintaining or updating the equipment and facilities as needed;

6. the training provider shall provide training courses that meet the following training hour requirements:

a. the lead inspector course shall consist of a minimum of 24 training hours, with a minimum of eight hours devoted to hands-on training. The minimum curriculum required for this course is established in Paragraph C.1 of this Section;

b. the risk assessor course shall consist of a minimum of 16 training hours with a minimum of four hours devoted to hands-on training. The minimum curriculum required for this course is established in Paragraph C.2 of this Section;

c. the lead project supervisor course shall consist of a minimum of 32 training hours, with a minimum of eight hours devoted to hands-on training. The minimum curriculum required for this course is established in Paragraph C.3 of this Section;

d. the lead project designer course shall consist of a minimum of eight training hours. The minimum curriculum required for this course is established in Paragraph C.4 of this Section; and

e. the lead worker course shall consist of a minimum of 16 training hours, with a minimum of eight hours devoted to hands-on training. The minimum curriculum required for this course is established in Paragraph C.5 of this Section;

7. for each course offered, the training provider shall conduct a course test at the completion of the course. In addition, at the completion of the hands-on skills training the principal instructor(s) shall conduct assessment of each student's hands-on skills. The student must demonstrate proficiency at hands-on skills to the satisfaction of the instructor and score 70 percent or greater on the course test to pass any course:

a. the training manager is responsible for maintaining the validity and integrity of the hands-on skills assessment to ensure that it accurately evaluates the students' performance of the work practices and procedures associated with the course topics;

b. the training manager is responsible for maintaining the validity and integrity of the course test to ensure that it accurately evaluates the students' knowledge and retention of the course topics; and

c. the course tests shall be developed in accordance with the test blueprint submitted with the application;

8. training providers shall issue unique initial and refresher training course completion certificates to each individual who successfully completes the course requirements. The course completion certificate shall include:

a. a unique certificate number;

b. the name, driver’s license or state identification number and the issuing state, and the address of the individual;

c. the name of the particular course that the individual completed;

d. the dates of course completion/test passage;

e. the name/address/telephone number of the training provider;

f. the following statement undersigned by the training manager:

> "Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (R.S. 30:2025), I certify that this training complies with all applicable requirements of TSCA Title IV, 40 CFR 745, and LAC 33:III.2805"; and

g. the expiration date, which is one year from the course completion date;

9. the training provider shall submit rosters, including photographs of participants, to the Office of Environmental Services within 10 working days of course completion. For each course, the training provider shall provide three photographs of each student:

a. one 1" x 1¼" photograph for the trainee to submit to the department with the application for accreditation;

b. one 1" x 1¼" photograph for the class roster submitted to the department by the training provider; and

c. one 1" x 1¼" photograph for the training provider to keep on file;

10. the training manager shall develop and implement a quality control plan. The plan shall be used to maintain or improve the quality of the training program over time. This plan shall contain at least the following elements:

a. procedures for periodic revision of training materials and course tests to reflect innovations in the field; and

b. procedures for the training manager's annual review of instructor competency;

11. training providers shall offer courses that teach the appropriate standards for conducting lead-based paint activities contained in LAC 33:III.2811, and other such standards adopted by the department;

12. the training manager shall be responsible for ensuring that the training provider complies at all times with all of the requirements of this Section;

13. the training manager shall allow the department to audit the training provider at any time during normal working hours;

14. training providers must be recognized to offer the initial training courses in order to offer the corresponding refresher training course(s):

a. a recognized refresher training course shall address the following topics:

i. an overview of current safety practices relating to lead-based paint activities in general, as well as specific information pertaining to the appropriate discipline;

ii. current laws and regulations relating to lead-based paint activities in general, as well as specific information pertaining to the appropriate discipline;

iii. current technologies relating to lead-based paint activities in general, as well as specific information pertaining to the appropriate discipline; and

iv. a review of the curriculum topics of the full-length course;

b. each refresher course, except for the project designer course, shall last a minimum of eight training hours and shall include a hands-on skills assessment if required in the original course. The project designer refresher course shall last a minimum of four training hours and does not require a hands-on skills assessment;

c. at the completion of the course, the student must pass a course test with a score of 70 percent or better; and

15. unannounced audits may be performed by the department to verify the certified statements, other contents of the application, and compliance with this Chapter.

C. Minimum Training Curricula Requirements. To obtain and maintain recognition training providers must ensure that their courses of study for the various lead-based paint activities disciplines cover the following subject areas. Passing students shall be provided with a course completion certificate:

[NOTE: Listed requirements ending in an asterisk (*), for this Subsection only, indicate areas that require hands-on experience as an integral component of the course.]

1. lead inspector:

a. role and responsibilities of lead inspector;

b. background information on lead and its adverse health effects;

c. background information on federal, state, and local regulations and guidance that pertains to lead-based paint and lead-based paint activities;

d. lead-based paint inspection methods, including selection of rooms and components for sampling or testing;*

e. paint, dust, and soil sampling methodologies;*

f. clearance standards and testing, including random sampling;*

g. preparation and submittal of the final inspection report;* and

h. recordkeeping;

2. risk assessor (inspector course completion certificate required as prerequisite):

a. role and responsibilities of risk assessor;

b. collection of background information to perform a risk assessment;

c. sources of environmental lead contamination such as paint, surface dust and soil, water, air, packaging, and food;

d. visual inspection for the purposes of identifying potential hazards associated with lead-based paint, dust-lead hazards, and soil-lead hazards;*

e. lead hazard screen protocol;

f. sampling for other sources of lead exposure;*

g. interpretation of lead-based paint and other lead sampling results;*

h. development of hazard control options, the role of interim controls, and operations and maintenance to reduce lead hazards; and

i. preparation of a final risk assessment report;

3. lead project supervisor:

a. role and responsibilities of lead project supervisor;

b. background information on lead and its adverse health effects;

c. background information on federal regulations that include 29 CFR 1926.62(1), state, and local regulations and guidance that pertain to lead-based paint abatement;

d. liability and insurance issues relating to lead-based paint abatement;

e. contract specifications, including conformance with building codes and cost estimation;

f. community relations;

g. project management and supervisory techniques;

h. risk assessment and inspection report interpretation;*

i. development and implementation of an occupant and worker protection plan and abatement report;

j. lead hazard recognition and control;*

k. lead-based paint abatement and lead hazard reduction methods, including restricted practices;*

l. interior dust abatement/cleanup or lead hazard control and reduction methods;*

m. soil and exterior dust abatement or lead hazard control and reduction methods;*

n. clearance standards and testing;

o. cleanup and waste disposal; and

p. recordkeeping;

4. project designer (lead project supervisor course completion certificate required as a prerequisite):

a. role and responsibilities of project designer;

b. development and implementation of an occupant and worker protection plan for large-scale abatement projects;

c. lead-based paint abatement and lead-based paint hazard reduction methods, including restricted practices for large-scale abatement projects;

d. interior dust abatement/cleanup or lead hazard control and reduction methods for large-scale abatement projects;

e. clearance standards and testing for large-scale abatement projects; and

f. integration of lead-based paint abatement methods with modernization and rehabilitation projects for large-scale abatement projects; and

5. lead worker:

a. role and responsibilities of lead worker;

b. background information on lead and its adverse health effects;

c. background information on federal regulations that must include 29 CFR 1926.62(l), state, and local regulations and federal and state guidance that pertain to lead-based paint abatement;

d. lead-based paint hazard recognition and control;*

e. personal protection equipment and personal hygiene;*

f. lead-based paint abatement and lead-based paint hazard reduction methods, including restricted practices;*

g. interior dust abatement methods/cleanup/waste disposal or lead-based paint hazard reduction;* and

h. soil and exterior dust abatement methods/cleanup/waste disposal or lead-based paint hazard reduction.*

D. Renewal of Training Provider's Recognition

1. A training provider seeking renewal of its recognition shall submit, along with the appropriate fees as required in LAC 33:III.223, a completed LPF-4 Form and a completed LPF-5 Form for each trainer to be recognized to the Office of Environmental Services 60 days prior to its expiration date. If a training provider does not submit its renewal application by that date, the department cannot guarantee the application will be reviewed and acted upon before the end of the one-year period.

2. The training provider's application for renewal of recognition shall contain:

a. the training provider's name, address, and telephone number;

b. a list of courses for which it is applying for renewal of recognition;

c. a description of any changes or updates to the training facility, equipment, or course materials; and

d. a statement signed by the training manager that certifies that:

i. the course materials for each course meet the requirements in Paragraphs C.1-5 of this Section, as appropriate;

ii. the principal instructors and guest instructors meet the qualifications in Paragraphs B.2-3 of this Section;

iii. the training provider complies at all times with all requirements in Subsection B of this Section;

iv. the quality control program meets the requirements in Paragraph B.10 of this Section; and

v. the recordkeeping and reporting requirements of Subsection G of this Section shall be followed.

3. A signed statement disclosing any violations of regulations governing training providers for which the applicant has been cited by any state or federal regulatory agency in the past year shall be submitted to the department. If no citation has been received during the previous year, that fact shall be stated. This disclosure shall include evidence that all penalties and fees assessed to the applicant are paid in full.

E. Notification Requirements. A training provider scheduling lead-based paint activities courses shall notify the Office of Environmental Services in writing as follows:

1. the written notification shall be received by the department at least five days before the start of initial training courses;

2. the written notification shall be received by the department at least two days before the start of refresher training courses;

3. the department shall be notified in writing of course location and time changes or cancellations 24 hours prior to the initial class day;

4. in the event that a training course must be scheduled immediately due to an emergency, notification to the department must be made as soon as possible, but no less than 24 hours prior to commencement of the course. Written justification for not notifying the department five working days in advance must be provided with the emergency training request;

5. in the notification, the training provider shall submit to the department the following information:

a. the name of the training course to be taught;

b. the dates and length of the training course;

c. the principal/guest instructors that will be teaching the course;

d. the name and telephone number of the training manager; and

e. the location where the course will be taught; and

6. the training course shall not start before the start date noted on the notification.

F. Suspension and Revocation of Recognized Training Providers

l. The department may suspend or revoke training provider recognition if a training provider has:

a. misrepresented the contents of a training course to the department and/or the student population;

b. failed to submit required information or notifications in a timely manner;

c. failed to maintain required records;

d. falsified records required by this Chapter, instructor qualifications, or other recognition information;

e. failed to comply with the training standards and other requirements of this Chapter;

f. failed to comply with federal, state, or local lead-based paint statutes or regulations; or

g. made false or misleading statements to the department, EPA, or another state in its application for recognition.

2. Suspension of training provider recognition shall be for no less than one year. Revocation of recognition shall be for no less than three years.

G. Training Provider Recordkeeping Requirements

1. Recognized training providers shall maintain, and make available to the department if requested, the following records:

a. all documents specified in Paragraph B.4 of this Section that demonstrate the qualifications listed in Paragraphs B.1-3 of this Section of the training manager, principal instructors, and guest instructors;

b. current curriculum/course materials and documents reflecting any changes made to these materials;

c. the course test blueprint;

d. information on how the hands-on assessment is conducted including, but not limited to, who conducts the assessment, how the skills are graded, what facilities are used, and the pass/fail rate;

e. the quality control plan as described in Paragraph B.10 of this Section; and

f. results of the student's hands-on skills assessments and course tests, and a copy of each student's course completion certificate and photograph.

2. Training providers may maintain records electronically.

3. The training provider shall retain these records at the location (e.g., address) specified on the training provider recognition application for five years.

4. The training provider shall notify the Office of Environmental Services 30 days prior to relocating its business or transferring its records.

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§2807. Accreditation of Individuals

A. Accreditation Requirements

1. Following the submission of an application and appropriate fees that meet the requirements of this Section and a determination by the department that an individual has met the applicable requirements to perform lead-based paint activities, the department shall accredit the applicant in one or more of the following disciplines:

a. lead inspector;

b. risk assessor;

c. lead project supervisor;

d. lead project designer; or

e. lead worker.

2. Individuals must be accredited by the department to engage in lead-based paint activities.

3. An individual seeking accreditation must have successfully completed the appropriate lead training course offered by a recognized training provider.

4. Individuals seeking accreditation in the lead inspector, risk assessor, lead project supervisor, or lead project designer disciplines must pass the applicable state examination given by the department or its proxy.

Individuals must pass the state examination, with a score of 70 percent or above. Individuals who fail the state examination will be allowed to take the examination again within a six-month period. Individuals who fail the state examination twice must retake the initial course before they will be allowed to retake the state examination. Anyone who fails the test three times within a six-month period may not apply for testing in that category for 90 days.

5. In order to take the state examination for a particular discipline, an individual shall present the following:

a. a valid course completion certificate for that discipline from a recognized training provider;

b. photographic proof of identity; and

c. documentation that the applicant meets the education and experience qualifications described in Subsection B of this Section.

6. An application for initial accreditation with the department shall include the following:

a. a completed and signed application form;

b. a copy of the initial course completion certificate and any subsequent refresher course completion certificates from recognized training providers in the discipline for which accreditation is sought, or a valid course completion certificate from another EPA-authorized state-recognized training provider. Workers who have received less than 24 hours of initial training must also submit proof of eight hours of training in 29 CFR 1926.62 (l);

c. a 1" x 1¼" photograph of the applicant issued by the recognized training provider;

d. proof of meeting the education and experience requirements listed in Subsection B of this Section; and

e. the appropriate fees as required in LAC 33:III.223.

7. The following documents shall be recognized by the department as proof of meeting the requirements listed in Subsection B of this Section:

a. official academic transcripts or diplomas;

b. résumés, letters of reference, or documentation of work experience; and

c. valid course completion certificates from recognized training providers.

8. Applications for accreditation or reaccreditation may be denied for:

a. failure to submit the required documentation and fees;

b. submission of inaccurate or falsified information; and

c. failure to comply with this Chapter.

9. Upon meeting the provisions of this Section, the applicant will be issued an accreditation certificate by the department. The issue date of the accreditation certificate shall become the annual renewal date of accreditation.

B. Education and Experience Requirements for the Lead Disciplines

1. To qualify for accreditation as a lead inspector, risk assessor, lead project supervisor, or lead project designer, an individual must:

a. successfully complete an initial course in the appropriate discipline and receive a course completion certificate from a recognized training provider;

b. pass the state lead certification examination in the appropriate discipline offered by the department or its proxy; and

c. meet or exceed the following experience and/or education requirements:

i. lead inspectors: a high school diploma (or equivalent);

ii. risk assessors: successful completion of a recognized training course and state certification examination for inspectors and risk assessors, and:

(a). a bachelor's degree and one year of experience in lead, asbestos, or environmental remediation work; or

(b). an associates degree and two years experience in lead, asbestos, or environmental remediation work; or

(c). certification as an industrial hygienist, professional engineer, or registered architect; or

(d). certification in an engineering, health, or environmental field (specifically, safety professional or environmental scientist); or

(e). a high school diploma (or equivalent), and at least four years of experience in lead, asbestos, or environmental remediation work;

iii. lead project supervisor: a high school diploma (or equivalent) and at least two years of experience in lead, asbestos, or environmental remediation work or in the building trades;

iv. project designers:

(a). bachelor's degree in engineering or architecture and one year of experience in building construction and design or a related field; or

(b). five years of experience in building construction and design.

2. To qualify for accreditation as a lead worker an individual must successfully complete an initial lead worker training course and receive a course completion certificate from a recognized training provider. There are no additional experience and/or education requirements.

C. Accreditation Based on Prior Training

1. Individuals in all disciplines who received training in a lead-based paint activity between January 1, 1995, and March 20, 1998, shall be eligible for accreditation by completing the following procedures:

a. submit a completed and signed application form to the Office of Environmental Services;

b. submit the appropriate certificate from an EPA-authorized state accredited training program; or

c. submit documentation to demonstrate the applicant has successfully completed training or on-the-job training in the conduct of a lead-based paint activity, and submit evidence of completion of an approved refresher training course for the appropriate discipline;

d. submit a 1" x 1¼" photograph of the applicant;

e. meet the education and/or experience requirements listed in Subsection B of this Section; and

f. submit the appropriate fees as required under LAC 33:III.223.

2. Individuals have until November 30, 1998, to apply for accreditation under the procedures in Paragraph C.1 of this Section. After that date all individuals wishing to obtain accreditation must do so through the procedures described in Subsection A of this Section.

D. Reaccreditation

1. To maintain accreditation individuals must be annually recertified by the Office of Environmental Services.

2. To maintain continuous accreditation an individual shall:

a. successfully complete the appropriate refresher course given by a recognized training provider 60 days prior to the accreditation expiration date;

b. submit a copy of the refresher course completion certificate to the Office of Environmental Services;

c. submit a 1" x 1¼" photograph of the applicant issued by the recognized training provider;

d. submit a signed and completed application form; and

e. submit the appropriate fees as required in LAC 33:III.223.

3. If the individual seeking reaccreditation receives refresher training earlier than 60 days prior to expiration or any time after the expiration date on the accreditation certificate, then the individual will receive a new expiration date.

4. If the individual fails to receive refresher training within one year after the accreditation expiration date, the individual must complete a refresher training course with a course test and hands-on assessment, as applicable, for the appropriate discipline in order to become recertified.

5. If an individual has not completed a refresher course within three years, the department shall require the applicant to:

a. pass the state lead certification examination in the appropriate discipline; or

b. complete a refresher training course with a course test and hands-on assessment, as applicable.

6. If an individual has not completed a refresher course within five or more years, the department shall require the applicant to complete a refresher training course with a course test and hands-on assessment, as applicable, and pass the state lead certification examination in the appropriate discipline.

E. Suspension and Revocation of Accreditations of Individuals Engaged in Lead-Based Paint Activities

1. The department may suspend or revoke an individual's accreditation if an individual has:

a. obtained training documentation through fraudulent means;

b. gained admission to and completed a recognized training course through misrepresentation of admission requirements;

c. obtained accreditation through misrepresentation of accreditation requirements or related documents dealing with education, training, professional registration, or experience;

d. performed work requiring accreditation at a job site without having proof of accreditation;

e. permitted the duplication or use of the individual's own certificate or photo identification by another;

f. performed work for which accreditation is required, but for which appropriate accreditation has not been received;

g. failed to comply with state lead-based paint statutes or regulations; or

h. failed to comply with the appropriate work practice standards for lead-based paint activities.

2. When suspension of accreditation credentials occurs, it shall be for no less than one year. When revocation occurs, it shall be for no less than three years. Penalties may also be assessed according to R.S. 30:2351.25(D).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1669 (December 1997), amended LR 24:2240 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2459 (November 2000), LR 28:2337 (November 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2446 (October 2005), LR 33:643 (April 2007), LR 33:2092 (October 2007).

§2809. Licensure of Lead Contractors

A. Licensure Requirements

1. In order to bid and/or perform abatement activities, lead contractors must obtain a lead-based paint abatement and removal license from the State of Louisiana Licensing Board for Contractors. Prior to obtaining an initial or renewal license, the lead contractor must submit an application for approval, along with the appropriate fees as required in LAC 33:III.223, to the Office of Environmental Services and certify to the department that the following criteria have been, or will be, met.

a. For target housing and child-occupied facilities, each qualifying person who conducts lead-based paint activities for the lead contractor is annually accredited as a lead project supervisor in accordance with the provisions of LAC 33:III.2807, and forms LPF-2ci and LPF-2th for each such person have been submitted.

b. For commercial buildings and steel structures, each qualifying person for the lead contractor is certified as a lead supervisor/competent person in accordance with SSPC C-3 or equivalent Occupational Safety and Health Administration (OSHA) competent person training, and form LPF-2ci for each such person has been submitted.

c. The lead contractor has access to at least one disposal site to receive lead-contaminated waste that may be generated by the lead contractor during the term of the license.

d. For target housing and child-occupied facilities, the lead contractor will incorporate the work practice standards in LAC 33:III.2811, and for commercial buildings and steel structures, the lead contractor will adhere to OSHA work practice standards and SSPC requirements, so as to prevent the contamination or recontamination of the environment and protect the public health from the hazards of exposure to lead.

e. The lead contractor possesses a worker protection and medical surveillance program consistent with the requirements of OSHA and/or the state health officer.

f. For target housing and child-occupied facilities, an accredited lead project supervisor will be present at all times during the lead contractor's abatements.

g. For commercial buildings and steel structures, a supervisor who is a certified lead supervisor/competent person in accordance with SSPC C-3 or equivalent OSHA competent person training will be available during commercial lead abatement activities.

h. The lead contractor will maintain all records as required by this Chapter.

2. Once the person receives a letter of approval, he can apply to the State of Louisiana Licensing Board for Contractors to request a license, subject to its approval.

a. Each person who conducts lead-based paint activities for the lead contractor shall be accredited annually in accordance with the provisions of LAC 33:III.2807.

b. The lead contractor shall have access to at least one disposal site to receive lead-contaminated waste that may be generated by the lead contractor during the term of the license.

c. The lead contractor shall incorporate the work practice standards in LAC 33:III.2811 so as to prevent the contamination or recontamination of the environment and protect the public health from the hazards of exposure to lead.

d. The lead contractor shall possess a worker protection and medical surveillance program consistent with the requirements of OSHA and/or the state health officer.

e. An accredited lead project supervisor shall be present at all times during all of the lead contractor's abatements.

f. The lead contractor shall maintain all records as required by this Chapter.

3. Applications for approval may be denied for:

a. failure to submit the required documentation and fees;

b. submission of inaccurate or falsified information; or

c. failure to comply with any of the provisions of this Chapter.

4. Letters of approval shall be valid through December 31 of issuance year. In order for lead contractors to be granted renewal, they must follow the procedures of this Subsection.

5. Lead contractors shall also submit to the department a signed statement disclosing any violations of state lead-based paint statutes or regulations for which the lead contractor may have been cited by the department or other state or federal agencies. If no citations were received since issuance of the previous letter of approval, that fact shall be stated. The disclosure shall include evidence that all penalties and fees assessed to the lead contractor have been paid in full. The department must receive the statement within 30 days prior to the renewal date, and the statement must be signed by the owner or an officer of the lead contractor's business. The department will approve or disapprove the application within 30 days of receipt of the application.

B. Suspension and Revocation of Letters of Approval for Lead Contractors

1. The department may suspend and/or revoke a lead contractor's letter of approval if the lead contractor performed work requiring licensure at a job site under one or more of the following situations:

a. with individuals who are not accredited and/or who have not successfully completed discipline-specific training in accordance with LAC 33:III.2807;

b. failed to use disposal sites approved by the department to receive lead-contaminated waste that may be

generated by the lead contractor during the term of the license;

c. failed to follow work practice standards that adequately protect the environment and public health from the hazards of exposure to lead;

d. failed to utilize a worker protection and medical surveillance program consistent with the requirements of the OSHA and/or the state health officer;

e. failed to have an accredited lead project supervisor present during the abatement project; or

f. failed to maintain required records.

2. In addition to the situations listed in Paragraph B.1 of this Section, the department may suspend or revoke the letter of approval of lead contractors that have failed to comply with any of the provisions of this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1671 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2459 (November 2000), LR 28:2338 (November 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2446 (October 2005), LR 33:643 (April 2007), LR 33:2092 (October 2007).

§2811. Work Practice Standards for Conducting Lead-Based Paint Activities for Target Housing and Child-Occupied Facilities

A. Applicability and Terms

1. All lead-based paint activities shall be performed in accordance with the work practice standards contained in this Section, except when treating paint-lead hazards of less than 2 square feet of deteriorated lead-based paint per room or equivalent, 20 square feet of deteriorated paint on the exterior of a building, or 10 percent of the total surface area of deteriorated paint on an interior or exterior type of component with a small surface area.

2. When performing an inspection, lead-hazard screen, risk assessment, or abatement, an accredited individual must perform that activity in compliance with the appropriate requirements contained in this Section.

3. Hazards related to paint, dust, and soil shall be determined as follows.

a. Lead-based paint is present on any surface that is tested and found to contain lead equal to or in excess of 1.0 milligrams per square centimeter or equal to or in excess of 0.5 percent by weight, and on any surface like a surface tested in the same room equivalent that has a similar painting history and that is found to be lead-based paint.

b. A paint-lead hazard shall be considered present:

i. on any friction surface that is subject to abrasion and where the lead dust levels on the nearest horizontal surface underneath the friction surface (e.g., the window sill or floor) are equal to or greater than the dust hazard levels defined in this Chapter;

ii. on any chewable lead-based paint surface on which there is evidence of teeth marks;

iii. where there is any damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component (such as a door knob that knocks into a wall or a door that knocks against its door frame); and

iv. if there is any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

c. A dust-lead hazard shall be considered present:

i. in a residential dwelling or child-occupied facility when in a residential dwelling on floors and interior window sills where the weighted arithmetic mean lead loading for all single surface or composite samples of floors and interior window sills are equal to or greater than 40 micrograms per square foot for floors and 250 micrograms per square foot for interior window sills, respectively;

ii. on floors or interior window sills in an unsampled residential dwelling in a multi-family dwelling, if a dust-lead hazard is present on floors or interior window sills, respectively, in at least one sampled residential unit on the property; and

iii. on floors or interior window sills in an unsampled common area in a multi-family dwelling, if a dust-lead hazard is present on floors or interior window sills, respectively, in at least one sampled common area in the same common area group on the property.

d. A soil-lead hazard shall be considered present:

i. in a play area when the soil-lead concentration from a composite play area sample of bare soil is equal to or greater than 400 parts per million; or

ii. in the rest of the yard, when the arithmetic mean lead concentration from a composite sample (or arithmetic mean of composite samples) of bare soil from the rest of the yard (i.e., non-play areas) for each residential building on a property is equal to or greater than 1,200 parts per million.

4. Clearance levels that are appropriate for the purposes of this Section are listed as follows:

a. dust wipes from floors/carpets: 40 micrograms per square foot;

b. dust wipes on window sills: 250 micrograms per square foot;

c. dust wipes on window troughs: 400 micrograms per square foot;

d. dust wipes from exterior surfaces: 400 micrograms per square foot;

e. lead-contaminated bare soil and lead-contaminated covered soil in areas expected to be used by children: 400 micrograms per gram; and

f. lead-contaminated covered soil in areas where contact by children is less likely or infrequent: 1200 micrograms per gram.

5. If using X-ray Fluorescence Spectroscopy (XRF) to test for the presence of lead-based paint, XRF shall be used according to the manufacturer's procedures. The XRF must be licensed in accordance with the department's Radiation Protection Regulations (LAC 33:XV).

B. Inspection

1. An inspection shall be conducted only by an accredited inspector or an accredited risk assessor according to the procedures in this Subsection.

2. When conducting an inspection, the following locations shall be selected according to documented methodologies and tested for the presence of lead-based paint:

a. in a residential dwelling and child-occupied facility, each component with a distinct painting history and each exterior component with a distinct painting history, except those components that the inspector or risk assessor determines to have been replaced after 1978 or to not contain lead-based paint; and

b. in a multi-family dwelling or child-occupied facility, each component with a distinct painting history in every common area, except those components that the inspector or risk assessor determines to have been replaced after 1978 or to not contain lead-based paint.

3. Paint shall be sampled in the following manner:

a. paint shall be analyzed to determine the presence of lead using documented methodologies that incorporate adequate quality control procedures; and/or

b. all collected paint chip samples shall be analyzed by a recognized laboratory to determine the concentration of lead.

4. The accredited inspector or the accredited risk assessor shall prepare an inspection report that shall include the following information:

a. date of each inspection;

b. address of building;

c. date of construction;

d. apartment numbers (if applicable);

e. name, address, and telephone number of the owner or owners of each residential dwelling or child-occupied facility;

f. name, signature, and accreditation number of each inspector and/or risk assessor conducting testing;

g. name, address, and telephone number of the licensed contractor employing each inspector and/or risk assessor, if applicable;

h. name, address, and telephone number of each recognized laboratory conducting an analysis of collected samples;

i. each testing method and device and/or sampling procedure employed for paint analysis, including quality control data and, if used, the serial number of any XRF device;

j. specific locations of each painted component tested for the presence of lead-based paint;

k. all sample data; and

l. results of the inspection expressed in terms appropriate to the sampling method used.

C. Lead Hazard Screen

1. A lead hazard screen shall be conducted only by an accredited risk assessor to determine the absence of a lead-based paint hazard in target housing and child-occupied facilities constructed after 1960. Lead hazard screens or similar lead hazard surveys shall not be used to determine the extent of lead-based paint hazards in target housing and child-occupied facilities.

2. If any dust sample collected during the screen contains a lead level greater than half of the applicable clearance level for the tested component; or any sampled paint that is found to be lead-based paint, then the lead hazard screen cannot be used to determine the extent of the lead-based paint hazard.

3. A lead hazard screen shall be conducted as follows:

a. background information regarding the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to one or more children, age 6 years and under, shall be collected;

b. a visual inspection of the residential dwelling or child-occupied facility shall be conducted to:

i. determine if any deteriorated paint is present; and

ii. locate at least two dust sampling locations;

c. if deteriorated paint is present, each surface with deteriorated paint that is determined, using documented methodologies, to be in poor condition and to have a distinct painting history shall be tested for the presence of lead;

d. in residential dwellings two composite dust samples shall be collected, one from the floors and the other from the windows, in rooms, hallways, or stairwells where one or more children, age 6 years and under, are most likely to come in contact with dust; and

e. in multi-family dwellings or child-occupied facilities, in addition to the floor and window samples, the risk assessor shall also collect composite dust samples from

common areas where one or more children, age 6 years and under, are most likely to come into contact with dust.

4. Dust samples shall be collected and analyzed in the following manner:

a. all dust samples shall be taken using documented methodologies that incorporate adequate quality control procedures; and

b. all collected dust samples shall be analyzed by a recognized laboratory to determine the concentration of lead.

5. Paint shall be sampled in the following manner:

a. paint shall be analyzed to determine the presence of lead using documented methodologies that incorporate adequate quality control procedures; and/or

b. all collected paint chip samples shall be analyzed by a recognized laboratory to determine the concentration of lead.

6. The risk assessor shall prepare a lead hazard screen report, which shall include the following information:

a. the information required in a risk assessment report as specified in Paragraph D.11 of this Section. Additionally, any background information collected in accordance with Paragraph D.3 of this Section shall be included in the risk assessment report; and

b. recommendations, if warranted, for a follow-up risk assessment and, as appropriate, any further actions.

D. Risk Assessment

1. A risk assessment shall be conducted only by an accredited risk assessor and, if conducted, must be conducted according to the procedures in this Subsection.

2. A visual inspection for risk assessment of the residential dwelling or child-occupied facility shall be undertaken to locate the existence of deteriorated paint, assess the extent and causes of the deterioration, and determine other potential lead-based paint hazards.

3. Background information regarding the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to one or more children, age six years and under, shall be collected.

4. Each surface with deteriorated paint that is determined, using documented methodologies, to be in poor condition and to have a distinct painting history shall be tested for the presence of lead. Each other surface determined, using documented methodologies, to be a potential lead-based paint hazard and having a distinct painting history shall also be tested for the presence of lead.

5. In residential dwellings dust samples (either composite or single-surface samples) from the window and floor shall be collected and analyzed for lead concentrations in all living areas where one or more children, age six years and under, are most likely to come into contact with a dust-lead hazard.

6. For multi-family dwellings and child-occupied facilities, the samples required in Paragraph D.4 of this Section shall be taken. In addition, window and floor dust samples (either composite or single-surface samples) shall be collected in the following locations:

a. common areas adjacent to the sampled residential dwelling or child-occupied facility; and

b. other common areas in the building where the risk assessor determines that one or more children, age six years and under, are likely to come into contact with a dust-lead hazard.

7. For child-occupied facilities window and floor dust samples (either composite or single-surface samples) shall be collected and analyzed for lead concentrations in each room, hallway, or stairwell utilized by one or more children, age six years and under, and in other common areas in the child-occupied facility where the risk assessor determines one or more children, age six years and under, are likely to come into contact with a dust-lead hazard.

8. Soil samples shall be collected and analyzed for lead concentrations in the following locations:

a. exterior play areas and non-play areas where bare soil is present; and

b. dripline/foundation areas where bare soil is present.

9. Any paint, dust, or soil sampling or testing shall be conducted using documented methodologies that incorporate adequate quality control procedures.

10. Any collected paint chip, dust, or soil samples shall be analyzed by a recognized laboratory to determine the concentration of lead.

11. The accredited risk assessor shall prepare a risk assessment report that shall include the following information:

a. date of assessment;

b. address of each building;

c. date of construction of buildings;

d. apartment number (if applicable);

e. name, address, and telephone number of each owner of each building;

f. name, signature, and accreditation of the accredited risk assessor conducting the assessment;

g. name, address, and telephone number of the licensed contractor employing each accredited risk assessor, if applicable;

h. name, address, and telephone number of each recognized laboratory conducting analysis of collected samples;

i. results of the visual inspection;

j. testing method and sampling procedure employed for paint analysis;

k. specific locations of each painted component tested for the presence of lead;

l. all data collected from on-site testing, including quality control data and, if used, the serial number of any XRF device;

m. all results of laboratory analysis on collected paint, soil, and dust samples;

n. any other sampling results;

o. any background information collected in accordance with Paragraph D.3 of this Section;

p. to the extent that they are used as part of the lead-based paint hazard determination, results of any previous inspections or analyses for presence of lead-based paint or other assessments of lead-based paint-related hazards;

q. description of the location, type, and severity of identified lead-based paint hazards and any other potential lead hazards; and

r. description of interim controls and/or abatement options for each identified lead-based paint hazard and a suggested prioritization for addressing each hazard. If the use of an encapsulant or enclosure is recommended, the report shall recommend a maintenance and monitoring schedule for the encapsulant or enclosure.

E. Abatement

1. An abatement shall be conducted only by persons accredited by the department according to the procedures in this Section.

2. An accredited lead project supervisor must be present at all times for each abatement project, as described in the lead project notification.

3. The accredited lead project supervisor and the lead contractor employing that supervisor shall ensure that all abatement activities are conducted according to the requirements of this Section.

4. The lead contractor shall notify the Office of Environmental Services in writing of abatement activities.

a. Regular notification shall be made using a department-approved form and be postmarked or hand-delivered at least five working days prior to beginning any on-site work at the lead abatement project. The notification must be accompanied by the appropriate fees (LAC 33:III.223).

b. The project shall not start before the start date noted on the Lead Project Notification (LPN). The Office of Environmental Services shall be notified if the operation will stop for a day or more during the project time noted on the LPN or if the project has been canceled or postponed. The firm shall also give notice 24 hours before the completion of a project. Notice shall be submitted to the department with written follow-up and fax notification to the appropriate regional office.

c. A notification of less than five working days constitutes an emergency notification and must be submitted within 48 hours of the start of the project. The notification must be accompanied by the appropriate processing fees (LAC 33:III.223).

d. Failure to submit a complete and accurate notification or failure to submit appropriate fees will cause the notification to be rejected and constitutes a failure to notify.

5. A written occupant and worker protection plan shall be developed for all abatement projects and shall be prepared according to the following procedures:

a. the occupant protection plan shall be unique to each residential dwelling or child-occupied facility and be developed prior to the abatement. The occupant protection plan shall describe the measures and management procedures that will be taken during the abatement to protect the building occupants from exposure to any lead-based paint hazards;

b. the worker protection plan shall describe the measures taken to ensure worker protection that are consistent with OSHA (29 CFR 1926.62) and/or the state health officer requirements; and

c. an accredited lead project supervisor or project designer shall prepare the occupant and worker protection plans.

6. The work practices shall be restricted during an abatement as follows:

a. open-flame burning or torching of lead-based paint is prohibited;

b. machine sanding or grinding or dry abrasive blasting or sandblasting of lead-based paint is prohibited unless used with attached High Efficiency Particulate Air (HEPA) vacuum-shrouded exhaust control, which removes particles of 0.3 microns or larger from the air at 99.97 percent or greater efficiency;

c. operating a heat gun on lead-based paint is permitted only at temperatures below 1100°F; and

d. dry scraping of lead-based paint is permitted only in conjunction with heat guns or adjacent to electrical outlets or when treating defective paint spots totaling no more than 2 square feet in any one room, hallway, or stairwell or totaling no more than 20 square feet on exterior surfaces.

7. For any exterior abatement of lead-based paint, pre-abatement composite soil samples following documented methodologies that incorporate adequate quality control procedures shall be taken by an accredited inspector or an accredited risk assessor next to the foundation or from the dripline below any exterior surface to be abated, unless this information is available from a current risk assessment. The samples shall be sent for analysis to a recognized laboratory capable of performing these analyses. When analysis results

exceed 400 micrograms per gram and bare soil is present, the contractor will furnish a written copy of the analysis results to the owner/operator of the residential dwelling or child-occupied facility prior to abatement.

8. If conducted, soil abatement shall be conducted in one of the following ways:

a. if soil is removed, the lead-contaminated soil shall be replaced with soil that is not lead-contaminated. Any lead-contaminated soil that is removed shall not be used as top soil at another residential property or child-occupied facility; or

b. if soil is not removed, the lead-contaminated soil shall be *permanently covered*, as defined in LAC 33:III.2803.

9. The following post-abatement clearance procedures shall be performed only by an accredited inspector or an accredited risk assessor:

a. following an abatement, a visual inspection shall be performed to determine if deteriorated painted surfaces and/or visible amounts of dust, debris, or residue are still present. If deteriorated painted surfaces or visible amounts of dust, debris, or residue are present, these conditions must be eliminated prior to the continuation of the clearance procedures;

b. following the visual inspection and any required post-abatement cleanup, clearance sampling for lead-contaminated dust shall be conducted. Clearance sampling may be conducted by employing single-surface sampling or composite sampling techniques;

c. dust samples for clearance purposes shall be taken using documented methodologies that incorporate adequate quality control procedures;

d. dust samples for clearance purposes shall be taken a minimum of one hour after completion of final post-abatement cleanup activities;

e. the following post-abatement clearance activities shall be conducted based upon the extent of abatement activities conducted in or to the residential dwelling or child-occupied facility:

i. after conducting an abatement with containment between abated and unabated areas, one dust sample shall be taken from one window (if available) and one dust sample shall be taken from the floor of at least four rooms, hallways, or stairwells within the containment area. In addition, one dust sample shall be taken from the floor outside the containment area. If there are fewer than four rooms, hallways, or stairwells within the containment area, then all rooms, hallways, or stairwells shall be sampled;

ii. after conducting an abatement with no containment, two dust samples shall be taken from at least four rooms, hallways, or stairwells in the residential dwelling or child-occupied facility. One dust sample shall be taken from one window (if available) and one dust sample shall be taken from the floor of each room, hallway, or stairwell selected. If there are fewer than four rooms, hallways, or stairwells within the residential dwelling or child-occupied facility then all rooms, hallways, or stairwells shall be sampled;

iii. following an exterior paint abatement, a visible inspection and sampling shall be conducted as follows. All horizontal surfaces in the outdoor living area closest to the abated surface shall be found to be cleaned of visible dust and debris:

(a). a visual inspection shall be conducted to determine the presence of paint chips on the dripline or next to the foundation below any exterior surface abated. If paint chips are present they must be removed from the site and properly disposed of, according to all applicable federal and state requirements; and

(b). in addition, sampling shall consist of at least one sample taken from an adjacent exterior horizontal surface including, but not limited to, a patio, deck, porch, stoop, or common area and composite soil samples taken next to the foundation or from the dripline and any bare soil areas adjacent to the exterior abatement that children, age six years and under, frequent. When analysis results indicate that the post-abatement soil lead content exceeds the pre-abatement level, then the abatement contractor shall abate the soil according to Paragraph E.8 of this Section;

iv. following soil abatement, at least two composite soil samples shall be taken from the abated area according to documented methodologies. When analysis results indicate that the post-abatement soil lead content exceeds the pre-abatement level, then the abatement contractor shall abate the soil according to Paragraph E.8 of this Section;

f. the rooms, hallways, or stairwells selected for sampling shall be selected according to documented methodologies; and

g. the accredited inspector or the accredited risk assessor shall compare the residual lead level (as determined by the laboratory analysis) from each dust sample with applicable clearance levels for lead in dust on floors, carpets, and windows. If the residual lead levels in a dust sample are equal to or exceed the clearance levels, all the components represented by the failed sample shall be recleaned and retested until clearance levels are met. Until all applicable clearance levels for lead in dust are met, the area shall not be cleared for reoccupancy.

10. In a multi-family dwelling with similarly constructed and maintained residential dwellings, random sampling for the purposes of clearance may be conducted provided:

a. the accredited individuals who abate or clean the residential dwellings do not know which residential dwelling will be selected for the random sample;

b. a sufficient number of residential dwellings are selected for dust sampling to provide a 95 percent level of confidence that no more than 5 percent or 50 of the

residential dwellings (whichever is smaller) in the randomly sampled population exceed the appropriate clearance levels; and

c. the randomly selected residential dwellings shall be sampled and evaluated for clearance according to the procedures found in Paragraph E.9 of this Section.

11. An abatement report shall be prepared by an accredited lead project supervisor or an accredited project designer. The abatement report shall include the following information:

a. start and completion dates of the abatement;

b. the name and address of each licensed contractor conducting the abatement and the name of each supervisor assigned to the abatement project;

c. the occupant and worker protection plan;

d. the name, address, and signature of each accredited risk assessor or accredited inspector conducting clearance sampling and the date of clearance testing;

e. the results of clearance testing and all soil analyses (if applicable) and the name of each recognized laboratory that conducted the analyses;

f. a detailed written description of the abatement, including abatement methods used, locations of rooms and/or components where abatement occurred, reason for selecting particular abatement methods for each component, and any suggested monitoring of encapsulants or enclosures; and

g. information on the storage, transport, and disposal of any waste generated during the abatement.

12. All lead-contaminated waste and construction debris from abatement projects shall be disposed of in accordance with federal, state, and local requirements.

13. All modifications to residences or child-occupied facilities and to their component systems that may occur during the abatement shall be designed and performed in accordance with applicable state and municipal building codes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1672 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2459 (November 2000), repromulgated LR 27:39 (January 2001), amended LR 28:2338 (November 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2446 (October 2005), LR 33:644 (April 2007), LR 33:2092 (October 2007).

§2813. Recordkeeping Requirements for Lead-Based Paint Activities

A. All records, reports, and plans required by this Chapter for inspections, hazard screens, risk assessments, and abatements shall be maintained by the owner of the residence, in the case of target housing, or the owner or operator of a residential dwelling or child-occupied building, and by the contractor or accredited individual who conducted the activities, for at least three years. The contractor or accredited individual shall provide copies of these reports to the owner/operator who contracted for its services. Any person who is required by this Chapter to maintain records may utilize the services of competent organizations such as industry trade associations and employee associations to maintain such records.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1676 (December 1997), amended by the Office of the Secretary, Legal Affairs Division, LR 33:644 (April 2007).

§2815. Enforcement

A. For failure to comply with the regulations of this Chapter, knowingly submitting false or inaccurate information, or directing others in such actions, civil and criminal penalties may be assessed under R.S. 30:2025 and R.S. 30:2351.25.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2025, 2054, and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1676 (December 1997).

§2817. Reciprocity

A. Individuals seeking accreditation from the department for a specific discipline, based upon accreditation by EPA or an EPA-approved state or Indian tribal program, shall submit copies of the following documents:

1. a valid lead-based paint activities certification (or equivalent) from EPA or an EPA-approved state or tribal program;

2. a training course certificate, issued by a training provider who, at the time the training certificate was issued, was an EPA or EPA-approved state or tribal program authorized training provider, and all subsequent annual refresher training certificates;

3. certification of a passing score on the applicable accreditation examination, if applicable;

4. an official academic transcript or diploma that meets the educational requirements in LAC 33:III.2807; and

5. a completed application for accreditation in the specific discipline and one 1" x 1 1/4" photograph of the applicant, with the appropriate fees.

B. Exception. An individual who seeks accreditation as a lead project supervisor for the purpose of obtaining a letter of approval (LAC 33:III.2809) must take the Louisiana state examination for that discipline.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation

Protection, Air Quality Division, LR 23:1676 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:2339 (November 2002).

§2819. Fees

A. Fees are defined in R.S. 30:2351.59 and listed in LAC 33:III.223.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1676 (December 1997).

Chapter 29. Odor Regulations

§2901. Odorous Substances

A. Purpose. The purpose of this Chapter is to establish an ambient air standard for odors.

B. Scope. This Section is applicable to all sources which emit odorous substances into the ambient air except those exempted in LAC 33:III.2901.E.

C. Definitions

Odor Dilution Ratio—the dilution of a sample required to reach a given odor intensity level, detectability point, sensory target, etc. This is represented by Z_t.

$$Z_t = C_o/C_t$$

where:

C_o = the odorant concentration (of the sample); and

C_t = the odorant concentration when some sensory target has been reached, such as the odor threshold.

Perceived Odor Intensity—the intensity of an odor sensation which is independent of the knowledge of the odorant concentration.

D. Standard. Limit on Odorous Substances at or beyond Property Lines. A person shall not discharge an odorous substance which causes a perceived odor intensity of six or greater on the specified eight point butanol scale when determined by the department's test method. (Method 41)

E. Exemptions. The following buildings, materials and operations are exempted from the provisions of this regulation:

1. single family dwellings;

2. restaurants;

3. other establishments for the purpose of preparing food for human consumption;

4. materials odorized for safety purposes;

5. materials possessing strong odors for reasons of public health and welfare where no suitable substitute is available and where best modern practices are employed;

6. agricultural, fiber, timber, poultry, seafood or fisheries production, unless such odors are detected in concentrations or intensities above that normally detected from these processes or byproducts when using applicable air pollution control devices; and

7. emission points regulated under the Total Reduced Sulfur (TRS) emission standard (LAC 33:III.2301.D.3).

F. Sample Analysis

1. Collection of Samples. Samples shall be taken and transported in a manner which minimizes alteration of the samples either by contamination or loss of material.

2. All samples shall be evaluated as soon after collection as possible in accordance with the procedures set forth in Subsection G of this Section.

G. Method 41—Odor Test Methods

1. Butanol Odor Evaluation Procedure

a. Sampling and Storage. Odorous gas sampling is no more than typical integrated bag sampling. Figure l shows the sampling train used by the department. A sample bag is placed inside the rigid leak-proof container. Bag material shall be manufactured of FEP Teflon, Tedlar, or Mylar.

b. The bag is filled by partially evacuating the rigid container. After partial filling, the air in the bag is expelled by pumping air into the container until the bag is empty. This serves to precondition the bag walls.

c. The bag is then totally filled by evacuating the container with a pump. The bag is removed, capped or sealed, and tagged for storage and eventual transport to the odor lab for sample evaluation. See Figure l for apparatus setup.

d. If the odorous air is very humid, and it is suspected that condensation of water will occur in the bags, an additional procedure, predilution, can be used to prevent condensation. The bag is half filled with odor-free air using a cylinder and flowmeter. This will allow exact metering of a known amount of odor-free air; the odorous air sample can then be taken per previous instructions.

e. Odorous samples should be stored in containers for a minimum of time after collection. This should be adhered to wherever possible and the time of storage, before odor measurement, must be recorded for each sample. Ideal storage conditions are less than four hours; acceptable conditions for most odor mixtures are 8-16 hours. Storage over 24 hours is unacceptable. In general, to prevent sample deterioration:

i. use FEP Teflon, Tedlar, or Mylar bags;

ii. minimize sample storage time; and

iii. predilute sample bag or use other suitable means to remove moisture if condensation is evident on the bag wall.

2. The department uses butanol referencing techniques for quantifying odors in terms of intensity. The method parallels that specified in ASTM E544-75. A complete description of the method follows.

a. Description

i. Figure 2 depicts the olfactometer. Adjustable air flow controls are mounted on the rectangular base plate. The odorant vapor generator, flow splitters, and ports that deliver the prepared stimuli (butanol) are mounted on an aluminum plate disc that can be rotated within an almost full revolution. A handle is positioned to turn the sample ports and is set to limit the rotation of the disc to one turn.

ii. There are two air flow systems within the olfactometer, each is controlled by a separate valve (V) and monitored by separate in-line flowmeters (F_1, F_2). Both can be supplied from the same air supply.

iii. Odorant vapor flow system is supplied with air at a rate of 350 ml/min (left flowmeter). This air flow is delivered to the odorant vapor generator through a flexible food-grade (almost odorless) Tygon tubing (T). The odorant vapor generator consists of a glass vessel (G) and several flow-controlling capillaries. This section is shown separately schematically in Figure 3.

iv. The odorant vapor/air mixture from the generator is supplied to the upper cavity of the "odor splitter" (O) through the upper tubular spout of this splitter. The splitter distributes the generator-prepared vapor/air mixture to eight stainless steel capillaries. The other ends of the capillaries connect via Teflon tubing to the corresponding glass sniffing ports. The capillaries are calibrated so that Port Number 8 (highest odorant concentration) receives mominally 160 ml/min of the vapor/air mixture, and the next Port, Number 7, receives nominally 80 ml/min of the same mixture. Other ports receive odorant volumes as per Table l.

v. The make-up air flow system, which is controlled by the valve-Flowmeter assembly (F_2), is fed at 950 ml/min. It is distributed by the lower level of the splitter (O). The make-up air is delivered to this level via Tygon tubing attached to the spout of the splitter under the olfactometer disc. There is no connection between the lower level and upper level of the splitter. The lower splitter provides additional air to Ports Number 7 through Number 1 so that the total flow to each port is nominally 160 ml/min. Mixing occurs in the port. Rapid flow rate changes occur on emergence from the Teflon tubing and from the lower smaller cross section of the glass port into the wider vertical glass tube portion. This action assures sufficient turbulence for adequate mixing.

(a). Flow rates are measured, if necessary, by attaching a Buck Calibrator flowmeter to ends of the Teflon tubings temporarily pulled out of the ports. Nominal flow rates should be:

Table 1

	Odorant Vapor-Carrying Tubing End	Make-Up Air
Port Number	**Tubing End (ml/min)**	**Tubing End (ml/min)**
8	160	
7	80	80
6	40	120
5	20	140
4	10	150
3	5	155
2	2.5	157.5
1	1.25	158.5

(b). The actual flow rates may differ, usually not more than within a few percent, and are measured and included in calculations in more exact experiments.

vi. Vapor generator section, Figure 3, contains a saturator, (Vessel G) which consists of a horizontal 16 mm o.d. by 170 mm long Pyrex tube with closed ends and three side tubes, each 4 mm o.d. and 25 mm long. The middle tube is used to introduce the odorant (butanol) and is then closed with a glass rod plug, P, connected to the side tube by a short length of black neoprene tubing.

vii. Important Safety Note. When slipping the neoprene tubing onto the glass side tubes, hold the side tube with fingers using short neoprene tubing collar with which the tube is equipped. Twist the attachable neoprene tubing to and fro, to facilitate the connection. If the glass vessel is held instead, the small glass side tubes may break off. Use the same precautions when removing the attachable tubing. Same applies to the other glass tubing/neoprene slip-on connections. Collars are not shown in Figure 3.

viii. The two other glass side tubes on the vessel are connected to the flow control capillaries. Capillary C is the principal vapor flow control capillary, while Capillary E is simply an exit capillary, with much less flow resistance than C. Capillary B is for air bypass; it is always of the same size and length, while Capillary C may be changed to provide 5x, 25x, 50x, and 100x flow split ratio. The department will use the nominal 5x flow split ratio in establishing its butanol scale. The ratio of flow rates through bypass B and through the saturator vessel vapor space depend on the flow resistances of B and C. Capillary C is upstream of the vapor space to maintain air pressure in the saturator vessel close to atmospheric.

ix. The desirable volume of odorant in the saturator vessel is 8-10 ml, which fills the lower half of the vessel and provides the widest surface. At up to 60 ml/min air flow, the air leaving the saturator is practically saturated with the odorant vapor, as has been established by mass-transfer calculations and direct measurements of l-butanol concentrations by hydrogen flame ionization detector; at 60 ml/min, 98 percent plus saturation is reached. The degree of saturation is not a function of the vapor pressure (which varies with odorants by several orders of magnitude), but of the diffusion constant for the odorant in air, and this constant varies from odorant to odorant within a fraction of one order of magnitude. The method of air passage over the surface

circumvents the need for mist filters needed when the saturation is by bubbling the air through the odorant. At lower flow rates, a few drops of the odorant may provide enough evaporation surface.

x. Vaporization rates are too low to produce significant cooling except for the most volatile odorants. Hence, for simplicity, no thermostating is provided, but the temperature at the saturator vessel is measured for use in vapor pressure calculations. The temperature in the area of the apparatus will be maintained at 25°C.

xi. The vapor dilution immediately after the saturation in the vessel produces a margin of safety in preventing condensation in the 8-way splitter, in case of a temperature change or sudden pressure drop.

xii. Connections to the stainless steel capillaries are via slip connectors, as shown in Figure 3. A short (5 MM) length of food-grade Tygon tubing fits tightly around the Capillary. A piece of black neoprene tubing overlaps this tubing and the larger connecting tube (brass tee, or glass side tube, or multi-way air or odorant-side splitter) so that the small Tygon tubing fits tightly against the larger tube. This system permits only a limited contact between the odorant vapor and Tygon and neoprene. These materials can be reached by vapors only by a non-connective diffusion through stagnant annular space between the o.d. of the capillary and the larger connecting tube; thus, depletion of vapor by sorption into Tygon or neoprene is negligibly small. In reverse, when the odorant vapor is discontinued, contamination of air flow by desorption of the odorant from Tygon or neoprene is slow and usually does not generate a prolonged contamination problem of any significance. Still, it is desirable to flush the odorant vapor flow system during the shutdown.

xiii. Connections between B and E Capillaries are via brass tees and slip on connectors. To check the generator system splitter ratio, brass tee (T) is pulled off B and E, and the flow rates out of B and E are measured using the same total odorant vapor flow rate as normal (the splitter ratio may be slightly affected on the absolute flow rates).

xiv. Important—only soap film flowmeters are suitable for measuring the flow rates in ports and at B and E. Other flowmeters produce some flow resistance which, in the low-pressure flow system of the olfactometer, will influence the flow rates and yield wrong values. Figure 3, bottom, illustrates connections to the soap film flowmeter for two situations:

(a). connecting to Teflon tubing ends pulled backward out of the ports for measuring flow rates to the ports; and

(b). connecting to ends of B or E when the brass Tee (Figure 3) is pulled off for measuring the flow rates from B and E, to check split ratio in the vapor generator section.

xv. Very Important—to Prevent Undesirable Contamination of the System

(a). With the odorant in the vapor-generating vessel, the flow of air to the odorant part of the system must be immediately set in operation. If this is not done, odorant vapors from the vessel may drift into the splitter bypass, condense there, and result in a much higher odorant concentration than in the regular operation. It is best to place the odorant into the vessel through the center spout (cf. Figure 3) with the bypass system (two brass tees with Capillaries B, C, and E attached) removed from the vessel, then plug the center spout of the vessel, begin air flow and then connect the bypass system to the vessel.

(b). The same applies to shutting-down of the olfactometer. First, the by-pass system is removed from the vessel, and the end spouts of the odorant vessel are plugged with pieces of neoprene tubing and glass rod plugs. With air flow still continuing, the Capillary C is connected to Capillary E by a short piece of Teflon tubing. This permits flushing the odorant vapors from the odorant side of the system. Flushing is continued until the highest-concentration port does not exhibit odor.

3. Problems/Backflow. Failure to observe need for continuous air flow while the odorant vessel is connected to the splitter (see preceding section) can easily result in diffusion of the odorant throughout the system, including back-diffusion into the Tygon tubing connecting flowmeter to the disc assembly. Such contamination is difficult to remove, and replacement of some components may become necessary. A list of sources for the components is attached (Paragraph G.5 of this Section).

4. Sample Calculation of Dilutions

a. Saturated Butanol

i. Odorant: l—Butanol

ii. Temperature: 25°C

iii. Vapor pressure, from Chemistry and Physics Handbook or other source, for 25°C is 6.97 mm.

iv. This corresponds to:

l,000,000 x 6.97/760 = 9170 ppm in air saturated with l-butanol vapor at 25°C; (l atm = 760 mm).

b. Dilution Factor in Generator/Bypass System. Dilution Factor: 4.66 ± .20

i. The concentration of l-butanol in the flow supplied to the round splitter is then:

$$9170/4.66 = 1966 \pm 16 \text{ ppm}$$

ii. This is also the concentration supplied to Port Number 8.

iii. Measurements for other ports are conducted by pulling the Teflon tubing out from the ports and connecting the Buck calibrator to these lines.

iv. The following set of data illustrates the calculations. (See Table 2)

v. The brass tee is sequentially pulled off Capillaries B and E and the air flow from each is measured.

5. Components and Sources

a. Stainless Steel Capillaries

i. l/16 o.d., 0.030 i.d.

ii. l/16 o.d., 0.020 i.d.

iii. l/16 o.d., 0.010 i.d.

b. Teflon Tubing. Teflon tubing AW Gage Number 15, standard wall, natural color.

c. Tygon Tubing

i. Tygon Food Grade 0.0315 in. i.d. For slip-on-connectors for stainless steel capillaries.

ii. Tygon tubing, Food Grade Formulation B-44-4X, 5/32 in. i.d., 7/32 in. o.d., l/32 in. wall. For flowmeter-to-disc connection.

iii. Tygon Food Grade tubing, 0.0655 in. i.d., 0.1945 in. o.d. For connection of soap film flowmeter tubing to Teflon tubing ends.

d. Neoprene Tubing. Black neoprene tubing, l/4 in. o.d., l/16 in. wall, for slip-on connectors and for plug.

e. Glass Ports, Odorant Vessel. Pyrex glass, custom-made by glass blowers.

f. Flowmeters

i. 50-500 cc/min

ii. 100-1000 cc/min

Table 2
8-Port 1-Butanol Olfactometer Port Concentration in ppm

Date	7	6	5	4	3	2	1
12-13	1038	533	274	138	70	35	17
12-15	1034	517	272	137	71	34	18
12-15	1042	524	268	137	71	34	19
12-15	1042	520	271	132	72	35	18
12-16	1010	513	271	136	70	35	17
12-16	1040	529	278	137	73	36	18
12-16	1032	516	272	134	72	35	18
Total	7238	3652	1906	951	499	244	125
Avg.	1034	522	272	136	71	35	18
	±10	±7	±3	±2	±1	±1	±1

6. Odor Panel

a. An odor panel consisting of eight members shall be selected by the department. Panelists shall not use perfume or perfumed shaving lotion within two hours prior to the test. Panelists shall not smoke, eat, or chew tobacco or gum for at least one hour before testing. Panelists shall not be tested for prolonged periods of time. A loose schedule with long resting periods for panelists is recommended.

b. Panelist candidates are screened for their ability to judge intensity. This is usually done using the butanol intensity olfactometer. A bag sample is taken from one of the eight butanol ports (usually Number 4 or Number 5) and the candidate must sniff the bag sample and select the port they feel has the same intensity. Panelists should be able to match butanol-to-butanol within two scale units. As with all sensory odor evaluations, the screening tests should be conducted in as nearly an odor-free environment as possible.

c. The testing room will be supplied with activated carbon filtered air of controlled constant temperature and humidity (25ºC and RH 50 percent).

d. Each panelist compares the intensity of the undiluted ambient sample being evaluated to the eight point butanol scale, specified in this procedure starting from the low end of scale, i.e., levels between two values on the scale may be selected by each panelist (i.e. 2.5, 6.5, etc). The arithmetic average of the values chosen by the eight panelists will determine compliance with the standard specified in the regulations.

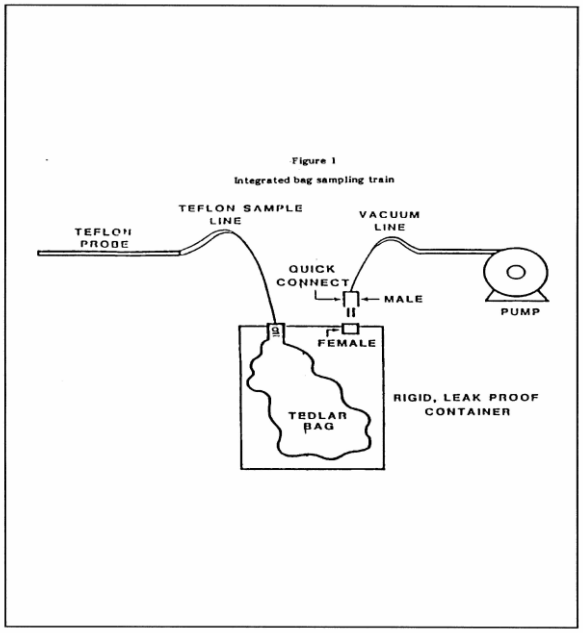


Figure 1
Integrated bag sampling train

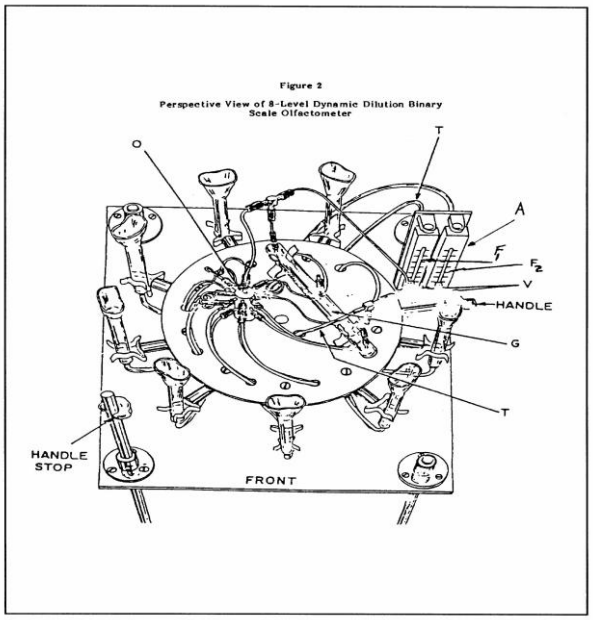
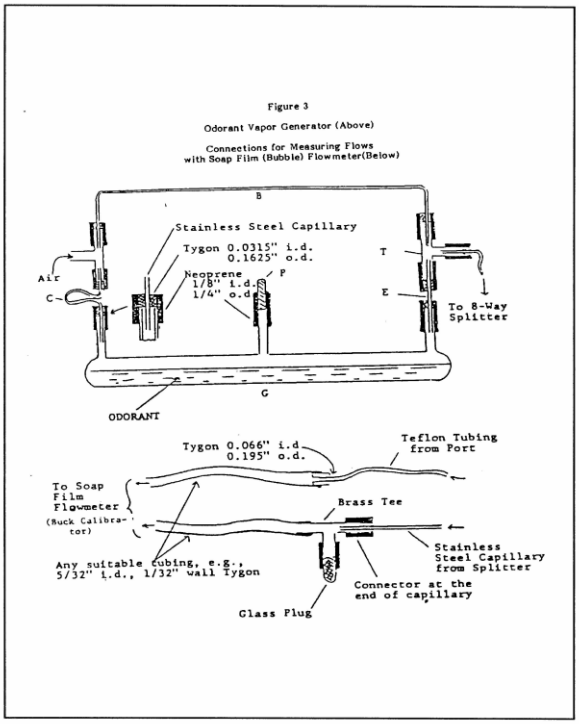


Figure 2
Perspective View of 8-Level Dynamic Dilution Binary Scale Olfactometer



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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2460 (November 2000).

Chapter 30. Standards of Performance for New Stationary Sources (NSPS)

§3001. Repeal and Renumbering

The following chapters, as they appeared on June 30, 1996, are hereby repealed or renumbered as indicated below.

A. Chapter 31 is repealed.

B. Chapter 60 is repealed with the exception of LAC 33:III.6099 which is moved and renumbered as LAC 33:III.2901.G.

C. Chapter 61 is repealed with the exception of Subchapter A which is moved and renumbered as Subchapter N in Chapter 21.

D. Chapter 64 is repealed.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:1212 (December 1996).

Subchapter A. Incorporation by Reference

§3003. Incorporation by Reference of 40 *Code of Federal Regulations* (CFR) Part 60

A. Except for 40 CFR Part 60, Subpart AAA, and as modified in this Section, Standards of Performance for New Stationary Sources, published in the *Code of Federal Regulations* at 40 CFR Part 60, July 1, 2006, are hereby incorporated by reference as they apply to the state of Louisiana. Also incorporated by reference are revisions to 40 CFR Part 60, Subpart A as promulgated on May 16, 2007, in the *Federal Register*, 72 FR 27437-27443.

B. Corrective modification and clarification are made as follows.

1. Whenever the referenced regulations (i.e., 40 CFR Part 60) provide authority to "the Administrator," such authority, in accordance with these regulations, shall be exercised by the administrative authority or his designee, notwithstanding any authority exercised by the U.S. Environmental Protection Agency (EPA). Reports, notices, or other documentation required by the referenced regulations (i.e., 40 CFR Part 60) to be provided to "the Administrator" shall be provided to the Office of Environmental Assessment, where the state is designated authority by EPA as "the Administrator," or shall be provided to the Office of Environmental Assessment and EPA, where EPA retains authority as "the Administrator."

2. 40 CFR Part 60, Subpart A, Section 60.4 (b)(T) shall be modified to read as follows: State of Louisiana: Office of Environmental Assessment, Department of Environmental Quality.

3. The availability to the public of information provided to or otherwise obtained by the state under this Chapter shall be governed by LAC 33:I.501-509.

4. Clarification of MSW landfill milestones are as follows: design plans are due on or before January 28, 1999; awarding of contracts is due on or before June 28, 1999; initiation of on-site construction is due on or before September 28, 1999; initial performance test is to be completed on or before March 28, 2000; and final compliance is due on or before April 28, 2000.

5. The department's emission guideline plan, required by the Clean Air Act (CAA), Section 111(d), for Hospital/Medical/Infectious Waste Incinerators includes the following CFR citations: 40 CFR 60.30, 60.30(e), 60.31(e), 60.32(e), 60.33(e), 60.35(e), 60.36(e), 60.37(e), 60.38(e), and 60.39(e). Until the department has a mechanism to approve training programs in compliance with 40 CFR 60.34(e), the department accepts accreditation approved by other states complying with 40 CFR 60.34(e).

6. The department’s emission guideline plan, required by the CAA, Section 111(d), for Commercial and Industrial Solid Waste Incineration (CISWI) Units includes 40 CFR 60.2575-60.2875 and Tables 1-5. Until the department has a

mechanism to approve training programs in compliance with 40 CFR 60.2635, the department shall accept accreditation approved by other states complying with 40 CFR 60.2635.

7. The department's emission guideline plan, required by Section 111(d) of the Clean Air Act, for Other Solid Waste Incinerator Units includes 40 CFR 60.2980-60.3078 and Tables 1-5 (70 FR 74870-74924, December 16, 2005). Until the department has a mechanism to approve training programs in compliance with 40 CFR 60.3014, the department shall accept accreditation approved by other states complying with 40 CFR 60.3014.

8. 40 CFR Part 60, Subpart B, Adoption and Submittal of State Plans for Designated Facilities, and 40 CFR Part 60, Subpart C, Emission Guidelines and Compliance Times, are not included in this incorporation by reference.

9. The minimum standards of the following emission guidelines of 40 CFR Part 60, and amendments to 40 CFR Part 60, that are incorporated by reference shall be applied to applicable units in the state.

40 CFR Part 60	Subpart Heading
Subpart Cb	Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or before September 20, 1994
Subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
Subpart Cd	Emission Guidelines and Compliance Times for Sulfuric Acid Production Units
Subpart Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators
Subpart BBBB	Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999
Subpart DDDD	Emission Guidelines and Compliance Times for Commercial and Industrial Waste Incineration Units That Commenced Construction on or before November 30, 1999
Subpart FFFF	Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004 (70 FR 74870-74924, December 16, 2005)

10. The definitions of *commercial and industrial solid waste incineration (CISWI) unit*, *commercial or industrial waste*, and *solid waste* do not include the revisions to the definitions in 40 CFR 60.2265 and 60.2875, promulgated by the EPA on September 22, 2005 (70 FR 55568-55581).

C. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, or from a public library.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:1212 (December 1996), amended LR 23:1681 (December 1997), LR 24:1287 (July 1998), LR 24:2238 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1239 (July 1999), LR 25:1797 (October 1999), LR 26:1607 (August 2000), LR 26:2460, 2608 (November 2000), LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 28:2179 (October 2002), LR 29:316 (March 2003), LR 29:698 (May 2003), LR 30:1009 (May 2004), amended by the Office of Environmental Assessment, LR 31:1568 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2446 (October 2005), LR 32:809 (May 2006), LR 32:1596 (September 2006), LR 33:1620 (August 2007), LR 33:2092 (October 2007), LR 33:2626 (December 2007).

Chapter 51. Comprehensive Toxic Air Pollutant Emission Control Program

Subchapter A. Applicability, Definitions, and General Provisions

§5101. Applicability

A. The provisions of this Subchapter and LAC 33:III.905 apply to the owner or operator of any *major source*, as defined in LAC 33:III.5103, unless exempted under LAC 33:III.5105.B.

B. The provisions of LAC 33:III.905, 5105.A.1, 3, and 4, and 5113 apply to the owner or operator of any stationary source that was a major source upon promulgation of this Subchapter (as of December 20, 1991), but that has achieved minor source status through reduction of emissions and reduction of potential to emit.

C. The provisions of this Subchapter do not apply to the consumer use, in a duration and frequency intended by the manufacturer, of products obtained through retail commerce, or to activities conducted on residential property. The provisions of this Subchapter do not apply to the distribution or application of pesticides.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1204 (December 1991), amended LR 18:1362 (December 1992), LR 23:56 (January 1997), LR 24:1276 (July 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2620 (December 2007).

§5103. Definitions, Units, and Abbreviations

A. The terms in this Subchapter are used as defined in LAC 33:III.111 except for those terms defined herein as follows.

Alternative Method—any method of sampling and analyzing for a toxic air pollutant that is not a reference method, but that has been demonstrated to the administrative authority's satisfaction to produce results adequate for the administrative authority's determination of compliance.

Area Source—any stationary source that is not a major source.

Capital Expenditure—an expenditure for a physical or operational change to a stationary source that exceeds the product of the applicable annual asset guideline repair allowance percentage specified in the latest edition of the Internal Revenue Service (IRS) Publication 534 and the stationary source's basis, as defined by Section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to a stationary source must not be reduced by an excluded additions as defined for stationary sources constructed after December 31, 1981, in IRS Publication 534, as would be done for tax purposes. In addition, the annual asset guideline repair allowance may be used even though it is excluded for tax purposes in IRS Publication 534.

Certification of Compliance—a statement indicating that specific requirements under this Subchapter have been met, including a description of measures used to meet such requirements.

Compliance Plan—a description of measures to be used to meet requirements under this Subchapter, including a compliance schedule of dates by which such measures will be taken.

Compliance Schedule—a sequence of events leading to compliance with all requirements of this Subchapter including the specified date by which the source must achieve compliance, and interim dates by which all necessary milestones shall be achieved.

Continuous Monitoring System—the total equipment required under the emission monitoring sections in applicable subchapters, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Control Measures—any operating procedures, abatement schemes, operational standards, or work practices used to prevent or reduce air pollution.

Electric Utility Steam Generating Unit—any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

Existing Source—any stationary source that is not a new source.

Major Source—any stationary source (including all emission points and units of such source located within a contiguous area and under common control) of air pollutants that emits, or has the potential to emit, in the aggregate, 10 tons per year or more of any toxic air pollutant listed in LAC 33:III.5112, Table 51.1 or 25 tons per year or more of any combination of toxic air pollutants listed in LAC 33:III.5112, Table 51.1.

Maximum Achievable Control Technology (MACT)—

1. the maximum degree of reduction in emissions of each air pollutant subject to this Subchapter (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; or

b. enclose systems or processes to eliminate emissions; or

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

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

e. are a combination of the above;

2. the degree of reduction in emissions deemed achievable for new sources in a category or subcategory shall not be less stringent than the most stringent emissions level achieved in practice by the best controlled similar source in the same category or subcategory, as determined by the administrative authority upon review of submitted *MACT* compliance plans and other relevant information, and may be more stringent where feasible;

3. emissions standards for existing sources in a category or subcategory may be less stringent than standards for new sources in a similar category or subcategory provided that the emissions limitation for existing sources in the category or subcategory is not less stringent, and may be more stringent, than:

a. for the categories or subcategories with 30 or more sources, the average emission limitation achieved by the best performing 12 percent of the existing sources nationally in the category or subcategory; or

b. for the categories or subcategories with fewer than 30 sources, the average emission limitation achieved by the best performing five sources nationally in the category or subcategory.

Modification (Modify)—any change in a facility including, but not limited to, a physical change, a change in the method of operation, or a change in the raw materials or feedstocks used for products manufactured that increases or decreases the emission rate of any toxic air pollutant by an amount that is greater than the minimum emission rate listed for that pollutant in LAC 33:III.5112, Table 51.1, or that results in the emission, at a rate greater than the minimum emission

rate listed in LAC 33:III.5112, Table 51.1, of any toxic air pollutant not previously emitted. A change in production rates (up to capacity) or hours of operation shall not be considered a change in the method of operation.

New Source—any stationary source for which construction or reconstruction begins after December 20, 1991 and for which the initial air quality operating permit is issued after December 20, 1991.

Owner or Operator—any person who owns, leases, operates, controls, or supervises a stationary source.

Permit—written authorization by the administrative authority to emit toxic air pollutants from or at a site or facility, including all conditions set forth therein.

Potential to Emit—the maximum capacity of a stationary source to emit a pollutant under its physical or 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 the design if the limitation or the effect it would have on emissions is specified by an existing state permit or a permit issued under a program to prevent the significant deterioration of air quality.

Reconstruction—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 for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Release—accidental or intentional emitting of toxic pollutants into the air.

Source Category—a classification of sources identified by EPA pursuant to Section 112(c) of the Federal Clean Air Act.

Standard—any criterion or prohibition as set forth in this Subchapter to control the emission of toxic air pollutants.

Standard Operating Procedure (SOP)—a scheme, plan, or set of operating procedures or practices intended to ensure compliance with applicable standards.

Stationary Source—any building, structure, facility, or installation that emits or may emit any toxic air pollutant designated by this Subchapter.

Toxic Air Pollutant (TAP)—any substance listed in LAC 33:III.5112, Table 51.2 or 51.3. *Toxic air pollutants* are listed pursuant to R.S. 30:2060 and, except for lead, do not include those pollutants for which National Ambient Air Quality Standards have been established under Section 108 of the Federal Clean Air Act.

Virgin Fossil Fuel—any solid, refined solid, refined liquid, or refined or natural gaseous fossil fuel with a Btu content greater than 7,000 Btu/lb that is not blended with reprocessed or recycled fuels. Group 1 *virgin fossil fuels* consist of natural gas, liquid petroleum gas, distillate fuel oil, gasoline, and diesel fuel. Group 2 *virgin fossil fuels* consist of coal, residual fuel oil, and petroleum coke.

Wood Residue Fuel—any wood based fuel including, but not limited to, bark, chips, fines, knots, and lumber. Unless approved by the secretary, *wood residue fuel* shall not include wood based fuels that have been treated with preservatives or that are building boards, such as plywood, particleboard, flakeboard, and oriented strand board.

B. Units and Abbreviations. The following units, abbreviations, and symbols are used in this Subchapter.

1. System International (SI) Units of Measure:

A = ampere

g = gram

Hz = hertz

J = joule

K = Kelvin (thermometric scale)

kg = kilogram = 10^3 gram

m = meter

m^3 = cubic meter

mg = milligram = 10^{-3} gram

mm = millimeter = 10^{-3} meter

Mg = megagram = 10^6 gram

mol = mole

N = newton

ng = nanogram = 10^{-9} gram

nm = nanometer = 10^{-9} meter

Pa = pascal

s = second

V = volt

W = watt

Ω = ohm

μg = microgram = 10^{-6} gram

2. Other Units of Measure:

°C = degree Celsius (centigrade)

cfm = cubic feet per minute

cc = cubic centimeter

d = day

°F = degree Fahrenheit

ft^2 = square feet

ft^3 = cubic feet

gal = gallon

in = inch

in Hg = inches of mercury

in H_20 = inches of water

l = liter

lb = pound

lpm = liter per minute

min = minute

ml = milliliter = 10^{-3} liters

oz = ounces

psia = pounds per square inch absolute

psig = pounds per square inch gauge

°R = degree Rankine

µl = microliter = 10^{-6} liter

v/v = volume per volume

yd^2 = square yards

yr = year

3. Chemical Nomenclature:

Be = Beryllium

Hg = Mercury

H_20 = water

M = Molar

N = Normal

4. Miscellaneous Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists

act = actual

avg = average

I.D. = inside diameter

NESHAPS = National Emission Standards for Hazardous Air Pollutants

NIOSH = National Institute of Occupational Safety and Health

O.D. = outside diameter

std = standard

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1204 (December 1991), amended LR 18:1362 (December 1992), LR 23:57 (January 1997), LR 24:1276 (July 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2621 (December 2007).

§5105. Prohibited Activities and Special Provisions

A. Prohibited Activities shall include the following.

1. After the effective date of any standard set forth in this Subchapter, no owner or operator shall construct or modify any stationary source subject to such standard without first obtaining written authorization from the administrative authority in accordance with this Subchapter.

2. After December 20, 1991, no owner or operator of any major source shall cause a violation of any ambient air standard listed in LAC 33:III.5112, Table 51.2, unless operating in accordance with LAC 33:III.5109.B.

3. No owner or operator subject to the provisions of this Subchapter shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of diluents to achieve compliance with an emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

4. No owner or operator subject to this Chapter shall fail to keep records, notify, report or revise reports as required under this Subchapter.

B. Special Provisions

1. The administrative authority may allow a certain complex within a facility to be considered as a separate source with regard to the requirements of this Subchapter, provided that the complex is used solely for research and development of new processes and/or products, and is not engaged in the manufacture of products for commercial sale.

2. Electric utility steam-generating units are exempt from the requirements of this Subchapter.

3. Each of the following emissions are exempt from the requirements of this Subchapter:

a. emissions from the combustion of Group 1 virgin fossil fuels;

b. emissions from the combustion of Group 2 virgin fossil fuels vented from a stack that has downwash minimization stack height or a height approved by the department; and

c. emissions from the combustion of gas streams with a Btu value of greater than 7,000 Btu/lb that are generated by onsite operations, collected by a *fuel gas system* as defined in 40 CFR Part 63, Subpart G, and used as fuel.

4. Any source, as defined in accordance with rules promulgated by the United States Environmental Protection Agency under provisions in Section 112(i)(5) of the federal Clean Air Act, that is in compliance with an enforceable commitment approved by the administrative authority* to achieve early reductions of 90 percent or more (95 percent for particulates), or that has demonstrated early reductions of 90 percent or more (95 percent for particulates), in

accordance with such rules, shall be exempt from MACT requirements under LAC 33:III.5109.A. The term of exemption shall extend until such time as the compliance extension granted by the administrative authority or the U.S. Environmental Protection Agency has expired, or until nine years from the anticipated date of promulgation of applicable federal MACT standards according to the schedule published by the U.S. Environmental Protection Agency in accordance with Section 112(e)(3) of the federal Clean Air Act, whichever date is earlier. Under no circumstances shall this provision be used to grant an exemption to a source under conditions that do not result in a net air quality benefit for the state of Louisiana, as determined by the administrative authority. Under no circumstances shall the granting of such an exemption to a source relieve any source of other obligations under state or federal law.

5. In accordance with R.S. 30:2060, except under circumstances that may reasonably be expected to pose a threat to human health, whether or not such units are in a contiguous area or under common control, in determining the applicability of emission standards or technical control standards the administrative authority shall not aggregate:

a. emissions from any oil or gas exploration or production well and its associated equipment;

b. emissions from any pipeline compressor or pump station; or

c. emissions from other similar units.

6. The emissions from the remediation of a RCRA, CERCLA, or any nonregulated inactive or abandoned waste site cleanup shall be exempt from the ambient air standards of LAC 33:III.5112, Table 51.2, upon approval of the cleanup plan by the administrative authority.

7. Emissions from the combustion of wood residue fuel from pulp and paper mills are exempt from the provisions of LAC 33:III.5109.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:2104 (December 1991), amended LR 18:1362 (December 1992), LR 21:370 (April 1995), LR 23:58 (January 1997), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2621 (December 2007).

§5107. Reporting Requirements, Availability of Information, and Public Notice Provisions

A. Annual Emissions Reporting. The owner or operator of any major source that meets the applicability requirements in LAC 33:III.5101.A and emits any toxic air pollutant listed in LAC 33:III.5112, Table 51.1 or 51.3, shall submit a completed annual emissions report to the Office of Environmental Assessment in a format specified by the department. The owner or operator shall identify on the emissions report the quantity of emissions in the previous calendar year for any such toxic air pollutant emitted. Beginning with the report due in 2008, the annual emissions report shall meet the following requirements.

1. The owner or operator of any major source subject to the requirements in this Subsection shall submit a completed annual emissions report to the Office of Environmental Assessment on or before March 31 of each year, unless otherwise directed by the administrative authority, that shall identify the quantity of emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3, for the previous calendar year.

2. Annual emissions reports and revisions to any emissions report shall include a certification statement that attests that the information contained in the emissions report is true, accurate, and complete, and that is signed by a *responsible official*, as defined in LAC 33:III.502. The certification statement shall include the full name of the responsible official, his or her title and signature, the date of the signature, and the phone number of the responsible official.

B. Discharge Reporting Requirements

1. Emergency Conditions. For any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property), the owner or operator of the source shall immediately, but in no case later than one hour, notify the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 (collect calls accepted 24 hours a day).

2. Emission Control Bypasses. Except as provided in Paragraph B.6 of this Section, for any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:I.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question, the owner or operator of the source shall provide prompt notification to SPOC of the bypass no later than 24 hours after the beginning of the bypass in the manner provided in LAC 33:I.3923. Where the emission control bypass was the result of an upset, the owner or operator shall comply with Paragraph B.3 of this Section.

3. Nonemergency Conditions. Except as provided in Paragraph B.6 of this Section, for any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:I.3931, the owner or operator of the source shall immediately, but in no case later than 24 hours, provide prompt notification to SPOC in the manner provided in LAC 33:I.3923.

4. Written Reports. For every such discharge or equipment bypass as referred to in Paragraphs B.1, 2, and 3 of this Section, the owner or operator shall submit to SPOC a written report by certified mail within seven calendar days of learning of the discharge.

a. The report shall contain the following information:

i. the identity of the source;

ii. the date and time of the discharge;

iii. the cause of the discharge;

iv. the approximate total loss during the discharge;

v. the method used for determining the loss;

vi. any action taken to prevent the discharge;

vii. the action taken to minimize the discharge; and

viii. the measures adopted to prevent future discharges.

b. If written notification of the discharge or bypass is required to be submitted pursuant to LAC 33:I.3925, such notification shall fulfill the obligation to submit a written report under this Paragraph.

5. All discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, if they can be measured and can be reliably quantified using good engineering practices, must be reported to the department along with the annual emissions report and where otherwise specified in the applicable subchapters. The report shall include the following information:

a. the identity of the source;

b. the date and time of the discharge; and

c. the approximate total loss during the discharge.

6. Leaks detected pursuant to specific leak detection and elimination requirements of any Subchapter of this Chapter shall be recorded and/or reported as required in that Subchapter and shall not be subject to Paragraphs B.2, 3, and 4 of this Section.

C. Availability of Information. The availability to the public of information provided to, or otherwise obtained by, the administrative authority under this Subchapter, shall be governed by R.S. 30:2030, and applicable Rules and Regulations promulgated thereunder.

D. Public Notice Provisions. The administrative authority shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days in advance of the hearing before granting approval for construction or issuing any permit that would:

1. allow a permitted increase in any Class 1 or Class 2 Louisiana toxic air pollutant by an amount greater than the minimum emission rate; or

2. allow the addition of any new point source or emission unit that would emit a Class 1 or Class 2 Louisiana toxic air pollutant by an amount greater than the minimum emission rate.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2060 and 2001 et seq.

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§5109. Emission Control and Reduction Requirements and Standards

A. Maximum Achievable Control Technology (MACT) Requirements

1. The owner or operator of any major source that emits or is permitted to emit a Class I or Class II toxic air pollutant at a rate equal to or greater than the minimum emission rate listed for that pollutant in LAC 33:III.5112, Table 51.1, shall control emissions of that toxic air pollutant to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by the administrative authority.

2. Compliance with an applicable federal standard promulgated by the US EPA in 40 CFR Part 63 shall constitute compliance with this Subsection for emissions of toxic air pollutants.

3. MACT determination for sources not regulated by a federal MACT standard shall be determined by the administrative authority through the permitting process using the existing state MACT determination method or protocol.

B. Ambient Air Standard Requirements. The owner or operator of any major source that emits, or is permitted to emit, any toxic air pollutant at a rate equal to or greater than the minimum emission rate listed for that toxic air pollutant shall determine the status of compliance, beyond the source's property line, with applicable ambient air standards listed in LAC 33:III.5112, Table 51.2. (See LAC 33:III.5105.A.2.)

1. New major sources shall demonstrate compliance with an ambient air standard in an application for a permit in accordance with LAC 33:III.5111.

2. The owner or operator shall achieve compliance with the ambient air standard unless the owner or operator demonstrates to the satisfaction of the administrative authority:

a. that compliance with an ambient air standard would be economically infeasible;

b. that the source's emissions could not reasonably be expected to pose a threat to public health or the environment; and

c. that the source's emissions would be controlled to a level that is Maximum Achievable Control Technology.

3. The administrative authority shall publish a public notice of and hold a public hearing on any preliminary determination to allow a source to exceed the ambient air standard for any toxic air pollutant listed in LAC 33:III.5112, Table 51.2. Within 90 days after the close of the public hearing on the preliminary determination, the administrative authority shall make a final determination, which is subject to review on a five-year basis or at any other time deemed appropriate by the administrative authority.

4. The administrative authority shall periodically, at least every 36 months, review and update the ambient air standards listed for each toxic air pollutant in LAC 33:III.5112, Table 51.2.

C. Standard Operating Procedure Requirements

1. The requirements of this Subsection do not apply to emissions of any of those pollutants listed in LAC 33:III.5112, Table 51.3, or to sources complying with applicable federal standards in 40 CFR Part 63.

2. The owner or operator of any new or existing source required to report emissions in accordance with LAC 33:III.5107.A shall develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in this Chapter. The SOP shall detail all operating procedures or parameters established by the owner or operator to ensure that compliance with the applicable standards is maintained, and shall address, but not be limited to, operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. A written copy of the SOP must be available on site or at an alternate approved location for inspection by the administrative authority. A copy of the SOP must be provided within 30 days upon request by the department.

D. Compliance Timing

1. The department may take appropriate enforcement action to address the failure by an existing major source to submit a Compliance Plan or Certification of Compliance, which submittal was required by Paragraph A.1 or 2, and Paragraph B.1 or 2, of this Section as promulgated in the *Louisiana Register* on December 20, 1991, at LR 17:1204, until December 20, 2007.

2. A new source shall be in compliance with the MACT regulations upon initial start-up of the source.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1204 (December 1991), amended LR 18:1363 (December 1992), LR 19:891 (July 1993), LR 23:59 (January 1997), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2623 (December 2007).

§5111. Permit Requirements, Application, and Review

A. Major Source Permit Requirements. Before commencement of the construction of any new source or any modification that will result in an increase in emissions of any toxic air pollutant or will create a new point source that emits a toxic air pollutant, the owner or operator of such source shall obtain a Louisiana air permit in accordance with LAC 33:III.501 and Subsection B of this Section and in accordance with LAC 33:I.1701.

B. Contents of Application for a Louisiana Air Permit

1. An owner or operator may submit to the Office of Environmental Services, by certified mail, a written request for a determination of whether actions intended to be taken by the owner or operator constitute construction or modification, or the commencement thereof, of a stationary source. The administrative authority will notify the owner or operator of the determination within 30 days after receiving sufficient information to evaluate the request.

2. Each application for a permit to construct a new major source shall include the following:

a. the name and address of the applicant;

b. the location or proposed location of the source;

c. technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including a description of intended controls and monitoring procedures. Such technical information shall include estimation of emissions prior to and after installation of emission control equipment or adoption of control measures, calculations of emission estimates in sufficient detail to allow assessment of the validity of the calculations, and documentation of methods or sources of information used in these determinations. Emissions of toxic air pollutants shall be speciated to identify each toxic air pollutant emitted from each emission point at the source and to identify fugitive emissions of toxic air pollutants.

3. Each application for a permit to modify an existing major source facility shall include, in addition to the information required in Paragraph B.2 of this Section, the following information:

a. the precise nature of the proposed changes;

b. the productive capacity of the source before and after the changes are complete;

c. calculations of estimates of emissions before and after the changes are completed, in sufficient detail to allow assessment of the validity of the calculations;

d. for sources that have been operating in Louisiana for a period of at least five years, a listing of all violations of Louisiana air quality laws or regulations for which the owner or operator is responsible, including all violations for which

a compliance schedule has been established and which have been cited in administrative enforcement actions by the department, and for which all rights of review and appeal have been exhausted. Applicants under a compliance schedule shall also demonstrate that they have made satisfactory progress in meeting the conditions of the compliance schedule. Applicants shall also provide a listing of all administrative or judicial actions taken against the owner or operator within the last five years under Louisiana environmental laws or regulations, including emergency cease and desist orders, notices of violation, compliance orders, penalty notices, or other administrative orders and any administrative or judicial proceedings that could result in such actions, and any other compliance history information requested by the administrative authority;

e. for sources that have not been operating in Louisiana for at least five years, a listing of all enforcement actions taken against the owner or operator for violations of United States federal or state environmental laws or regulations, and any other compliance history information requested by the administrative authority.

4. Any application corresponding to a major source that emits or is permitted to emit any Class I or Class II toxic air pollutant shall include a description of all federal standards (i.e., any standards promulgated by the US EPA in 40 CFR Part 63) and compliance methods applicable to units being permitted.

5. The department may request a dispersion modeling report demonstrating compliance with the ambient air standard developed by the owner or operator in accordance with the department's air toxics modeling procedures.

6. The owner or operator shall provide such other pertinent information as may be necessary for a complete understanding of the application that is being reviewed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1204 (December 1991), amended LR 18:1363 (December 1992), LR 19:891 (July 1993), repromulgated LR 19:1314 (October 1993), amended LR 23:59 (January 1997), amended by the Office of the Secretary, LR 25:661 (April 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2461 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2447 (October 2005), LR 33:2093 (October 2007), LR 33:2623 (December 2007).

§5112. Tables—51.1, 51.2, and 51.3

Table 51.1
Minimum Emission Rates Toxic Air Pollutants
Class I. Known and Probable Human Carcinogens

Compounds	CAS Number	Synonyms	Minimum Emission Rate (Pounds/year)
Acrylonitrile	107-13-1		35.0
Arsenic (and compounds) [1] [12]	7440-38-2		25.0
Asbestos (friable)	1332-21-4		25.0
Benzene	71-43-2	Benzol, Coal naphtha	260.0
Beryllium (and compounds) [1]	7440-41-7	Glucinum	25.0
Bis (2-chloroethyl) ether	111-44-4	Dichloroethyl ether	2,180.0
Cadmium (and compounds) [1]	7440-43-9		25.0
Chromium VI (and compounds) [1] [12]	7440-47-3		25.0
1,2-Dibromoethane	106-93-4	Ethylene bromide, Ethylene dibromide	25.0
Epichlorohydrin	106-89-8	2-Chloropropylene oxide	3,400.0
Ethylene oxide	75-21-8		35.0
Formaldehyde	50-00-0	Methylene oxide	260.0
Nickel (and compounds) [1]	7440-02-0		25.0
Nickel (refinery dust) [1]	7440-02-0		25.0
Propylene oxide	75-56-9	Methyl ethylene oxide	700.0
Vinyl chloride	75-01-4	Chloroethene, Monochloride ethylene	240.0

Table 51.1
Minimum Emission Rates Toxic Air Pollutants
Class II. Suspected Human Carcinogens and Known or Suspected Human Reproductive Toxins

Compounds	CAS Number	Synonyms	Minimum Emission Rate (Pounds/year)
Acetaldehyde	75-07-0	Acetic aldehyde	700.0
Acetonitrile	75-05-8	Cyanomethane, Methyl cyanide	5,000.0
Acrolein	107-02-8	Acrylic aldehyde	25.0
Acrylamide	79-06-1	Acrylic amide	25.0
Allyl chloride	107-05-1	3-chloropropene	25.0
Aniline	62-53-3	Aminobenzene, Phenylamine	600.0
Antimony (and compounds) [1]	7440-36-0		37.5
Barium (and compounds) [1]	7440-39-3		37.5

Table 51.1
Minimum Emission Rates Toxic Air Pollutants
Class II. Suspected Human Carcinogens and Known or Suspected Human Reproductive Toxins

Compounds	CAS Number	Synonyms	Minimum Emission Rate (Pounds/year)
Biphenyl	92-52-4	1,1-biphenyl, Xenene	97.5
1,3-Butadiene	106-99-0	Biethylene	25.0
Carbon disulfide	75-15-0	Carbon bisulfide	2,400.0
Carbon tetrachloride	56-23-5	Tetrachloromethane	83.5
Chlorinated dibenzo-p-dioxins [2]	3268-87-9		0.0001
Chlorinated dibenzo furans [3]	51207-31-9		0.0001
Chlorine dioxide	10049-04-4	Chlorine peroxide	25.0
Chlorobenzene	108-90-7	Benzene chloride	25.0
Chloroethane	75-00-3	Ethyl chloride	20,000.0
Chloroform	67-66-3	Trichloromethane	69.5
Chloromethane	74-87-3	Methyl chloride	7,750.0
Chloroprene	126-99-8		2,700.0
Copper (and compounds)[1]	7440-50-8		25.0
Diaminotoluene	25376-45-8		250.0
Dibutyl phthalate	84-74-2	DBP	380.0
1,4-Dichlorobenzene	106-46-7	p-Dichlorobenzene	20,000.0
1,2-Dichloroethane	107-06-2	Ethylene dichloride, EDC	48.5
Dichloromethane	75-09-2	Methylene chloride, DCM	540.0
1,2-Dicloropropane	78-87-5	Propylene dichloride	20,000.0
1,3-Dichloropropylene	542-75-6	1,3-dichloropropene, DCP	340.0
2,4-Dinitrotoluene [5]	121-14-2	2,4-DNT	100.0
2,6-Dinitrotoluene [5]	606-20-2		100.0
1,4-Dioxane	123-91-1	Diethylene dioxide, p-dioxane	1,040.0
Ethyl acrylate	140-88-5	Ethyl propenoate	1,500.0
Ethyl benzene	100-41-4	Phenylethane	20,000.0
Glycol ethers [6]	109-86-4		1,200.0
Hexachloro-1,3-butadiene	87-68-3	Hexachlorobutadiene	25.0
Hexachlorobenzene	118-74-1	Perchlorobenzene	870.0
Hexachloroethane	67-72-1	Perchloroethane	700.0
Hydrazine	302-01-2		25.0
Manganese (and compounds) [1]	7439-96-5		75.0
Mercury (and compounds) [1]	7439-97-6		25.0
Naphthalene (and Methylnaphthalenes) [11]	91-20-3	Camphor tar	1,990.0
Nitrobenzene	98-95-3	Nitrobenzol	400.0
2-Nitropropane	79-46-9	Dimethylnitromethane	2,700.0
Phenol	108-95-2	Benzenol, Carbolic acid	1,400.0
Polynuclear aromatic hydrocarbons [7]	206-44-0	PAHs	25.0
Selenium (and compounds) [1]	7782-49-2		25.0
Styrene	100-42-5	Vinylbenzene	2,000.0
1,1,2,2-Tetrachloroethane	79-34-5	Acetylene Tetrachloride	300.0
Tetrachloroethylene	127-18-4	Antisol 1, Carbon dichloride, Perchloroethylene	2,800.0
Toluene-2, 4-diisocyanate [8]	584-84-9		25.0
Toluene-2, 6-diisocyanate [8]	91-08-7		25.0
1,1,2-Trichloroethane	79-00-5	Vinyl trichloride	4,000.0
Trichloroethylene	79-01-6	Acetylene trichloride	900.0
Vinylidene chloride	75-35-4	1, 1-dichloroethylene	1,500.0
Xylene (mixed isomers) [9]	1330-20-7	ortho-xylene, meta-xylene, para-xylene	20,000.0

Table 51.1
Minimum Emission Rates Toxic Air Pollutants
Class III. Acute and Chronic (Non-Carcinogenic) Toxins

Compounds	CAS Number	Synonyms	Minimum Emission Rate (Pounds/year)
Acrylic acid	79-10-7	Acroleic acid, Propene acid	400.0
Ammonia [10]	7664-41-7		1,200.0
n-Butyl alcohol	71-36-3	n-butanol	11,000.0
Carbonyl sulfide	463-58-1	Carbon oxysulfide	1,000.0
Chlorine	7782-50-5		100.0
Cresol [4]	1319-77-3		1,600.0
Cumene	98-82-8	Isopropyl benzene	18,000.0
Ethylene glycol	107-21-1		9,000.0

Table 51.1 Minimum Emission Rates Toxic Air Pollutants Class III. Acute and Chronic (Non-Carcinogenic) Toxins			
Compounds	**CAS Number**	**Synonyms**	**Minimum Emission Rate (Pounds/year)**
n-Hexane	110-54-3		13,000.0
Hydrochloric acid	7647-01-0	Hydrogen chloride	500.0
Hydrofluoric acid	7664-39-3	Fluoric acid, Hydrogen fluoride	63.0
Hydrogen cyanide	74-90-8	Cyclon	800.0
Hydrogen sulfide	7783-06-4		1,000.0
Maleic anhydride	108-31-6	cis-Butenedioic anhydride	70.0
Methanol	67-56-1	Methyl alcohol	20,000.0
Methyl ethyl ketone	78-93-3	MEK	20,000.0
Methyl isobutyl ketone	108-10-1	MIBK	15,000.0
Methyl methacrylate	80-62-6		20,000.0
Nitric acid	7697-37-2		300.0
Phosgene	75-44-5	Carbonyl chloride	30.0
Phthalic anhydride	85-44-9		400.0
Propionaldehyde	123-38-6		700.0
Pyridine	110-86-1	Azine	1,200.0
Sulfuric acid	7664-93-9		75.0
Toluene	108-88-3	Methylbenzene	20,000.0
1,1,1-Trichloroethane	71-55-6	Chloroethene	20,000.0
Vinyl acetate	108-05-4		2,600.0
Zinc (and compounds) [1][12]	7440-66-6		200.0

Explanatory Notes:

[1] Includes any unique chemical substance that contains the listed metal as part of that chemical's infrastructure, excluding barium sulfate. Barium sulfate has been delisted as a toxic air pollutant and should not be included as part of the metals and compounds emissions. Concentrations are based on µg (×)/m^3, where × is the elemental form of the metal.

[2] Includes only 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), and octachlorodibenzo-p-dioxin (OCDD).

[3] Includes all isomers of chlorinated dibenzo-furans.

[4] Includes o-, m-, and p-cresol, and mixed isomers.

[5] Includes 2,4- and 2,6-dinitrotoluene and mixed isomers.

[6] Glycol ethers refers to the following compounds:

Ethylene glycol monomethyl ether (CAS Number 109864)

Ethylene glycol monomethyl ether acetate (CAS Number 110496)

Ethylene glycol monoethyl ether (CAS Number 110805)

Ethylene glycol monoethyl ether acetate (CAS Number 111159)

Diethylene glycol dimethyl ether (CAS Number 111966)

Ethylene glycol dimethyl ether (CAS Number 110714)

[7] Includes organic compounds with more than one fused benzene ring and which have a boiling point greater than or equal to 100°C. Those compounds listed as Naphthalene and Methylnaphthalene are not to be included as PAHs for the purposes of this regulation.

[8] Includes toluene-2,4- and 2,6-diisocyanate and mixed isomers.

[9] Includes o-, m-, and p-xylene, and mixed isomers.

[10] Excludes soil or foliar application of ammonia in agricultural practices.

[11] Includes the following compounds: Naphthalene (CAS Number 91-20-3), Methylnaphthalene (CAS Number 1321-94-4), 1-Methylnaphthalene (CAS Number 90-12-0), 2-Methylnaphthalene (CAS Number 91-57-6).

[12] Zinc chromates and zinc arsenates are Class I TAPs regulated as carcinogens under Chromium VI (and compounds) and arsenic (and compounds) TAP categories.

Table 51.2 Louisiana Toxic Air Pollutant Ambient Air Standards				
Compounds	**CAS Number**	**Class**	**Ambient Air Standard [14]**	
			(µg/m^3*) (8 Hour Avg.)	**(µg/m^3**) (Annual Avg.)**
Acetaldehyde	75-07-0	II		45.50
Acetonitrile	75-05-8	II	810.00	
Acrolein	107-02-8	II	5.40	
Acrylamide	79-06-1	II		0.08
Acrylic acid	79-10-7	III	140.00	
Acrylonitrile	107-13-1	I		1.47
Allyl chloride	107-05-1	II	71.40	
Ammonia [11]	7664-41-7	III	640.00	
Aniline	62-53-3	II	181.00	
Antimony (and compounds) [1]	7440-36-0	II	11.90	
Arsenic (and compounds) [1] [13]	7440-38-2	I		0.02
Asbestos (friable)	1332-21-4	I		┼

Table 51.2
Louisiana Toxic Air Pollutant Ambient Air Standards

Compounds	CAS Number	Class	Ambient Air Standard [14]	
			(μg/m³*) (8 Hour Avg.)	(μg/m³**) (Annual Avg.)
Barium (and compounds) [1]	7440-39-3	II	11.90	
Benzene	71-43-2	I		12.00
Beryllium (and compounds) [1]	7440-41-7	I		0.04
Biphenyl	92-52-4	II	23.80	
Bis (2-chloroethyl) ether	111-44-4	I		0.30
1,3-Butadiene	106-99-0	II		0.92
n-Butyl alcohol	71-36-3	III	3,620.00	
Cadmium (and compounds) [1]	7440-43-9	I		0.06
Carbon disulfide	75-15-0	II	71.40	
Carbon tetrachloride	56-23-5	II		6.67
Carbonyl sulfide	463-58-1	III	582.00	
Chlorinated dibenzo-p-dioxins [2]	3268-87-9	II		.003
Chlorinated dibenzo furans [3]	51207-31-9	II		.003
Chlorine	7782-50-5	III	35.7	
Chlorine dioxide	10049-04-4	II	6.67	
Chlorobenzene	108-90-7	II	1,100.00	
Chloroethane	75-00-3	II	6,290.00	
Chloroform	67-66-3	II		4.30
Chloromethane	74-87-3	II		55.56
Chloroprene	126-99-8	II	857.00	
Chromium VI (and compounds) [1] [13]	7440-47-3	I		0.01
Copper (and compounds) [1]	7440-50-8	II	23.80	
Cresol [4]	1319-77-3	III	238.00	
Cumene	98-82-8	III	5,860.00	
Diaminotoluene	25376-45-8	II	181.00	
1,2-Dibromoethane	106-93-4	I		0.45
Dibutyl phthalate	84-74-2	II	119.00	
1,4-Dichlorobenzene	106-46-7	II	1,430.00	
1,2-Dichloroethane	107-06-2	II		3.85
Dichloromethane	75-09-2	II		212.77
1,2-Dichloropropane	78-87-5	II	8,260.00	
1,3-Dichloropropylene	542-75-6	II	107.00	
2,4-Dinitrotoluene [5]	121-14-2	II	4.76	
2,6-Dinitrotoluene [5]	606-20-2	II	4.76	
1,4-Dioxane	123-91-1	II	2,140.00	
Epichlorohydrin	106-89-8	I		83.00
Ethyl acrylate	140-88-5	II	476.00	
Ethyl benzene	100-41-4	II	10,300.00	
Ethylene glycol	107-21-1	III	2,380.00	
Ethylene oxide	75-21-8	I		1.00
Formaldehyde	50-00-0	I		7.69
Glycol ethers [6]	109-86-4	II	571.00	
Hexachloro-1,3-butadiene	87-68-3	II		4.55
Hexachlorobenzene	118-74-1	II		0.20
Hexachloroethane	67-72-1	II		25.00
n-Hexane	110-54-3	III	4,190.00	
Hydrazine	302-01-2	II		0.02
Hydrochloric acid	7647-01-0	III	180.00	
Hydrofluoric acid	7664-39-3	III	61.90	
Hydrogen cyanide	74-90-8	III	260.00	
Hydrogen sulfide	7783-06-4	III	330.00	
Maleic anhydride	108-31-6	III	23.80	
Manganese (and compounds) [1]	7439-96-5	II	4.76	
Mercury (and compounds) [1]	7439-97-6	II	1.19	
Methanol	67-56-1	III	6,240.00	
Methyl ethyl ketone	78-93-3	III	14,000.00	
Methyl isobutyl ketone	108-10-1	III	4,880.00	
Methyl methacrylate	80-62-6	III	9,760.00	
Naphthalene (and Methylnaphthalenes) [12]	91-20-3	II	1,190.00	
Nickel (and compounds) [1]	7440-02-0	I		0.21
Nickel (refinery dust) [1]	7440-02-0	I		0.42
Nitric acid	7697-37-2	III	120.00	
Nitrobenzene	98-95-3	II	119.00	

Table 51.2 Louisiana Toxic Air Pollutant Ambient Air Standards				
Compounds	CAS Number	Class	Ambient Air Standard [14]	
			(μg/m³*) (8 Hour Avg.)	(μg/m³**) (Annual Avg.)
2-Nitropropane	79-46-9	II		20.00
Phenol	108-95-2	II	452.00	
Phosgene	75-44-5	III	9.50	
Phthalic anhydride	85-44-9	III	145.00	
Polynuclear aromatic hydrocarbons [7]	206-44-0	II		0.06
Propionaldehyde	123-38-6	III	4,290.00	
Propylene oxide	75-56-9	I		27.00
Pyridine	110-86-1	III	381.00	
Selenium (and compounds) [1]	7782-49-2	II	4.76	
Styrene	100-42-5	II	5,070.00	
Sulfuric acid	7664-93-9	III	23.80	
1,1,2,2 Tetrachloroethane	79-34-5	II		1.70
Tetrachloro ethylene	127-18-4	II		105.26
Toluene	108-88-3	III	8,900.00	
Toluene-2,4-diisocyanate [8]	584-84-9	II	0.86	
Toluene-2,6-diisocyanate [8]	91-08-7	II	0.86	
1,1,1-Trichloroethane	71-55-6	III	45,200.00	
1,1,2-Trichloroethane	79-00-5	II		6.25
Trichloroethylene	79-01-6	II		58.80
Vinyl acetate	108-05-4	III	830.00	
Vinyl chloride	75-01-4	I		1.19
Vinylidene chloride	75-35-4	II		2.00
Xylene (mixed isomers) [9]	1330-20-7	II	10,300.00	
Zinc (and compounds) [1][10][13]	7440-66-6	III	119.00	

Explanatory Notes:

* Based on one forty-second of the selected occupational exposure level, or other data determined to be superior by the administrative authority.

** Based on unit risk factors and a residual risk of one in ten thousand, or other data determined to be superior by the administrative authority.

┼ Refer to standards pursuant to LAC 33:III.5151.

[1] Includes any unique chemical substance that contains the listed metal as part of that chemical's infrastructure, excluding barium sulfate. Barium sulfate has been delisted as a toxic air pollutant and should not be included as part of the metals and compound emissions. Concentrations based on $\mu g(x)/m^3$, where x is the elemental form of the metal.

[2] Includes only 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), and octachlorodibenzo-p-dioxin (OCDD).

[3] Includes all isomers of chlorinated dibenzo-furans.

[4] Includes o-, m-, and p-cresol, and mixed isomers.

[5] Includes 2,4- and 2,6-dinitrotoluene and mixed isomers.

[6] Glycol ethers refers to the following compounds:

Ethylene glycol monomethyl ether (CAS Number 109864)

Ethylene glycol monomethyl ether acetate (CAS Number 110496)

Ethylene glycol monoethyl ether (CAS Number 110805)

Ethylene glycol monoethyl ether acetate (CAS Number 111159)

Diethylene glycol dimethyl ether (CAS Number 111966)

Ethylene glycol dimethyl ether (CAS Number 110714)

[7] Includes organic compounds with more than one fused benzene ring and which have a boiling point greater than or equal to 100°C. Those compounds listed as Naphthalene and Methylnaphthalene are not to be included as PAHs for the purposes of this regulation.

[8] Includes toluene-2,4- and 2,6-diisocyanate and mixed isomers.

[9] Includes o-, m-, and p-xylene, and mixed isomers.

[10] Concentrations based on mg ZnO/m^3.

[11] Excludes soil or foliar application of ammonia in agricultural practices.

[12] Includes the following compounds: Naphthalene (CAS Number 91-20-3), Methylnaphthalene (CAS Number 1321-94-4), 1-Methylnaphthalene (CAS Number 90-12-0), 2-Methylnaphthalene (CAS Number 91-57-6).

[13] Zinc chromates and zinc arsenates are Class I TAPs regulated as carcinogens under Chromium VI (and compounds) and arsenic (and compounds) TAP categories.

[14] The AAS for acetaldehyde, acetonitrile, biphenyl, carbon disulfide, chloroethane, cresol, 1,4-dichlorobenzene, 2,4-dinitrotoluene, 2,6-dinitrotoluene, ethylene glycol, manganese (and compounds) was revised effective January 1, 2002.

Table 51.3 Louisiana Toxic Air Pollutants Supplemental List*			
Compounds	CAS Number	Class	Synonyms
Acetamide	60-35-5	II	
Acetophenone	98-86-2	III	
2-Acetylaminofluorene	53-96-3	II	N-fluoren-2-yl acetamide
4-Aminobiphenyl	92-67-1	I	4-biphenylamine, 4-aminodiphenyl
o-Anisidine	90-04-0	II	
Benzidine	92-87-5	I	
Benzotrichloride	98-07-7	II	Benzyl trichloride
Benzyl chloride	100-44-7	II	Tolyl chloride

Table 51.3
Louisiana Toxic Air Pollutants Supplemental List*

Compounds	CAS Number	Class	Synonyms
Bis(2-ethylhexyl)phthalate	117-81-7	II	DEHP, Di-(2-ethylhexyl)phthalate
Bis(chloromethyl)ether	542-88-1	I	
Bromoform	75-25-2	II	Tribromomethane
Calcium cyanamide	156-62-7	III	
Captan	133-06-2	II	
Carbaryl	63-25-2	II	1-naphthalenol, methylcarbonate
Catechol	120-80-9	III	Pyrocatechol, o-benzenenedrol
Chloramben	133-90-4	III	3-amino-2,5-dichlorobenzoic acid
Chlordane	57-74-9	II	
Chloroacetic acid	79-11-8	II	
2-Chloroacetophenone	532-27-4	II	
Chlorobenzilate	510-15-6	II	4,4’-dichlorobenzilic acid ethyl ester
Chloromethyl methyl ether	107-30-2	I	CMME, chlorodimethyl ether
Cobalt compounds	7440-48-4	II	
Coke oven emissions [1]		I	
Cyanide compounds [4]	57-12-5	III	
2,4-D, Salts and esters	94-75-7	II	2,4-dichlorophenoxy-acetic acid
DDE	72-55-9	II	p,p’-dichlorodiphenyldichloroethylene
Diazomethane	334-88-3	III	Azinethylene, diazirine
1,2-Dibromo-3-chloropropane	96-12-8	II	DBCP
3,3’-Dichlorobenzidene	91-94-1	II	Dichlorobenzidene Base
Dichlorvos	62-73-7	II	2,2-dichlorovinyl dimethyl phosphate
Diethanolamine	111-42-2	III	DEA, Bis (2-hydroxy ethyl)amine
N,N-Diethyl aniline	91-66-7	III	
Diethyl sulfate	64-67-5	I	Ethyl sulfate
3,3’-Dimethoxybenzidene	119-90-4	II	o-dianisidine
Dimethyl aminoazobenzene	60-11-7	II	4-dimethylaminoazobenzene
N,N-Dimethyl aniline	121-69-7	III	
Dimethyl formamide	68-12-2	II	DMF, DMFA
1,1-Dimethyl hydrazine	57-14-7	II	Dimazine
Dimethyl phthalate	131-11-3	II	Phthalic acid methyl ester
Dimethyl sulfate	77-78-1	I	Methyl sulfate, DMS
3,3’-Dimethylbenzidine	119-93-7	II	3,3’-tolidine, diaminoditolyl
N,N-Dimethyl carbamoyl chloride	79-44-7	I	(Dimethylamino)carbonyl chloride
4,6-Dinitro-o-cresol, and salts	534-52-1	II	
2,4-Dinitrophenol	51-28-5	II	
1,2-Diphenylhydrazine	122-66-7	II	Hydrazobenzene
1,2-Epoxybutane	106-88-7	III	1,2-butylene oxide, 1-butene oxide
Ethyl carbamate	51-79-6	II	Urethane
Ethylene imine	151-56-4	II	Aziridine
Ethylene thiourea	96-45-7	II	2-imidazolidinethione
Ethylidene dichloride	75-34-3	II	1,1-dichloroethane
Fine mineral fibers [2]	7440-21-3	I	
Glycol ethers [3]	112-35-6	II	
Heptachlor	76-44-8	II	3-chlorochlordene
Hexachlorocyclopenta diene	77-47-4	III	HCCPD
Hexamethylene-1,6-diisocyanate	822-06-0	III	1,6-diisocyanatohexane
Hexamethyl phosphoramide	680-31-9	II	HMPA, MEMPA, hempa
Hydroquinone	123-31-9	III	Quinol, hydroquinol, p-hydroxybenzene
Isophorone	78-59-1	II	Isoacetophorone
Lead compounds	7439-92-1	II	
Lindane, (all isomers)	58-89-9	II	Benzene hexachloride (all 5 isomers)
Methoxychlor	72-43-5	II	Methoxy DDT, DMDT, Dimethoxy-DDT
Methyl bromide	74-83-9	III	Bromomethane
Methyl hydrazine	60-34-4	II	
Methyl iodide	74-88-4	II	Iodomethane
Methyl isocyanate	624-83-9	II	
Methyl tert butyl ether	1634-04-4	III	MTBE
4,4’-Methylenebis(2-Chloroaniline)	101-14-4	II	MOCA, MBOCA
4,4’-Methylene dianiline	101-77-9	II	MDA, p,p’-diaminodiphenylmethane
Methylene diphenyl diisocyanate	101-68-8	III	MDI
4-Nitrobiphenyl	92-93-3	II	4-nitrodiphenyl, p-nitrobiphenyl
4-Nitrophenol	100-02-7	III	p-nitrophenol
N-Nitroso-n-methylurea	684-93-5	II	N-methyl-N-nitrosourea
N-Nitrosodimethylamine	62-75-9	I	DMN, dimethylnitrosoamine

Table 51.3 Louisiana Toxic Air Pollutants Supplemental List*			
Compounds	**CAS Number**	**Class**	**Synonyms**
N-Nitrosomorpholine	59-89-2	II	4-nitrosomorpholine
Parathion	56-38-2	II	AATP, ethyl parathion
Pentachloronitrobenzene	82-68-8	II	Quintobenzene, PCNB
Pentachlorophenol	87-86-5	II	PCP
p-Phenylenediamine	106-50-3	III	p-diaminobenzene
Phosphine	7803-51-2	III	Hydrogen phosphide
Phosphorus	7723-14-0	III	(red or white)
Polychlorinated biphenyls	1336-36-3	II	PCB, Aroclors
1,3-Propane sultone	1120-71-4	II	1,2-oxathiolane-2, 2-dioxode
beta-Propriolactone	57-57-8	II	2-oxetanone
Propoxur	114-26-1	III	Baygon, o-isopropoxyphenyl methylcarbamate
1,2-Propyleneimine	75-55-8	II	2-methyl aziridine, Propylene imine
Quinoline	91-22-5	III	Chinoline
Quinone	106-51-4	III	Chinone,1,4-benzoquinone,p-benzoquinone
Styrene oxide	96-09-3	I	1,2-epoxyethylbenzene
Titanium tetrachloride	7550-45-0	III	Titanic chloride
2,4-Toluene diamine	95-80-7	II	MTD, Toluene-2,4-diamine
o-Toluidine	95-53-4	II	o-aminotoluene
Toxaphene	8001-35-2	II	Chlorinated camphene
1,2,4-Trichlorobenzene	120-82-1	II	unsym-trichlorobenzene
2,4,5-Trichlorophenol	95-95-4	III	
2,4,6-Trichlorophenol	88-06-2	II	2,4,6-T
Triethylamine	121-44-8	III	
Trifluralin	1582-09-8	II	2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl) benzamine
2,2,4-Trimethylpentane	540-84-1	III	Isooctane
Vinyl bromide	593-60-2	II	Bromoethane

Explanatory Notes:

* For pollutants listed in Table 51.3 of this Section, minimum emission rates and ambient air standards have not been established. Certain requirements of this Subchapter do not apply to these pollutants. For example, the provisions of LAC 33:III.5109, MACT and Ambient Air Standard Requirements and Standard Operating Procedure requirements, do not apply. Emissions of Table 51.3 pollutants shall not be counted toward a facility's total toxic air pollutant emissions in determining whether a stationary source is a major source for the purposes of this Subchapter. The provisions of LAC 33:III.5107.A, B, and C, Reporting Requirements and Availability of Information, do apply to emissions of Table 51.3 pollutants. Such emissions shall be reported on the Annual Emissions Reports provided for under LAC 33:III.5107.A.1 and 2, beginning with the report due July 1, 1993. To determine the applicability of other provisions to the pollutants listed in this table, refer to the text of this Subchapter.

[1] Coke manufacturers to which the reporting requirements of this Subchapter apply should report emissions of listed Louisiana toxic air pollutants in the same format used by all other affected major sources in the state.

[2] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[3] Excludes those glycol ethers listed in Table 51.2 of this Section. Those glycol ethers listed in Table 51.2 of this Section are subject to all provisions of this Subchapter. Includes any other mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R(OCH_2CH_2)_n$-OR'

where:

n = 1, 2, or 3;

R = alkyl or aryl groups;

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: $R(OCH_2CH)_n$-OH. Polymers are excluded from the glycol category.

[4] X'CN where X = H' or any group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:1331 (December 1995), amended LR 22:278 (April 1996), LR 24:1277 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1237 (July 1999), LR 26:2004 (September 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2624 (December 2007).

§5113. Notification of Start-Up, Testing, and Monitoring

A. Notification of Start-Up. Any owner or operator that has an initial start-up of a stationary source subject to MACT or Ambient Air Standard Requirements under this Subchapter shall furnish SPOC written notification as follows:

1. a notification to SPOC of the anticipated date of the initial start-up of the source not more than 60 days nor less than 30 days before that date; and

2. a notification to SPOC of the actual date of initial start-up of the source postmarked within 10 working days after such date.

B. Emission Tests and Waiver of Emission Tests

1. The department may require any owner or operator to conduct tests to determine the emission of toxic air pollutants from any source whenever the department has reason to believe that an emission in excess of those allowed by this Subchapter is occurring. The department may specify testing methods to be used in accordance with good

professional practice. The department may observe the testing. All tests shall be conducted by qualified personnel. The Office of Environmental Assessment shall be given a copy of the test results in writing signed by the person responsible for the tests within 45 days after completion of the test.

2. Emission tests shall be conducted as set forth in accordance with Test Methods of 40 CFR, Parts 60, 61, and 63 or in accordance with alternative test methods approved by the administrative authority.

3. The department may conduct tests of emissions of toxic air pollutants from any source. Upon request of the department, the persons responsible for the source to be tested shall provide necessary sampling and testing facilities, exclusive of instruments and sensing devices, as needed to properly determine the emission of toxic air pollutants.

4. The owner or operator of a new or existing source subject to this Chapter, when required, shall provide emission testing facilities as follows:

a. sampling ports adequate for test methods applicable to each source;

b. safe sampling platforms;

c. safe access to sampling platforms;

d. utilities for sampling and testing equipment; and

e. any other facilities that the administrative authority needs to safely and properly test a source.

5. Unless otherwise specified, samples shall be analyzed and emissions determined within 30 days after each emission test has been completed. The owner or operator shall report the determinations of the emission test to the Office of Environmental Assessment by a certified letter sent before the close of business on the forty-fifth day following the completion of the emission test.

6. The owner or operator shall retain records of emission test results and other data needed to determine emissions. Such records shall be retained at the source, or at an alternate location approved by the administrative authority for a minimum of two years, and shall be made available upon request for inspection by the administrative authority.

7. The owner or operator shall notify the Office of Environmental Assessment of any emission test required to demonstrate compliance with this Subchapter at least 30 days before the emission test to allow the administrative authority the opportunity to have an observer present during the test.

C. Monitoring Requirements

1. Each owner or operator shall maintain and operate each monitoring system in a manner consistent with good air pollution control practices for minimizing emissions. Any breakdown or malfunction of the monitoring system shall be repaired or adjusted as soon as practicable after its occurrence. The administrative authority's determination of whether acceptable operating and maintenance procedures are being used will be based on information that may include, but is not limited to, review of operating and maintenance procedures, manufacturer recommendations and specifications, inspection of the monitoring system, and adherence to a preventive maintenance program.

2. When required at any other time requested by the administrative authority, the owner or operator of a source being monitored shall conduct a performance evaluation of the monitoring system and furnish the Office of Environmental Assessment with a copy of a written report of the results within 60 days of the evaluation. The owner or operator of the source shall furnish the Office of Environmental Assessment with written notification of the date of the performance evaluation at least 30 days before the evaluation is to begin.

3. When monitoring is required and the effluents from a single source, or from two or more sources subject to the same emission standards, are combined before being released to the atmosphere, the owner or operator shall install a monitoring system on each effluent or on the combined effluent. If two or more sources are not subject to the same emission standards, the owner or operator shall install a separate monitoring system on each effluent, unless otherwise specified. If the applicable standard is a mass emission standard and the effluent from one source is released to the atmosphere through more than one point, the owner or operator shall install a monitoring system at each emission point unless the administrative authority approves the installation of fewer systems.

4. Monitoring data recorded during periods of unavoidable monitoring system breakdowns and repairs, calibration checks, and zero and span adjustments shall not be included in any data average.

5. The administrative authority may require a continuous monitoring system where such systems are deemed feasible and necessary to demonstrate compliance with applicable standards. The owner or operator of a facility that the administrative authority has required to install a continuous monitoring system shall submit to the Office of Environmental Assessment for approval a plan describing the affected sources and the methods for ensuring compliance with the continuous monitoring system. The plan for the continuous monitoring system must be submitted to the department within 90 days after the administrative authority requests either the initial plan or an updated plan.

a. Upon request, the owner or operator of any affected facility shall evaluate the performance of continuous monitoring systems and furnish the administrative authority with two or more copies of a written report of the test results within 60 days. The performance of the continuous monitoring systems shall be evaluated in accordance with the requirements and procedures contained in the applicable performance specification of 40 CFR Part 60, Appendix B.

b. Except for continuous monitoring system breakdown and repairs, calibration checks, and zero and

span adjustments, and when the equipment being monitored is out of service or shutdown, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements.

c. All continuous monitoring systems for measuring emissions, except opacity, shall where feasible complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

d. All continuous monitoring systems or monitoring devices shall be installed to make representative measurements under variable process or operating parameters.

e. An owner or operator of any continuous monitoring system shall collect and reduce all data as follows.

i. An owner or operator of a continuous monitoring system measuring opacity shall:

(a). reduce all data to six-minute averages; and

(b). calculate the six-minute averages from 36 or more data points equally spaced over each six-minute period.

ii. An owner or operator of a continuous monitoring system measuring parameters other than opacity shall:

(a). reduce all data to one-hour averages; and

(b). where feasible, calculate the one-hour averages from four or more data points equally spaced over each one-hour interval.

f. Data recorded during periods of continuous monitoring system breakdowns and repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this Paragraph.

6. Repeated problems of monitoring system breakdowns, repairs, calibration checks, zero and span adjustments, or failure to follow standard operating procedures (SOPs) shall be subject to investigation and enforcement actions.

7. The owner or operator of any monitoring system shall maintain records of monitoring data, monitoring system calibration checks, and the occurrence and duration of any period during which the monitoring system is malfunctioning or inoperative. These records shall be maintained at the source, or at an alternate location approved by the administrative authority, for a minimum of three years and made available, upon request, for inspection by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1204 (December 1991), amended LR 18:1364 (December 1992), LR 23:59 (January 1997), LR 23:1658 (December 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2461 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2448 (October 2005), LR 33:2094 (October 2007).

Subchapter B. Incorporation by Reference of 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants)

§5116. Incorporation by Reference of 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants)

A. Except as modified in this Section and specified below, National Emission Standards for Hazardous Air Pollutants, published in the *Code of Federal Regulations* at 40 CFR Part 61, July 1, 2006, and specifically listed in the following table, are hereby incorporated by reference as they apply to sources in the state of Louisiana. Also incorporated by reference are revisions to 40 CFR Part 61, Subpart A as promulgated on May 16, 2007, in the *Federal Register*, 72 FR 27437-27443.

40 CFR Part 61	Subpart/Appendix Heading
Subpart A	General Provisions
Subpart C	National Emission Standard for Beryllium
Subpart D	National Emission Standard for Beryllium Rocket Motor Firing
Subpart E	National Emission Standard for Mercury
Subpart F	National Emission Standard for Vinyl Chloride
Subpart J	National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene
Subpart L	National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants
Subpart N	National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants
Subpart O	National Emission Standard for Inorganic Arsenic Emissions for Primary Copper Smelters
Subpart P	National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities
Subpart V	National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Subpart Y	National Emission Standard for Benzene Emissions from Benzene Storage Vessels
Subpart BB	National Emission Standard for Benzene Emissions from Benzene Transfer Operations
Subpart FF	National Emission Standard for Benzene Waste Operations
Appendix A	National Emission Standards for Hazardous Air Pollutants, Compliance Status Information
Appendix B	Test Methods
Appendix C	Quality Assurance Procedures

B. Modifications or Exceptions. The following modifications or exceptions are made to the incorporated federal standards.

1. 40 CFR Part 61, Subpart A, Section 61.04(b)(T) is modified to read as follows: Louisiana Department of Environmental Quality, Office of Environmental Services.

2. Whenever the referenced regulations (i.e., 40 CFR Part 61) provide authority to "the Administrator," such authority, in accordance with these regulations, shall be

exercised by the administrative authority or his designee, notwithstanding any authority exercised by the U.S. Environmental Protection Agency (EPA). Reports, notices, or other documentation required by the referenced regulations (i.e., 40 CFR Part 61) to be provided to "the Administrator" shall be provided to the Office of Environmental Compliance, where the state is designated authority by EPA as "the Administrator," or shall be provided to the Office of Environmental Compliance and EPA, where EPA retains authority as "the Administrator."

C. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, or from a public library.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:61 (January 1997), amended LR 23:1658 (December 1997), LR 24:1278 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1464 (August 1999), LR 25:1797 (October 1999), LR 26:2271 (October 2000), LR 27:2230 (December 2001), LR 28:995 (May 2002), LR 28:2179 (October 2002), LR 29:699 (May 2003), LR 30:1009 (May 2004), amended by the Office of Environmental Assessment, LR 31:1569 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2448 (October 2005), LR 32:809 (May 2006), LR 33:1620 (August 2007), LR 33:2094 (October 2007).

Subchapter C. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as It Applies to Major Sources

§5122. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as It Applies to Major Sources

A. Except as modified in this Section and specified below, National Emission Standards for Hazardous Air Pollutants for Source Categories, published in the *Code of Federal Regulations* at 40 CFR Part 63, July 1, 2006, are hereby incorporated by reference as they apply to major sources in the state of Louisiana. Also incorporated by reference are revisions to 40 CFR Part 63, Subpart A as promulgated on May 16, 2007, in the *Federal Register*, 72 FR 27437-27443, applicable to major sources.

B. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, or from a public library.

C. Modifications or Exceptions. The following modifications or exceptions are made to the incorporated federal standards.

1. Whenever the referenced regulations (i.e., 40 CFR Part 63) provide authority to "the Administrator," such authority, in accordance with these regulations, shall be exercised by the administrative authority or his designee, notwithstanding any authority exercised by the U.S. Environmental Protection Agency (EPA). Reports, notices, or other documentation required by the referenced regulations (i.e., 40 CFR Part 63) to be provided to "the Administrator" shall be provided to the Office of Environmental Compliance, where the state is designated authority by EPA as "the Administrator," or shall be provided to the Office of Environmental Compliance and EPA, where EPA retains authority as "the Administrator."

2. In Section 63.440(d)(1) of 40 CFR 63, Subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry, the requirement is modified to read,

> "Each kraft pulping system shall achieve compliance with the pulping system provisions of Section 63.443 for the equipment listed in Section 63.443(a)(1)(ii)-(v), as expeditiously as practicable, but in no event later than December 20, 2004, and the owners and operators shall establish dates, update dates, and report the dates for the milestones specified in Section 63.455(b)."

3. 40 CFR Part 63, Subpart D, Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants; Subpart E, Approval of State Programs and Delegation of Federal Authorities; Subpart J, National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production; and Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, are not included in this incorporation by reference.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:61 (January 1997), amended LR 23:1659 (December 1997), LR 24:1278 (July 1998), LR 24:2240 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1464 (August 1999), LR 25:1798 (October 1999), LR 26:690 (April 2000), LR 26:2271 (October 2000), LR 27:2230 (December 2001), LR 28:995 (May 2002), LR 28:2180 (October 2002), LR 29:699 (May 2003), LR 29:1474 (August 2003), LR 30:1010 (May 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2449 (October 2005), LR 31:3115 (December 2005), LR 32:810 (May 2006), LR 33:1620 (August 2007), LR 33:2095 (October 2007), LR 33:2627 (December 2007).

Subchapter D. Reserved

Subchapter E. Reserved

Subchapter F. Reserved

Subchapter G. Reserved

Subchapter H. Reserved

Subchapter I. Reserved

Subchapter J. Reserved

Subchapter K. Reserved

Subchapter L. Reserved

Subchapter M. Asbestos

§5151. Emission Standard for Asbestos

A. Applicability. The provisions of this Subchapter are applicable to those sources specified in Subsections C-O of this Section.

B. Definitions. Terms used in this Section are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined in LAC 33:III.5103 or below, as follows.

Accredited or Accreditation—when referring to a person, the *accreditation* of such person by the Department of Environmental Quality under the provisions of LAC 33:III.2799.Appendix A—Agent Accreditation Plan.

Active Waste Disposal Site—any disposal site other than an inactive site.

Adequately Wet—sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being *adequately wet*. Once contained, water droplets formed inside disposal containers will be sufficient evidence of being *adequately wet*.

Asbestos—the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

Asbestos Material—asbestos or any material or product which contains more than 1 percent asbestos.

Asbestos Mill—any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the *asbestos mill*.

Asbestos Tailing—any solid waste product that contains asbestos and is a product of asbestos mining or milling operations.

Asbestos-Containing Waste Material (ACWM)—mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this Subchapter. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos, including disposable equipment and clothing.

Category I Nonfriable Asbestos-Containing Material (ACM)—asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos as determined by using the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy.

Category II Nonfriable ACM—any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined by using the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Commercial Asbestos—any material containing asbestos that is extracted from asbestos ore and has value because of its asbestos content.

Cutting—to penetrate with a sharp-edged instrument, including sawing, but not including shearing, slicing, or punching.

Demolition—the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

DEQ Identification Number—the accreditation number supplied by the administrative authority which authorizes a contractor/supervisor to manage an asbestos demolition or renovation project which involves RACM (regulated asbestos-containing material).

Emergency Demolition/Renovation Operation—a demolition or renovation operation that was not planned but results from a sudden unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

Encapsulation—the treatment of asbestos material with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers by the encapsulant creating a membrane over the surface (bridging encapsulant) or penetrating the material and binding its components together (penetrating encapsulant).

Enclosure—an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

Fabricating—any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites

(field fabricating) for the construction or restoration of facilities. In the case of friction products, *fabricating* includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of *fabricating*.

Facility—any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this Subchapter is not excluded, regardless of its current use or function.

Facility Component—any part of a facility, including equipment.

Friable Asbestos Material—any material containing more than 1 percent asbestos as determined by using the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM, or an equivalent EPA approved estimation technique, or assume the amount to be greater than 1 percent and treat the material as asbestos-containing material.

Fugitive Source—any source of emissions not controlled by an air pollution control device.

Glove Bag—a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, *glove bags* provide a small work area enclosure typically used for small-scale asbestos stripping operations.

a. They are limited to one use on a work area or section of pipe that is shorter than the bag is wide.

b. The bag shall be disposed of after its single use.

c. No person shall loosen a bag once installed, slide the bag along a working surface or section of pipe and use the bag for a second work area or section of pipe.

d. Any deviation from single use of a *glove bag* requires prior written approval of the administrative authority. Additional information on *glove bag* installation, equipment and supplies, and work practices can be obtained from the Occupational Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (29 CFR 1926.58, Appendix G).

Grinding—to reduce to powder or small fragments, including mechanical chipping or drilling.

High Efficiency Particulate Air (HEPA) Filter—a filtering system certified by the manufacturer as being capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 microns in diameter or larger.

In Poor Condition—the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

Inactive Waste Disposal Site—any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

Inspection or Inspect—an examination of a facility or facility component to determine the presence or location, or to assess the condition of friable or nonfriable asbestos material, or suspected asbestos material, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of assumed asbestos material and friable and nonfriable asbestos material which has been previously identified. The term does not include the following:

a. periodic surveillance of the type described in LAC 33:III.2721.B solely for the purpose of recording or reporting a change in the condition of known or assumed asbestos material;

b. inspections performed by employees or agents of federal, state, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or

c. visual inspections of the type described in LAC 33:III.2717.I solely for the purpose of determining completion of response actions.

Installation—any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

Leak-Tight—solids or liquids cannot escape or spill out. It also means dust-tight.

Major Fiber Release Episode—any uncontrolled or unintentional disturbance of asbestos material which involves the falling or dislodging of more than 3 square or 3 linear feet of friable asbestos material.

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 so that emissions of asbestos are increased. Failures of equipment shall not be considered *malfunctions* if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

Manufacturing—the combining of commercial asbestos (in the case of woven friction products, the combining of textiles containing commercial asbestos) with any other material(s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of *manufacturing*.

Natural Barrier—a natural object that effectively precludes or deters access. *Natural barriers* include physical obstacles such as cliffs, lakes, or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a *natural barrier*.

Nonfriable Asbestos-Containing Material—any material containing more than 1 percent asbestos as determined by using the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Nonscheduled Operation—any individual asbestos renovation and/or demolition operation necessitated solely by the need for the repair or maintenance of facility components, and involves a total of less than 1 cubic yard of RACM per operation. An operation cannot be artificially sub-divided into several smaller operations for the purpose of meeting the less-than-1-cubic-yard requirement to be considered a nonscheduled operation. Annual notification is required for such an operation as described in Clause F.1.d.i of this Section.

Operations and Maintenance (O and M)—a program of work practices to maintain friable asbestos material in good condition, ensure cleanup of asbestos fibers previously released, and prevent further release by minimizing and controlling the disturbance or damage of friable asbestos material.

Outside Air—the air outside buildings, structures, or enclosures, including, but not limited to, the air under a bridge, in an open air ferry dock, or air outside demolition or renovation construction activities or enclosures.

Owner or Operator of a Demolition or Renovation Activity—any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

Particulate Asbestos Material—finely divided particles of asbestos or material containing asbestos.

Planned Operation—a demolition and/or renovation operation, or a number of such operations, in which RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

Recognized Disposal Site—a waste disposal site which has been approved or permitted by the Department of Environmental Quality.

Regulated Asbestos-Containing Material (RACM)—

a. friable asbestos material;

b. Category I nonfriable ACM that has become friable;

c. Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or

d. Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this Subchapter.

Remove—to take out RACM or facility components that contain or are covered with RACM from any facility.

Renovation—altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component that is to be returned or remain in place. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Resilient Floor Covering—asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined by using polarized light microscopy according to the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy.

Response Action—a method, including removal, encapsulation, enclosure, repair, and operations and maintenance activities, that protects human health and the environment from friable asbestos material.

Roadways—surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

Small-Scale, Short-Duration (SSSD) Activities—tasks that involve less than or equal to 3 square feet or 3 linear feet of asbestos material.

State Building—a building owned or leased by the state of Louisiana.

Strip—to take off RACM from any part of a facility or facility components.

Structural Member—any load-supporting member of a facility such as beams and load-supporting walls; or any non-load-supporting member, such as ceilings, roofs and non-load-supporting walls.

Visible Emissions—any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

Waste from Asbestos Control Devices—any waste material that is placed or collected in asbestos control equipment.

Waste Generator—any owner or operator of a source covered by this Subchapter whose act or process produces asbestos-containing waste material.

Waste Shipment Record—the shipping document (Asbestos Disposal Verification Form, ADVF), required to be originated and signed by the waste generator or the owner or operator of a demolition or renovation activity, used to

track and substantiate the disposition of asbestos-containing waste material.

Working Day—Monday through Friday, including holidays that fall on any of the days Monday through Friday.

C. Standard for Asbestos Mills

1. Each owner or operator of an asbestos mill shall either discharge no visible emissions to the outside air from that asbestos mill, including fugitive sources, or use the methods specified in Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

2. Each owner or operator of an asbestos mill shall meet the following requirements.

a. Monitor each potential source of asbestos emissions from any part of the mill facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15-seconds duration per source of emissions.

b. Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this Subparagraph, submit to the administrative authority, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

i. maintenance schedule; and

ii. recordkeeping plan.

c. Maintain records of the results of visible emissions monitoring and air cleaning device inspections using a format similar to the Inspection and Monitoring Record Form, AAC-6, and include the following:

i. date and time of each inspection;

ii. presence or absence of visible emissions;

iii. condition of fabric filters, including presence of any tears, holes and abrasions;

iv. presence of dust deposits on clean side of fabric filters;

v. brief description of any corrective actions taken, including date and time; and

vi. daily hours of operation for each air cleaning device.

Inspection and Monitoring Record Form					AAC-6
Date of Inspection (mo/day/yr)	**Time of Inspection (a.m./p.m.)**	**Air Cleaning Device or Fugitive Source Designation or Number**	**Visible Emissions Observed (yes/no), Corrective Action Taken**	**Daily Operating Hours**	**Inspector's Initials**

Figure 1. Record of Visible Emission Monitoring **Page 1**

d. Furnish upon request, and make available at the affected facility during normal business hours for inspection by a representative of the administrative authority, all records required under this Subsection.

e. Retain a copy of all monitoring and inspection records for at least two years.

f. Submit quarterly a copy of visible emission monitoring records to the administrative authority if visible emissions occurred during the report period. Quarterly reports shall be postmarked by the thirtieth day following the end of the calendar quarter.

D. Standard for Roadways. No person shall construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings:

1. it is a temporary roadway on an area of asbestos ore deposits (asbestos mine); or

2. it is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or

3. it is encapsulated in asphalt concrete meeting the specifications contained in Section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.

E. Standard for Manufacturing and Fabricating

1. There shall be no visible emissions to the outside air from any of the following operations that use commercial asbestos or from any building or structure in which such operations are conducted, or from any other fugitive sources:

a. the manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials;

b. the manufacture and fabrication of cement products;

c. the manufacture of fireproofing and insulating materials;

d. the manufacture and fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles;

e. the manufacture of paper, millboard, and felt;

f. the manufacture of floor tile;

g. the manufacture of paints, coatings, caulks, adhesives, and sealants;

h. the manufacture of plastics and rubber materials;

i. the manufacture of chlorine utilizing asbestos diaphragm technology;

j. the manufacture of shotgun shell wads;

k. the manufacture of asphalt concrete; and

l. the fabrication of cement or silicate board for ventilation hoods, ovens, electrical panels, laboratory furniture, bulkheads, partitions and ceilings for marine construction, and flow control devices for the molten metal industry.

2. Use the methods specified by Subsection O of this Section to clean emissions from these operations containing particulate asbestos material before they escape to, or are vented to, the outside air.

3. Monitor each potential source of asbestos emissions from any part of the manufacturing or fabricating facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once each day during daylight hours for visible emissions to the outside air during periods of operation. The monitoring shall be visual observation of at least 15 seconds duration per source of emissions.

4. Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this Paragraph, submit to the administrative authority, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

a. maintenance schedule; and

b. recordkeeping plan.

5. Maintain records of the results of visible emission monitoring and air cleaning device inspections using the format similar to the Inspection and Monitoring Record Form, AAC-6, and include the following:

a. date and time of each inspection;

b. presence or absence of visible emissions;

c. condition of fabric filters, including presence of any tears, holes and abrasions;

d. presence of dust deposits on clean side of fabric filters;

e. brief description of corrective actions taken, including date and time; and

f. daily hours of operation for each air cleaning device.

6. Furnish upon request, and make available at the affected facility during normal business hours for inspection by the administrative authority, all records required under this Subsection.

7. Retain a copy of all monitoring and inspection records for at least two years.

8. Submit quarterly a copy of the visible emission monitoring records to the administrative authority if visible emissions occurred during the report period. Quarterly

reports shall be postmarked by the thirtieth day following the end of the calendar quarter.

F. Emission Standard for Demolition and Renovation

1. Applicability. To determine which requirements of Paragraphs F.1, 2 and 3 of this Section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of Paragraphs F.2 and 3 of this Section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows.

a. In a facility being demolished, all the requirements of Paragraphs F.2 and 3 of this Section apply, except as provided in Subparagraph F.1.c of this Section, if RACM is present.

b. In a facility being demolished, only the notification requirements of Subparagraphs F.2.a and b and Clauses F.2.c.i and iv, d.i-vii, ix, and xvi of this Section apply, if RACM is present as Category I in good condition, or if RACM is not present.

c. If the facility is being demolished under an order of a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of Subparagraphs F.2.a and b, Clause F.2.c.iii, Subparagraph F.2.d (except Clause F.2.d.viii), Subparagraphs F.2.e, and 3.d-i of this Section apply.

d. In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of Paragraphs F.2 and 3 of this Section apply if RACM is to be stripped, removed, dislodged, cut, drilled, or similarly disturbed, and:

i. Subparagraph F.1.d of this Section applies to planned renovation operations involving individual nonscheduled operations of less than one cubic yard by predicting the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31 based on past operating experience;

ii. Subparagraph F.1.d of this Section applies to emergency renovation operations of an estimated amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

e. Owners or operators of demolition and renovation operations are exempt from the requirements of LAC 33:III.5105.A, 5109.E, 5111.A and 5113.A.

f. An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of Paragraphs F.2 and 3 of this Section for each demolition or renovation activity. The supplying of regulated personnel on an hourly, monthly, or other time basis to another company is considered contracting, (i.e., abatement workers, supervisors, air monitoring, or project monitoring personnel).

g. If the activities are an emergency demolition/ renovation operation, all the requirements of Subparagraphs F.2.d, e, f, and Paragraph F.3 of this Section apply.

2. Notification Requirements. Each owner or operator of a demolition or renovation activity to which this Subsection applies shall:

a. provide the Office of Environmental Services with typed notice of intention to demolish or renovate using the latest version of Form AAC-2, Notification of Demolition and Renovation. This form is available from the Office of Environmental Services or through the department's website. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. The use of a prior version of the AAC-2 Form is acceptable unless the department has previously provided the owner or operator with a copy of the current version, or the owner or operator is aware of the latest version;

b. update notice (AAC-2), as necessary, including when the amount of asbestos affected changes by at least 20 percent;

c. postmark or deliver the notice as follows:

i. at least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge, or similarly disturb asbestos material), if the operation is described in Subparagraphs F.1.a and d (except Clauses F.1.d.i and ii) of this Section. If the operation is as described in Subparagraph F.1.b of this Section, notification is required 10 working days before demolition begins;

ii. at least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in Clause F.1.d.i of this Section;

iii. as early as possible before, but not later than the following working day, if the operation is a demolition ordered according to Subparagraph F.1.c of this Section, or if the operation is a renovation described in Clause F.1.d.ii of this Section;

iv. for asbestos stripping or removal work in a demolition or renovation operation, described in Subparagraphs F.1.a and d (except Clauses F.1.d.i and ii) of this Section, and for a demolition described in Subparagraph F.1.b of this Section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the DEQ regional office responsible for inspecting the project site as follows:

(a). when the asbestos stripping or removal operation or demolition operation covered by this Subsection will begin after the date contained in the notice (AAC-2):

(i). notify the DEQ regional office responsible for inspecting the project site of the new start date by

telephone as soon as possible before the original start date; and

(ii). provide the Office of Environmental Services with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable;

(b). when the asbestos stripping or removal operation or demolition operation covered by this Subsection will begin on a date earlier than the original start date:

(i). provide the Office of Environmental Services, Air Permits Division, with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins;

(ii). for demolitions covered by Subparagraph F.1.b of this Section, provide the Office of Environmental Services, Air Permits Division, written notice of a new start date at least 10 working days before commencement of demolition. Delivery of the updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable;

(c). in no event shall an operation covered by this Subsection begin on a date other than the date contained in the written notice (AAC-2) of the new start date;

d. include the following in the notice:

i. an indication of whether the notice is the original notification or a revised notification;

ii. name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator, and the DEQ identification number assigned by the administrative authority;

iii. type of operation: demolition or renovation;

iv. description of the facility or affected part of the faciliy including the size (square meters, square feet and number of floors), age, and present and prior use of the facility;

v. procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM;

vi. estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before the demolition;

vii. location and street address (including building number or name and floor or room number, if appropriate), city, parish, and state, of the facility being demolished or renovated;

viii. scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in Clause F.1.d.i of this Section;

ix. scheduled starting and completion dates of demolition or renovation;

x. description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components;

xi. description of work practices and engineering controls to be used to comply with the requirements of this Section, including asbestos removal and waste handling emission control procedures;

xii. name, telephone number, mailing address, and physical location of the waste disposal site where the asbestos-containing waste material will be deposited;

xiii. a signed certification that personnel performing the demolition or renovation activity are trained and accredited as required by Subparagraph F.3.h of this Section when RACM is present. This requirement shall be effective upon promulgation of this regulation;

xiv. for facilities described in Subparagraph F.1.c of this Section, the name, title, and authority of the state or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification;

xv. for emergency renovations described in Clause F.1.d.ii of this Section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden;

xvi. description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder;

xvii. name, address and telephone number of the waste transporter; and

xviii. current ADVF (Asbestos Disposal Verification Form) numbers if they have been issued for the project;

e. the AAC-2 Form must be used to report information required in Subparagraph F.2.d of this Section;

f. provide prompt notification of emergencies in the manner provided in LAC 33:I.3923 immediately, but in no case later than one hour after learning of the incident which will induce emergency demolition or renovation operations:

i. the notification by phone shall include the following:

(a). the reason for the emergency;

(b). steps taken to minimize potential hazards to workers and the public; and

(c). estimated quantities of friable and nonfriable asbestos-containing materials to be handled;

ii. within five working days after the notification is made by phone, a typed notification as specified in Subparagraphs F.2.d and e shall be submitted to the Office of Environmental Services in order to obtain an ADVF;

g. use the following procedures in order that the department can trace disposal of asbestos-containing waste material:

i. each demolition or renovation notification received by the department that is associated with a project that generates asbestos-containing waste material shall result in a confirmation letter with a specific project number to the owner or operator accompanied by an Asbestos Disposal Verification Form (ADVF) with a specific facility code;

ii. the owner or operator of a demolition or renovation activity shall complete and sign their portion of the ADVF and relinquish it to the waste transporter prior to the off-site shipment;

iii. the waste transporter shall transport the asbestos-containing waste material with the ADVF to a recognized disposal site and complete, sign, and relinquish the ADVF to the disposal site owner or operator at the time the asbestos waste is delivered for burial;

iv. the completed ADVF from the transporter shall be verified and signed by the disposal site owner or operator and mailed to the Office of Environmental Services within 30 working days. A copy is to be returned to the waste generator;

v. the ADVF shall expire 90 days from the date of issue. ADVFs for nonscheduled operations shall expire on December 31 of the year for which they are issued;

vi. the ADVF must be completed in its entirety by the applicable person as indicated in the particular section of the form, and must be legible;

vii. acceptance of an invalid ADVF by a waste transporter or disposal site owner or operator is a violation of this Subchapter.

3. Procedures for Asbestos Emission Control. Each owner or operator of a demolition or renovation activity to whom this Section applies, according to Paragraph F.1 of this Section, shall comply with the following procedures.

a. Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

i. it is Category I nonfriable ACM that is not in poor condition and is not friable;

ii. it is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition;

iii. it was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of; or

iv. it is Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.

b. When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:

i. adequately wet all RACM exposed during cutting or disjoining operations; and

ii. carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding or otherwise damaging them or disturbing the RACM.

c. When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM prior to and during the stripping operation. The work area shall be controlled to prevent the release of asbestos-containing material to the outside air, and the controlled work area shall, when feasible, be visible to inspectors outside the work area (i.e., transparent window which is easily accessible).

i. In renovation operations, wetting is not required if:

(a). the owner or operator has obtained prior written approval from the administrative authority based on a written application that wetting, to comply with Subsection F of this Section, would unavoidably damage equipment or present a safety hazard; and

(b). the owner or operator uses one or more of the following emission control methods as approved by the administrative authority:

(i). a local exhaust ventilation and collection (HEPA filter) system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements of Subsection O of this Section;

(ii). a glove-bag system designed and operated to capture the particulate asbestos material produced by the stripping of the asbestos materials; and

(iii). leak-tight clear transparent wrapping to contain all RACM prior to dismantlement.

ii. In renovation operations where wetting would result in equipment damage or a safety hazard, and the

methods allowed in Clause F.3.c.i of this Section cannot be used, another method may be used after obtaining written approval from the administrative authority based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in Clause F.3.c.i of this Section.

iii. A copy of the administrative authority's written approval referenced in Subclause F.3.c.i.(a) and Clause F.3.c.ii of this Section shall be kept at the worksite and made available for inspection.

d. After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to Subparagraph F.3.b of this Section, it shall be stripped or contained in leak-tight, clear, transparent wrapping, except as described in Subparagraph F.3.e of this Section. If stripped:

i. adequately wet RACM during stripping; and

ii. use a local exhaust ventilation and containment with a collection (HEPA filter) system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in Subsection O of this Section.

e. For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with Subparagraphs F.3.b, c, and d of this Section), the RACM is not required to be stripped if the following requirements are met:

i. the component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM;

ii. the component is encased in a leak-tight, clear, transparent wrapping; and

iii. the leak-tight, clear, transparent wrapping is labeled according to Clause I.4.a.iii of this Section during all loading and unloading operations and during storage.

f. For all RACM, including material that has been removed or stripped:

i. adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with Subsection J of this Section;

ii. carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material;

iii. transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections;

iv. RACM contained in leak-tight, clear, transparent wrapping that has been removed in accordance with Subclause F.3.c.i.(a) of this Section need not be wetted.

g. When the temperature at the point of wetting is below 0°C (32°F) and written authorization has been approved by the administrative authority as specified in Subclause F.3.c.i.(a) of this Section.

i. The owner or operator need not comply with Clause F.3.b.i of this Section and the wetting provisions of Subparagraph F.3.c of this Section.

ii. The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.

iii. During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each work day and keep daily temperature records available for inspection by the administrative authority during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least two years.

h. No response action shall be conducted at a facility regulated by this Section unless at least one asbestos abatement contractor/supervisor is physically present. All asbestos abatement workers who are performing response actions other than SSSD activities, shall be supervised by an asbestos contractor/supervisor. Evidence of the required training shall be made available for inspection by the administrative authority at the demolition or renovation site. Evidence of required training shall include, but not be limited to, the appropriate training certificates, DEQ issued identification card or accreditation certificates. For contracted abatement personnel, evidence of accreditation shall be made available for inspection by the administrative authority at the demolition or renovation site.

i. For facilities described in Subparagraph F.1.c of this Section, adequately wet the portion of the facility that contains RACM during the wrecking operation.

j. If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with this Section before burning.

k. There shall be no discharge of asbestos contaminated liquids from the demolition or renovation activity which are contaminated with asbestos material if it is reasonably anticipated that such asbestos may become airborne.

l. Prior to completion of renovation or demolition activity involving RACM, the work area (described area where the renovation or demolition activity occurs) shall be cleaned by:

i. removing all loose debris in and adjacent to the immediate work area whether or not it is RACM; and

ii. encapsulating all remaining RACM in the immediate work area when feasible with a nonwhite pigmented (opaque) encapsulant which is compatible with the contacted surface.

m. Within 24 hours after the demolition or renovation activity has ended and the work area has been cleaned in accordance with Subparagraph F.3.l of this Section, verbally notify the Department of Environmental Quality (DEQ) regional office responsible for inspecting the project site of the conclusion of the cleanup. Only after the DEQ has been notified of project completion will the abatement activity be complete.

G. Standard for Spraying. The owner or operator of an operation in which asbestos-containing materials are spray applied shall comply with the following requirements.

1. For spray-on application on buildings, structures, pipes, and conduits, do not use material containing more than 1 percent asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy, except as provided in Paragraph G.3 of this Section.

2. For spray-on application of materials that contain more than 1 percent asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy, on equipment and machinery, except as provided in Paragraph G.3 of this Section.

a. Notify the Office of Environmental Services at least 20 days before beginning the spraying operation. Include the following information in the notice:

i. name, address and telephone number of owner or operator of a demolition or renovation activity;

ii. location of spraying operation; and

iii. procedures to be followed to meet the requirements of Paragraph G.2 of this Section.

b. Discharge no visible emissions to the outside air from spray-on application of the asbestos-containing material or use methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

3. The spray-on application of materials in which the asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and which are not friable after drying is exempted from the requirements of Paragraph G.1 and Subparagraph G.2.b of this Section.

4. Sources subject to this Chapter are exempt from all requirements of LAC 33:III.Chapter 51.Subchapter A, except that the provisions regarding availability of information, LAC 33:III.5107.C, shall apply.

H. Standard for Insulating Materials. No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this Subsection do not apply to spray-applied insulating materials regulated under Subsection G of this Section.

I. Standard for Waste Disposal for Asbestos Mills. Each owner or operator of any source covered under the provisions of Subsection C of this Section shall:

1. deposit all asbestos-containing waste material at a waste disposal site recognized by the department. A completed AAC-7 Form shall have been submitted to the Office of Environmental Services by the disposal facility for prior recognition. Updated information will be required upon request. The latest AAC-7 Form may be obtained from the Office of Environmental Services or through the department's website. The Office of Environmental Services will maintain a current list of recognized asbestos waste disposal sites;

2. discharge no visible emissions to the outside air from the transfer of waste from asbestos control devices to the tailings conveyor, or use the methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air. Dispose of the waste from asbestos control devices in accordance with Paragraph J.1 or 3 of this Section;

3. discharge no visible emissions to the outside air during the collection, processing, packaging, or on-site transporting of any asbestos-containing waste material, or use one of the disposal methods specified in Subparagraph I.3.a or b of this Section, as follows:

a. use a wetting agent as follows:

i. adequately mix all asbestos-containing waste material with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings, before depositing the material at a waste disposal site. Use the agent as recommended for the particular dust by the manufacturer of the agent;

ii. discharge no visible emissions to the outside air from the wetting operation or use the methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;

iii. wetting may be suspended with written authorization from the administrative authority when the ambient temperature at the waste disposal site is less than 9.5°C (15°F) as determined by an appropriate measurement method with an accuracy of ±1°C (±2°F). During periods when wetting operations are suspended, the temperature shall be recorded at least at hourly intervals, and records must be retained for at least two years in a form suitable for inspection;

b. use an alternative emission control and waste treatment method that has received prior written approval by the administrative authority. To obtain approval for an alternative method, a written application must be submitted to the Office of Environmental Services demonstrating that the following criteria are met:

i. the alternative method will control asbestos emissions equivalent to currently required methods;

ii. the alternative method is suitable for the intended application;

iii. the alternative method will not violate other regulations; and

iv. the alternative method will not result in increased water pollution, land pollution, or occupational hazards;

4. when waste is transported by vehicle to a disposal site:

a. mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must:

i. be displayed in such a manner and location that a person can easily read the legend;

ii. conform to the requirements for 51 cm x 36 cm (20 in. x 14 in.) upright format signs specified in 29 CFR 1910.145(d)(4) and this Clause; and

iii. display the following legend or the OSHA legend described in 29 CFR 1926.58(k)(1)(ii) in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this Clause:

DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

Notation:
2.5 cm (1 inch) Sans Serif, Gothic or Block
2.5 cm (1 inch) Sans Serif, Gothic or Block
1.9 cm (3/4 inch) Sans Serif, Gothic or Block
14 Point Gothic
Spacing between any two lines must be at least equal to the height of the upper of the two lines.

b. for off-site disposal, provide a copy of the waste shipment record (ADVF) described in Subparagraph I.5.a of this Section, to the disposal site owner or operator at the same time as the asbestos-containing waste material arrives at the disposal site;

5. for all asbestos-containing waste material transported off the facility site:

a. maintain asbestos waste shipment records, using an ADVF Form, and include the following information:

i. the name, DEQ identification number, address, and telephone number of the waste generator;

ii. the quantity of the asbestos-containing waste material in cubic meters (cubic yards);

iii. the name and telephone number of the disposal site operator;

iv. the name and physical site location of the disposal site;

v. the date transported;

vi. the names, address, and telephone number of the transporter(s); and

vii. a certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations;

b. for waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment;

c. report in writing to the Office of Environmental Services if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

i. a copy of the waste shipment record for which a confirmation of delivery was not received; and

ii. a cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts;

d. retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least two years;

6. furnish upon request, and make available for inspection by the administrative authority, all records required under this Section.

J. Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations. Each owner or operator of any source covered under the provisions of Subsection E, F, or G of this Section shall comply with the following provisions.

1. Discharge no visible emissions to the outside air during collection, processing (including incineration), packaging, or transporting or deposition of any asbestos-containing waste material generated by the source, and use one of the emission control and waste treatment methods specified in Subparagraphs J.1.a-d of this Section.

a. Adequately wet and store asbestos-containing waste material as follows:

i. mix waste from asbestos control devices to form a slurry; adequately wet other asbestos-containing waste material;

ii. discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by Subsection O of

this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;

iii. after wetting, seal all asbestos-containing waste material in leak-tight, clear, transparent containers (i.e., bags) while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight, clear, transparent wrapping. If utilizing plastic drums to contain ACM, the transparent wrapping requirement is not necessary. If drums are used to store bagged material, the bags must be transparent;

iv. label the containers or wrapped materials specified in this Subsection using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(2) or 1926.58(k)(2)(iii). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible;

v. for asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated; and

vi. store all wrapped and contained asbestos-containing waste material in a labeled, secured area away from the public, where it will not be subject to disturbance or tampering until it can be transported to a waste disposal site recognized by the department.

b. Process asbestos-containing waste material into nonfriable forms as follows:

i. form all asbestos-containing waste material into nonfriable pellets or other shapes; and

ii. discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

c. For facilities demolished where the RACM is not removed prior to demolition according to Clauses F.3.a.i, ii, iii, and iv of this Section or for facilities demolished according to Subparagraph F.3.i of this Section, adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this Subparagraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.

d. Use an alternative emission control and waste treatment method that has received prior written approval by the EPA Administrator according to the procedure described in Subparagraph I.3.b of this Section.

e. As applied to demolition and renovation, the requirements of Paragraph J.1 of this Section do not apply to Category I and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.

2. All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:

a. a waste disposal site operated in accordance with the provisions of Subsection N of this Section; or

b. an EPA approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of Subsection L of this Section;

c. the requirements of Paragraph J.2 of this Section do not apply to Category I nonfriable ACM that is not RACM.

3. Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of Clauses I.4.a.i, ii, and iii of this Section.

4. For all asbestos-containing waste material transported off the facility site:

a. maintain waste shipment records, using an ADVF Form, and include the following information:

i. the name, address, and telephone number of the waste generator;

ii. the name and address of the administrative authority responsible for administering the asbestos NESHAP program;

iii. the approximate quantity in cubic meters (cubic yards);

iv. the name and telephone number of the disposal site operator;

v. the name and physical site location of the disposal site;

vi. the date transported;

vii. the name, address, and telephone number of the transporter(s); and

viii. a certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations;

b. provide a copy of the waste shipment record, described in Subparagraph J.4.a of this Section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site;

c. for waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the

owner or operator of the designated disposal site to determine the status of the waste shipment;

d. report in writing to the Office of Environmental Services if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

i. a copy of the waste shipment record for which a confirmation of delivery was not received; and

ii. a cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts;

e. retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least two years.

5. Furnish upon request, and make available for inspection by the administrative authority, all records required under this Section.

K. Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations. Each owner or operator of any inactive waste disposal site that was operated by sources covered under Subsection C or E of this Section and received deposits of asbestos-containing waste material generated by the sources, shall:

1. comply with the following:

a. discharge no visible emissions to the outside air from an inactive waste disposal site subject to Subsection C, E, or K of this Section;

b. cover the asbestos-containing waste material with at least 60 centimeters (24 inches) of compacted non-asbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material; or

c. for inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in Subparagraphs K.1.a and b of this Section. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the administrative authority to use this or other equally effective dust suppression agents. For purposes of Subsection K of this Section, any used, spent, or other waste oil is not considered a dust suppression agent;

2. unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with Subparagraph K.1.b of this Section:

a. display warning signs at all entrances and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited, at intervals of 50 m (ca. 165 feet) or less. The warning sign must:

i. be posted in such a manner and location that a person can easily read the legend;

ii. conform to the requirements of 51 cm x 36 cm (20 in. x 14 in.) upright format signs specified in 29 CFR 1910.145(d)(4) and this Paragraph; and

iii. display the following legend with letter sizes and styles of a visibility at least equal to those specified in this Clause:

ASBESTOS WASTE DISPOSAL SITE
DO NOT CREATE DUST
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH

Notation:
2.5 cm (1 inch) Sans Serif, Gothic or Block
1.9 cm (3/4 inch) Sans Serif, Gothic or Block
14 Point Gothic
Spacing between lines must be at least equal to the height of the upper of the two lines.

b. the perimeter of the site shall be fenced in a manner adequate to prevent access by the general public;

c. when requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Office of Environmental Services to determine whether a fence or a natural barrier adequately deters access by the general public;

3. the owner or operator may use an alternate control method that has received prior approval by the EPA Administrator rather than comply with the requirements of Paragraph K.1 or 2 of this Section;

4. notify the Office of Environmental Services in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this Section, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Office of Environmental Services at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

a. scheduled starting and completion dates;

b. reason for disturbing the waste;

c. procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the administrative authority may require changes in the emission control procedures to be used; and

d. location of any temporary storage site and the final disposal site;

5. within 60 days of a site becoming inactive and after the effective date of this Section, record, in accordance with state law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

a. the land has been used for the disposal of asbestos-containing waste material;

b. the survey plot and record of the location and quantity of asbestos-containing waste material disposed of within the disposal site required in Paragraph N.6 of this Section have been filed with the administrative authority; and

c. the site is subject to LAC 33:III.Chapter 51.Subchapter M and the certification provisions in LAC 33:III.2799.Appendix A—Agent Accreditation Plan.

L. Standard for Operations that Convert RACM or Asbestos-Containing Waste Material into Nonasbestos (Asbestos-free) Material. Each owner or operator of an operation that converts RACM or asbestos-containing waste material into nonasbestos (asbestos-free) material shall:

1. obtain the prior written approval of the EPA Administrator to construct the facility. To obtain approval, the owner or operator shall provide the EPA Administrator with the following information:

a. application to construct pursuant to LAC 33:III.5111;

b. in addition to the requirements of LAC 33:III.5111:

i. description of waste feed handling and temporary storage;

ii. description of process operating conditions;

iii. description of handling and temporary storage of the end product; and

iv. description of the protocol to be followed when analyzing output materials by transmission electron microscopy;

c. performance test protocol, including provisions for obtaining information required under Paragraph L.2 of this Section;

d. the EPA Administrator may require that a demonstration of the process be performed prior to approval of the application to construct;

2. conduct a start-up performance test. Test results shall include:

a. a detailed description of the types and quantities of nonasbestos material, RACM, and asbestos-containing waste material processed, i.e., asbestos cement products, friable asbestos insulation, plaster, wood, plastic, wire, etc. Test feed is to include the full range of materials that will be encountered in actual operation of the process;

b. results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed;

c. results of analyses, using transmission electron microscopy, that document that the output materials are free of asbestos. Samples for analysis are to be collected as eight-hour composite samples [one 200-gram (7-ounce) sample per hour], beginning with the initial introduction of RACM or asbestos-containing waste material and continuing until the end of the performance test;

d. a description of operating parameters, such as temperature and residence time, defining the full range over which the process is expected to operate to produce nonasbestos (asbestos-free) materials. Specify the limits for each operating parameter within which the process will produce nonasbestos (asbestos-free) materials; and

e. the length of the test;

3. during the initial 90 days of operation:

a. continuously monitor and log the operating parameters identified during start-up performance tests that are intended to ensure the production of nonasbestos (asbestos-free) output material;

b. monitor input materials to ensure that they are consistent with the test feed materials described during start-up performance tests in Subparagraph L.2.a of this Section;

c. collect and analyze samples, taken as 10-day composite samples [one 200-gram (7-ounce) sample collected every eight hours of operation] of all output material for the presence of asbestos. Composite samples may be for fewer than 10 days. Transmission electron microscopy (TEM) shall be used to analyze the output materials for the presence of asbestos. During the initial 90-day period, all output materials must be stored on-site until analysis shows the material to be asbestos-free or disposed of as asbestos-containing waste material according to Subsection J of this Section;

4. after the initial 90 days of operation:

a. continuously monitor and record the operating parameters identified during start-up performance testing and any subsequent performance testing. Any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) output materials shall be:

i. disposed of as asbestos-containing waste material according to Subsection J of this Section; or

ii. recycled as waste feed during process operation within the established range of operating conditions; or

iii. stored temporarily on-site in a leak-tight container until analyzed for asbestos content. Any product

material that is not asbestos-free shall be either disposed of as asbestos-containing waste material or recycled as waste feed to the process;

b. collect and analyze monthly composite samples [one 200-gram (7-ounce) sample collected every eight hours of operation] of the output material. Transmission electron microscopy shall be used to analyze the output material for the presence of asbestos;

5. discharge no visible emissions to the outside air from any part of the operation, or use the methods specified by Subchapter O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;

6. maintain records on-site or at another location approved by the administrative authority and include the following information:

a. results of start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristics, and analyses of output materials;

b. results of the composite analyses required during the initial 90 days of operation under Paragraph L.3 of this Section;

c. results of the monthly composite analyses required under Paragraph L.4 of this Section;

d. results of continuous monitoring and logs of process operating parameters required under Paragraphs L.3 and 4 of this Section;

e. the information on waste shipments received as required in Subsection N of this Section;

f. for output materials where no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which the output materials were sold or deposited, and the date of sale or disposal; and

g. retain records required by Paragraph L.6 of this Section for at least two years;

7. submit the following reports to the Office of Environmental Services:

a. a report for each analysis of product composite samples performed during the initial 90 days of operation; and

b. a quarterly report, including the following information concerning activities during each consecutive three-month period:

i. results of analyses of monthly product composite samples;

ii. a description of any deviation from the operating parameters established during performance testing, the duration of the deviation, and steps taken to correct the deviation;

iii. disposition of any product produced during a period of deviation, including whether it was recycled, disposed of as asbestos-containing waste material, or stored temporarily on-site until analyzed for asbestos content; and

iv. the information on waste disposal activities as required in Subchapter N of this Section;

8. nonasbestos (asbestos-free) output material is not subject to any of the provisions of this Subsection. Output materials in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the start-up performance testing, unless shown by transmission electron microscopy (TEM) analysis to be asbestos-free, shall be considered to be asbestos-containing waste and shall be handled and disposed of according to Subsections J and N of this Section or reprocessed while all of the established operating parameters are being met.

M. Reporting and Recordkeeping. Any new source to which this Subchapter applies (with the exception of sources subject to Subsections D, F, G, and H of this Section), which has an initial start-up date preceding the effective date of this Subchapter, shall provide the following information to the administrative authority, postmarked or delivered, within 90 days of the effective date. In the case of a new source that does not have an initial start-up date preceding the effective date, the information shall be provided to the administrative authority, postmarked or delivered, within 90 days of the initial start-up date. Any owner or operator of an existing source shall provide the following information to the administrative authority within 90 days of the effective date of this Subchapter, unless the owner or operator of the existing source has previously provided this information to the administrative authority. Any changes in the information provided by any existing source shall be provided to the administrative authority, postmarked or delivered, within 30 days after the change. The owner or operator of any existing source to which this Section is applicable shall, within 90 days after the effective date, provide the following information to the Office of Environmental Services:

1. a description of the emission control equipment used for each process; and

2. if a fabric filter device is used to control emissions:

a. the airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$) if the fabric filter device uses a woven fabric; and if the fabric is synthetic, whether the fill yarn is spun or not spun; and

b. if the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd^2) the minimum thickness in millimeters (inches), and the airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$);

3. if a HEPA filter is used to control emissions, the filter efficiency shall be certified by the manufacturer to be capable of trapping and retaining 99.97 percent of all particles larger than 0.3 microns;

4. for sources subject to Subsections I and J of this Section:

a. a brief description of each process that generates asbestos-containing waste material;

b. the average volume of asbestos-containing waste material disposed of, measured in m^3/day (yd^3/day);

c. the emission control methods used in all stages of waste disposal; and

d. the type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site;

5. for sources subject to Subsections K and N of this Section:

a. a brief description of the site; and

b. the method or methods used to comply with the standard, or alternative procedures to be used;

6. the information required by Subsection M of this Section shall accompany the information required by LAC 33:III.5107.A and B. Active waste disposal sites subject to Subsection N of this Section shall also comply with Subsection M of this Section using the AAC-7 Form. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of LAC 33:III.5107.A and B.

N. Standard for Active Waste Disposal Sites. Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under Subsections I, J and L of this Section shall meet the requirements of this Subsection.

1. There shall be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited.

2. Unless a natural barrier adequately deters access by the general public, warning signs and fencing shall be installed and maintained as follows.

a. Warning signs shall be displayed at all entrances, and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited, at intervals of 50 m (ca. 165 ft) or less. The warning signs shall:

i. be posted in such a manner and location that a person may easily read the legend;

ii. conform to the requirements of 51 cm x 36 cm (20 in. x 14 in.) upright format signs; and

iii. display the following legend or the OSHA legend described in 29 CFR 1926.58(k)(1)(ii) in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this Paragraph:

ASBESTOS WASTE DISPOSAL SITE

DO NOT CREATE DUST

BREATHING ASBESTOS IS HAZARDOUS TO

YOUR HEALTH

Notation:
2.5 cm (1 inch) Sans Serif, Gothic or Block
1.9 cm (3/4 inch) Sans Serif, Gothic or Block
14 Point Gothic
Spacing between any two lines must be at least equal to the height of the upper of the two lines.

b. The perimeter of the disposal site shall be fenced in a manner adequate to deter access by the general public.

c. The administrative authority will, upon request and supply of appropriate information, determine whether a fence or natural barrier adequately deters access by the general public.

3. At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

a. be covered with at least 15 centimeters (ca. 6 inches) of compacted nonasbestos-containing waste material; or

b. be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion, if previously approved by the Department of Environmental Quality. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior written approval by the administrative authority. For purposes of this Subsection, any used, spent, or other waste oil is not considered a dust suppression agent.

4. Rather than meet the no visible emission requirement of Paragraph N.1 of this Section, use an alternative emissions control method that has received prior written approval by the EPA Administrator according to the procedures of Subparagraph I.3.b of this Section.

5. For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

a. maintain waste shipment records using the ADVF Form and including the following information:

i. the name, address, and telephone number of the waste generator;

ii. the name, address, and telephone number of the transporter(s);

iii. the quantity of asbestos-containing waste material in cubic meters (cubic yards);

iv. the presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the administrative authority [identified in the waste shipment record (ADVF)], by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record (ADVF) along with the report; and

v. the date of the receipt;

b. as soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed ADVF to the waste generator and to the Office of Environmental Services;

c. upon discovering a discrepancy between the quantity of waste designated on the ADVF and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Office of Environmental Services. Describe the discrepancy and attempts to reconcile it, and submit a copy of the ADVF with the report;

d. retain a copy of all records and reports required by Subsection N of this Section for at least two years.

6. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

7. Upon closure, comply with all the provisions of Subsection K of this Section.

8. Submit to the Office of Environmental Services, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

9. Furnish upon request, and make available during normal business hours for inspection by the administrative authority, all records required under this Subsection.

10. Notify the Office of Environmental Services, in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date shall be provided to the administrative authority at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

a. scheduled starting and completion dates;

b. reason for disturbing the waste;

c. procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the administrative authority may require changes in the emission control procedures to be used; and

d. location of any temporary storage site and the final disposal site.

O. Air-Cleaning. If air-cleaning is elected, as permitted by Paragraphs C.1 and E.2, Division F.3.c.i.(b).(i), Subparagraph F.3.d, Clause F.3.d.ii, Subparagraph G.2.b, Paragraph I.2 and Clause G.3.a.ii, Clauses J.1.a.ii and b.ii, and Paragraph L.5 of this Section, the requirements of this Subsection shall be met.

1. Use fabric filter collection devices, except as noted in Subparagraphs O.4.a and c of this Section, by doing all of the following:

a. operating the fabric filter collection devices at a pressure drop of no more than 0.995 kilopascal (4 inches of water gage), as measured across the filter fabric;

b. ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 $m^3/min/m^2$ (30 $ft^3/min/ft^2$) for woven fabrics or $11^3/min/m^2$ (35 $ft^3/min/ft^2$) for felted fabrics, except that 12 $m^3/min/m^2$ (40 $ft^3/min/ft^2$) for woven and 14 $m^3/min/m^2$ (45 $ft^3/min/m^2$) for felted fabrics is allowed for filtering air from asbestos ore dryers;

c. ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (1/16 inch) thick throughout; and

d. avoiding the use of synthetic fabrics that contain fill yard other than that which is spun.

2. Properly install, use, operate, and maintain all air-cleaning equipment authorized by this Section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.

3. For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.

4. The following are exceptions to Paragraph O.1 of this Section.

a. After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the administrative authority determines that a fabric filter is not feasible, the administrative authority may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gauge pressure).

b. Use a HEPA filter that is certified to be at least 99.97 percent efficient for particles larger than 0.3 microns.

c. The administrative authority may authorize the use of filtering equipment other than that described in Paragraphs O.1 and 4 of this Section if the owner or operator demonstrates to the administrative authority's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.

P. Training and Accreditation Requirements

1. Asbestos Discipline

a. Worker. A person must be trained as a worker in accordance with LAC 33:III.2799.Appendix A—Agent Accreditation Plan, Paragraph A.5 to perform any of the following activities in a facility regulated by this Section:

i. a response action other than an SSSD activity;

ii. a maintenance activity other than an SSSD activity that disturbs RACM; or

iii. a response action for a major fiber release episode.

b. Contractor/Supervisor. A person must be trained as a contractor/supervisor in accordance with LAC 33:III.2799.Appendix A—Agent Accreditation Plan, Paragraph A.4 to supervise any of the following activities in a facility regulated by this Section:

i. a response action other than an SSSD activity;

ii. a maintenance activity other than an SSSD activity that disturbs RACM; or

iii. a response action for a major fiber release episode.

c. Inspector. A person must be trained as an inspector in accordance with LAC 33:III.2799.Appendix A—Agent Accreditation Plan, Paragraph A.1 and accredited in order to inspect for asbestos materials in facilities regulated by this Section.

d. Project Designer. A person must be trained as a project designer in accordance with LAC 33:III.2799.Appendix A—Agent Accreditation Plan, Paragraph A.3 and accredited in order to design any of the following activities in a facility regulated by this Section:

i. a response action other than a SSSD activity;

ii. a maintenance activity other than an SSSD activity that disturbs RACM; or

iii. a response action for a major fiber release episode.

e. Air Monitor Personnel. A person must be trained as an asbestos contractor/supervisor in accordance with LAC 33:III.2799.Appendix A—Agent Accreditation Plan, Paragraph A.4 and accredited to conduct air monitoring for an asbestos abatement project or related activity in facilities regulated by this Section.

2. Response Actions

a. Response actions including removal, encapsulation, enclosure, or repair, other than small-scale, short-duration activities in state buildings and schools shall be designed and conducted by persons accredited to design and conduct response actions.

b. When response actions are performed by contracted personnel, those persons shall be accredited.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:1204 (December 1991), repealed and repromulgated LR 18:1121 (October 1992), amended LR 20:1277 (November 1994), LR 24:27 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2462 (November 2000), LR 30:1673 (August 2004), amended by the Office of Environmental Assessment, LR 30:2022 (September 2004), LR 31:1570 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2449 (October 2005), LR 33:2095 (October 2007).

Subchapter P. Reserved

Subchapter V. Reserved

Chapter 53. Area Sources of Toxic Air Pollutants

Subchapter A. Toxic Emissions Reporting Requirements

§5301. Applicability

A. The provisions of this Subchapter apply to *area sources* as defined in LAC 33:III.5103 which belong to the following categories of facilities and which use the chemicals listed for that category:

1. chromic acid anodizing processes using chromium and chromium compounds;

2. commercial dry cleaning, transfer machines using perchloroethylene;

3. commercial dry cleaning, dry-to-dry machines using perchloroethylene;

4. commercial sterilization facilities using ethylene oxide, including but not limited to medical equipment suppliers, pharmaceutical manufacturers, health-related industry facilities, spice manufacturers/processors, contract sterilizers, libraries, museums and archives, laboratories, and state agricultural offices;

5. decorative chromium electroplating using chromium and chromium compounds;

6. halogenated solvent cleaners using 1,1,1-trichloroethane, perchloroethylene, methylene chloride, and trichloroethylene; or

7. hard chrome electroplating using chromium and chromium compounds.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:430 (April 1994), amended LR 23:63 (January 1997).

§5303. Exemptions

A. Facilities that belong to a listed category but are classified as major sources or are located at *major sources* as

defined in LAC 33:III.Chapter 51 are exempt from this Chapter.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:431 (April 1994).

§5307. Reporting Requirements

A. An initial emissions inventory report is due on or before October 1, 1994, from the facilities within the specified categories that use the listed chemical(s) pursuant to LAC 33:III.5301. The report shall be submitted on a form or in an electronic format specified by the department to the Department of Environmental Quality, and include the following information:

1. the company's name, physical address, mailing address, city and parish location, zip code, and site phone number;

2. the company's main or corporate office if other than the site location, street address, mailing address, city and parish, zip code, and office phone number;

3. the name of the contact who will be responsible for liaison with the department;

4. the category of the facility and the toxic air pollutant(s) emitted as listed in LAC 33:III.5112, Table 51.1 or 51.3 and chemical(s) listed in LAC 33:III.5301 that are used at the facility;

5. the emissions of toxic air pollutants for the previous calendar year from operations, accidents, and any other event(s) where emissions are generated;

6. the quantity of the listed chemical(s) consumed at the facility for the previous calendar year; and

7. a statement clarifying the extent and accuracy of the submitted report.

B. Subsequent reports will be due on or before July 1 of each year. The report shall be submitted to the Office of Environmental Assessment and include the information requested in Subsection A of this Section for the preceding calendar year.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:431 (April 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2464 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2450 (October 2005), LR 33:2096 (October 2007).

Subchapter B. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as It Applies to Area Sources

§5311. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as It Applies to Area Sources

A. Except as modified in this Section and specified below, National Emission Standards for Hazardous Air Pollutants for Source Categories, published in the *Code of Federal Regulations* at 40 CFR Part 63, July 1, 2006, and specifically listed in the following table, are hereby incorporated by reference as they apply to area sources in the state of Louisiana. Also incorporated by reference are the revisions to 40 CFR Part 63, Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Facilities, applicable to area sources, promulgated on January 3, 2007, in the *Federal Register*, 72 FR 26, and revisions to 40 CFR Part 63, Subpart A as promulgated on May 16, 2007, in the *Federal Register*, 72 FR 27437-27443, applicable to area sources.

40 CFR Part 63	Subpart/Appendix Heading
Subpart A	General Provisions
Subpart M	National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities
Subpart N	National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks
Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities
Subpart T	National Emission Standards for Halogenated Solvent Cleaning
Subpart X	National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting
Subpart HH	National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Facilities
Subpart EEE	National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors
Subpart LLL	National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry
Subpart VVV	National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works
Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
Subpart IIIII	National Emission Standards for Hazardous Air Pollutants: Mercury Emission From Mercury Cell Chlor-Alkali Plants

B. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Assessment, or from a public library.

C. Modifications or Exceptions. Whenever the referenced regulations (i.e., 40 CFR Part 63) provide authority to "the Administrator," such authority, in accordance with these regulations, shall be exercised by the administrative authority or his designee, notwithstanding any authority exercised by the U.S. Environmental Protection Agency (EPA). Reports, notices, or other documentation required by the referenced regulations (i.e., 40 CFR Part 63) to be provided to "the Administrator" shall be provided to the Office of Environmental Assessment, where the state is designated authority by EPA as "the Administrator," or shall be provided to the Office of Environmental Assessment and EPA, where EPA retains authority as "the Administrator."

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:63 (January 1997), amended LR 23:1660 (December 1997), LR 24:1279 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1464 (August 1999), LR 27:2230 (December 2001), LR 28:995 (May 2002), LR 28:2180 (October 2002), LR 29:699 (May 2003), LR 30:1010 (May 2004), amended by the Office of Environmental Assessment, LR 31:1569 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2451 (October 2005), LR 32:810 (May 2006), LR 33:1620 (August 2007), LR 33:2096 (October 2007).

Chapter 56. Prevention of Air Pollution Emergency Episodes

§5601. Purpose

A. This regulation is designed to prevent the buildup of excess concentrations of air contaminants during periods of high air pollution potential.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§5603. Scope

A. The Air Pollution Emergency Episode Plan described herein shall apply to prevention of damage to the health of the people of the State of Louisiana by air pollution episodes.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§5605. Episode Criteria

A. The administrative authority shall have reason to declare an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency whenever he determines that air pollutant concentrations have reached a point in any place that is approaching or has reached a level that could, if sustained long enough, cause a substantial threat to the health of persons. In making this determination, the administrative authority will be guided by the following criteria.

1. Air Pollution Forecast. The first state is the Air Pollution Forecast, which is actuated by an Atmospheric Stagnation Advisory by the National Weather Service. The Air Pollution Forecast advises environmental control personnel that atmospheric conditions capable of causing an Air Pollution Emergency Episode exist in the area for which the advisory was issued.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§5607. Administrative Authority Will Determine When Criteria Level Has Been Reached

A. When the administrative authority determines that the criteria level has been reached due to the emissions of a limited number of sources, he shall notify such sources that the preplanned strategy in LAC 33:III.5611, Table 5, 6, or 7 or standby plan should be put into effect.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

§5609. Preplanned Strategies Required

A. Any person responsible for operation of a source as listed in LAC 33:III.5611, Tables 5, 6, and 7 shall prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611, Tables 5, 6, and 7.

1. Alert Level

a. The alert level is the concentration of pollutant at which the first stage of control action is taken. An alert will be declared when any one of the following levels is reached at any monitoring site:

i. SO_2 — 800 μg/m^3 (0.3 ppm), 24-hr average;

ii. PM_{10} — 350 μg/m^3, 24-hr average;

iii. CO — 17 mg/m^3 (15 ppm), 8-hr average;

iv. Oxidant (O_3) — 400 μg/m^3 (0.2 ppm), 1-hr average;

v. NO_2 — 1130 μg/m^3 (0.6 ppm), 1-hr average 282 μg/m^3 (0.15 ppm), 24-hr average; and meteorological conditions indicate that the pollutant concentrations will remain at the above levels 12 hours or more or increase unless control actions are taken.

b. When the administrative authority declares an Air Pollution Alert, any person responsible for the operation of sources of air pollution as listed in LAC 33:III.5611, Table 5

shall take such action as prescribed by LAC 33:III.5611, Table 5 and shall activate the preplanned abatement strategy listed in LAC 33:III.5611 for an Air Pollution Alert.

2. Warning Level

a. The warning level indicates that pollutant concentration levels are continuing to rise and further control measures are needed. A warning will be declared when any one of the following levels is reached at any monitoring site:

i. SO_2 — 1600 μg/m^3 (0.6 ppm), 24-hr average;

ii. PM_{10} — 420 μg/m^3, 24-hr average;

iii. CO — 34 mg/m^3 (30 ppm), 8-hr average;

iv. Oxidant (O_3) — 800 μg/m^3 (0.4 ppm), 1-hr average;

v. NO_2 — 2260 μg/m^3 (1.2 ppm), 1-hr average 565 μg/m^3 (0.30 ppm), 24-hr average; and meteorological conditions indicate that the pollutant concentrations will remain at the above levels 12 hours or more or increase unless control actions are taken.

b. When the administrative authority declares an Air Pollution Warning, any person responsible for the operation of sources of air pollution as listed in LAC 33:III.5611, Table 6 shall take such action as prescribed by LAC 33:III.5611, Table 6 and shall activate the preplanned strategy listed in LAC 33:III.5611 for an Air Pollution Warning.

3. Emergency Level

a. The emergency level indicates that pollutant concentrations are increasing to dangerous levels and that the most stringent control actions are necessary in order to assure a reduction in pollutant concentration levels. An emergency will be declared when any one of the following levels is reached at any monitoring site:

i. SO_2 — 2100 μg/m^3 (0.8 ppm), 24-hr average;

ii. PM_{10} — 500 μg/m^3, 24-hr average;

iii. CO — 46 mg/m^3 (40 ppm), 8-hr average;

iv. Oxidant (O_3) — 1000 μg/m^3 (0.5 ppm), 1-hr average;

v. NO_2 — 3000 μg/m^3 (1.6 ppm), 1-hr average 750 μg/m^3 (0.4 ppm), 24-hr average; and meteorological conditions indicate that the pollutant concentrations will remain at the above levels 12 hours or more or increase unless control actions are taken.

b. When the administrative authority declares an Air Pollution Emergency, any person responsible for the operation of sources of air pollution as listed in LAC 33:III.5611, Table 7 shall take such action as prescribed by LAC 33:III.5611, Table 7 and shall activate the preplanned abatement strategy listed in LAC 33:III.5611 for an Air Pollution Emergency.

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

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

§5611. Standby Plans to be Submitted When Requested by the Administrative Authority

A. Any persons responsible for the operation of any source not listed in LAC 33:III.5611, Tables 5, 6, and 7 shall, when requested by the administrative authority, submit a standby plan for the reduction or elimination of emissions during an air pollution alert, air pollution warning or air pollution emergency.

B. Standby plans as required by this Section shall be available to the administrative authority upon request for evaluation as to the adequacy of the plan to effectively meet the objectives set forth in LAC 33:III.5611, Tables 5, 6, and 7. Any company asked to furnish a standby plan to the administrative authority shall have 30 days from the date of request to submit a plan.

1. To Be Available during Episode. During an air pollution alert, air pollution warning or air pollution emergency, standby plans as required by this Section shall be made available on the premises to any person authorized by the department to enforce these regulations.

Table 5 Emission Reduction Plans—Alert Level	
Part A. General	
1. There shall be no open burning by any persons of tree waste, vegetation, refuse or debris in any form.	
2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.	
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.	
4. Persons operating motor vehicles should eliminate all unnecessary operations.	
Part B. Source Curtailment	
Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this alert level.	
Source of Air Pollution	**Control Action**
1. Electric power generating facilities	a. Substantial reduction by utilization of fuels having lowest ash and sulfur content
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
	c. Substantial reduction by diverting electric power generation to facilities outside of alert area
2. Process steam generating facilities	a. Substantial reduction by utilization of fuels having low ash and sulfur content
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
	c. Substantial reduction of steam load demands consistent with continuing plant operations
3. Manufacturing industries of the following classifications: primary metals industry, petroleum refining operations, chemical industries, mineral processing industries, paper and allied products and grain industry	a. Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and all operations
	b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gas vapors or malodorous substances
	c. Maximum reduction of heat load demands for processing
	d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing

Table 6 Emission Reduction Plans—Warning Level	
Part A. General	
1. There shall be no open burning by any person.	
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.	
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.	
4. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.	
Part B. Source Curtailment	
Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this warning level.	
Source of Air Pollutant	**Control Action**
1. Electric power generating	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
	c. Maximum reduction by diverting electric power generation to facilities outside of warning area
2. Process steam generating facilities	a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
	c. Making ready for use a plan of action to be taken if an emergency develops
3. Manufacturing industries which require considerable lead time for shutdown, including the following classifications: petroleum refining, chemical industries, primary metals industries, glass industries and paper and allied products	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operation
	b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances
	c. Maximum reduction of heat load demands for processing
	d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing
4. Manufacturing industries which require relatively short lead times for shutdown, including the following classifications: primary metals industries, chemical industries, mineral processing industries and grain industry	a. Elimination of air pollutants from manufacturing operations, by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment
	b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances
	c. Maximum reduction of heat load demands for processing
	d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing

Table 7 Emission Reduction Plans—Emergency Level	
Part A. General	
1. There shall be no open burning by any person.	
2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.	
3. All places of employment described below shall immediately cease operations. a. Mining and quarrying of non-metallic minerals. b. All construction work except that which must proceed to avoid imminent physical harm. c. All manufacturing establishments except those required to have in force an air pollution emergency plan. d. All wholesale trade establishments; i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food. e. All offices of local, county and state government, including authorities, joint meetings and other public bodies, excepting such agencies which are determined by the chief administrative officer of local, county, or state government authorities, joint meetings and other public bodies deemed to be vital for public safety and welfare and the enforcement of the provisions of this order. f. All retail trade establishments except pharmacies, surgical supply distributors and stores. g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices. h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments, photographic studios, beauty shops, barber shops, shoe repair shops. i. Advertising offices, consumer credit reporting, adjustment and collection agencies, duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services, equipment rental services, commercial testing laboratories. j. Automobile repair, automobile services, garages. k. Establishments rendering amusement and recreational services, including motion picture theaters. l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.	
4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.	
5. The use of motor vehicles is prohibited except in emergencies, with the approval of local or state police. The department will notify state police whenever an emergency is declared.	
Part B. Source Curtailment	
Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this emergency level.	
Source of Air Pollution	**Control Action**
1. Electric power generating facilities	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing c. Maximum reduction by diverting electric power generation to facilities outside of emergency area
2. Process steam generating facilities	a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing c. Taking the action called for in the emergency plan
3. Manufacturing industries of the following classifications: primary metals industries, petroleum refining, chemical industries, mineral processing industries, grain industry, and paper and allied products	a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances c. Maximum reduction of heat load demands for processing d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987).

Chapter 59. Chemical Accident Prevention and Minimization of Consequences

Subchapter A. General Provisions

§5901. Incorporation by Reference of Federal Regulations

A. Except as provided in Subsection C of this Section, the department incorporates by reference 40 CFR Part 68, July 1, 2006.

B. The volumes containing those federal regulations listed in Subsection A of this Section may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402.

C. Modifications or Exceptions. The following modifications or exceptions are made to the incorporated federal standards.

1. In 40 CFR 68.3 Definitions:

a. *Act*—either the Clean Air Act as amended (42 U.S.C. 7401 et seq.) or the Louisiana Environmental Quality Act, Subtitle II of Title 30.

b. *Administrator* or *Regional Administrator*—the *administrator* of the United States Environmental Protection Agency or his authorized representative.

c. *Implementing Agency*—Louisiana Department of Environmental Quality.

2. United States Environmental Protection Agency, U.S. Environmental Protection Agency, or EPA shall mean United States Environmental Protection Agency, except that it shall mean Louisiana Department of Environmental Quality in 40 CFR 68.150(a), 68.190(a), and 68.190(c).

3. In 40 CFR 68.10(a)(2) and 40 CFR 68.190(b)(2), the requirement is modified to read:

> "Three years after the date on which a new regulated substance is first listed by EPA under 40 CFR 68.130, provided that the Department shall have adopted the addition of the new substance to 40 CFR 68.130 by three years after the date of the new EPA listing."

4. In 40 CFR 68.210, the availability of information to the public shall be ensured by the Louisiana Public Records Act, R.S. 44:1 et seq., except as otherwise declared confidential pursuant to R.S. 30:2030 and all regulations promulgated thereto including LAC 33:I.Chapter 5.

5. In 40 CFR 68.215, the air permitting authority shall refer to Louisiana Department of Environmental Quality permitting authority in LAC 33:III.Chapter 5.

6. In 40 CFR 68.130 the list of substances is modified to read:

> "Storers of liquefied petroleum gas whose facilities are permitted through or inspected by the Louisiana Liquefied Petroleum Gas Commission of the Department of Public Safety and Corrections or storers of liquefied petroleum gas who use such gas as a fuel in an agricultural process are not subject to the provisions of this Chapter. "

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 30:2063.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:421 (April 1994), amended LR 22:1124 (November 1996), repromulgated LR 22:1212 (December 1996), amended LR 24:652 (April 1998), LR 25:425 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:70 (January 2000), LR 26:2272 (October 2000), LR 28:463 (March 2002), LR 29:699 (May 2003), LR 30:1010 (May 2004), amended by the Office of Environmental Assessment, LR 30:2463 (November 2004), LR 31:1570 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 32:810 (May 2006), LR 33:1621 (August 2007).

§5907. General Duty

A. The owners and operators of stationary sources producing, processing, handling, or storing substances listed in 40 CFR 68.130, Table 59.0 of this Section, or Table 59.1 of LAC 33:III.5913 in quantities greater than the threshold quantities listed in those respective places (as determined in the manner described in 40 CFR 68.115), have a general duty in the same manner and to the same extent as Section 654 of Title 29 of the United States Code (Occupational Safety and Health Act) to identify hazards that may result from accidental releases of such substances using appropriate hazard assessment techniques, to design and maintain a safe facility, and to minimize the off-site consequences of accidental releases of such substances that do occur. For the purposes of this Section the provisions of R.S. 30:2026 (Citizen Suits) shall not be available to any person or otherwise be construed to be applicable to this Section. Nothing in this Section shall be interpreted, construed, implied, or applied to create any liability or basis for suit for compensation for bodily injury or any other injury or property damages to any person that may result from accidental releases of such substances.

Table 59.0
Supplemental List of Regulated Substances and Their Threshold Quantities for Accidental Release Prevention

CAS Number	Chemical Name	Threshold Planning Quantity (pounds)
Varies	Alkylaluminums	5000
107-05-1	Allyl chloride	1000
7790-98-9	Ammonium perchlorate	7500
7787-36-2	Ammonium permanganate	7500
13863-41-7	Bromine chloride	1500
7789-30-2	Bromine pentafluoride	2500
7787-71-5	Bromine trifluoride	15000
106-96-7	Bromopropyne (3-) (Propargyl bromide)	100
75-91-2	Butyl hydroperoxide (tertiary)	5000
614-45-9	Butyl perbenzoate (tertiary)	7500
353-50-4	Carbonyl fluoride	2500
9004-70-0	Cellulose nitrate (Conc>12.6 % nitrogen)	2500
13637-63-3	Chlorine pentafluoride	1000
7790-91-2	Chlorine trifluoride	1000
97-00-7	Chloro-2,4-dinitrobenzene (1-)	5000
96-10-6	Chlorodiethylaluminum	5000
76-06-2	Chloropicrin	500
None	Chloropicrin and methyl bromide mixture	1500
None	Chloropicrin and methyl chloride mixture	1500
80-15-9	Cumene hydroperoxide	5000
675-14-9	Cyanuric fluoride	100
110-22-5	Diacetyl peroxide (Conc>70 %)	5000
334-88-3	Diazomethane	500
94-36-0	Dibenzoyl peroxide	7500
110-05-4	Dibutyl peroxide (tertiary)	5000
7572-29-4	Dichloro acetylene	250
557-20-0	Diethylzinc	10000
105-64-6	Diisopropyl peroxydicarbonate	7500
105-74-8	Dilauroyl peroxide	7500
97-02-9	Dinitroaniline (2,4-)	5000
1338-23-4	Ethyl methyl ketone peroxide (Conc>60 %)	5000
371-62-0	Ethylene fluorohydrin	100
684-16-2	Hexafluoroacetone	5000
10035-10-6	Hydrogen bromide	5000
7722-84-1	Hydrogen peroxide (conc>=52 % by weight)	7500
7803-49-8	Hydroxylamine	2500
463-51-4	Ketene	100
78-85-3	Methacrylaldehyde	1000
920-46-7	Methacryloyl chloride	150
30674-80-7	Methacryloyloxyethyl isocyanate	100
74-83-9	Methyl bromide	2500
453-18-9	Methyl fluoroacetate	100
421-20-5	Methyl fluorosulfate	100
74-88-4	Methyl iodide	7500
79-84-4	Methyl vinyl ketone	100
100-01-6	Nitroaniline (p-)	5000
7783-54-2	Nitrogen trifluoride	5000
10544-73-7	Nitrogen trioxide	250
75-52-5	Nitromethane	2500

Table 59.0 Supplemental List of Regulated Substances and Their Threshold Quantities for Accidental Release Prevention		
CAS Number	**Chemical Name**	**Threshold Planning Quantity (pounds)**
20816-12-0	Osmium tetroxide	100
7783-41-7	Oxygen difluoride	100
19624-22-7	Pentaborane	100
7601-90-3	Perchloric acid (Conc>60 % by weight)	5000
7616-94-6	Perchloryl fluoride	5000
627-13-4	Propyl nitrate	2500
107-44-8	Sarin	100
7783-79-1	Selenium hexafluoride	1000
7803-52-3	Stibine (Antimony hydride)	500
5714-22-7	Sulfur pentafluoride	250
7783-80-4	Tellurium hexafluoride	250
10036-47-2	Tetrafluorohydrazine	5000
7719-09-7	Thionyl chloride	250
1558-25-4	Trichloro (chloromethyl) silane	100
27137-85-5	Trichloro (dichlorophenyl) silane	2500
2487-90-3	Trimethoxysilane	1500

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2063.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:1126 (November 1996).

Subchapter B. Risk Management Program Requirements

§5911. Registration for Stationary Sources

A. The owner or operator of each stationary source that has a covered process as defined by 40 CFR 68.3 shall register with the Office of Environmental Compliance by the latest of the following dates:

1. January 31, 1998; or

2. within 60 days after the date on which a stationary source becomes subject to this Chapter.

B. The registration shall include the following:

1. the name of the stationary source, the owner/operator, the street address, the mailing address, the telephone number, and the program level (as defined by 40 CFR Part 68) of the facility (highest program of a process at the facility, Program 3 being the highest);

2. the name, mailing address, and telephone number of the invoicing contact person;

3. the location of the source by parish, and latitude and longitude; and

4. the following certification dated and signed by the owner or operator:

> "The undersigned certifies that, to the best of my knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete."

C. If at any time after the submission of the registration, information in the registration is no longer accurate, the owner or operator shall submit an amended registration within 60 days to the Office of Environmental Compliance.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2063.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:426 (April 1994), amended LR 22:1125 (November 1996), LR 23:1496 (November 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2464 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2451 (October 2005), LR 33:2097 (October 2007).

§5913. Supplementary List of Regulated Substances

A. All the requirements of this Chapter for regulated substances listed in 40 CFR 68.130 shall also apply to the supplementary list of chemicals in Table 59.1 of this Section present at stationary sources in more than the threshold quantities listed in Table 59.1 of this Section. If a new substance is added to Table 59.1, an owner or operator of a stationary source that has more than a threshold quantity of that substance shall comply with all the requirements of this Chapter for regulated substances listed in 40 CFR 68.130 no later than three years after the date the substance is first listed in Table 59.1.

Table 59.1 Supplementary List of Regulated Toxic Substances and Their Threshold Quantities for Accidental Release Prevention (Alphabetical Order)		
CAS Number	**Chemical Name**	**Threshold Planning Quantity (Pounds)**
10544-72-6	Nitrogen Tetroxide	250

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 2063.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:1127 (November 1996).