# Title 33 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, unless specifically defined elsewhere.
- 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.

*Coldset Printing*—a web offset printing process in which ink is allowed to dry naturally through absorption and evaporation.

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.

Criteria Pollutant—any compound for which an ambient air quality standard has been listed in LAC 33:III.Chapter 7; however, volatile organic compounds, as defined in this Section, shall be included as a surrogate for ozone.

*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.

Flexible Package Printing Facility—a facility that uses either rotogravure printing or flexographic printing processes on flexible packaging.

Flexible Packaging—any package or part of a package the shape of which can be readily changed, including, but not limited to, bags, pouches, liners, and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials.

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.

Fountain Solution—a solution used on an offset lithographic press to keep the ink from adhering to the non-image areas of the offset lithographic plate.

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 interfelted 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).

*Heatset Dryer*—a hot air dryer used in heatset lithography to heat the printed substrate and to promote the evaporation of the ink oils.

Heatset Web Offset Lithographic Printing—a type of web offset lithographic printing process where heat is applied via a drying oven to set and dry the ink.

*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).

Letterpress Printing—relief printing of text and/or images using a press with a "type-high bed," in which a reversed, raised surface is inked and then pressed into a sheet of paper to obtain a positive, right-reading image.

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.);
- g. any other category of coated metal products except:

- i. those on the specified list in LAC 33:III.2123.C. Table 1, Items 1-6, and 13-17 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);
- ii. coating operations covered under 40 CFR 63, subpart GG National Emissions Standards for Aerospace Manufacturing and Rework Facilities; and
- iii. the surface coating of metal parts and products performed on-site at installations owned or operated by the armed forces of the United States (including the Coast Guard, and the National Guard of any state) or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the armed forces of the United States.

*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:

- a. routine maintenance repair and replacement shall not be considered physical changes; and
- b. 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.

Offset Lithographic Printing—an indirect printing method in which ink is transferred from the lithographic plate to a rubber-covered intermediate "blanket" cylinder, and then from the blanket cylinder to the paper or other printing substrate.

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 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 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 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.

*Sheet-Fed Printing*—a process in which individual sheets of paper or other substrates are fed into the press.

*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<sub>2</sub>)—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.

Web Printing—a process where a continuous roll of paper or other substrate is fed into the press, and rewound or cut to size after printing.

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), LR 35:1101 (June 2009), LR 36:1773 (August 2010), LR 37:1145 (April 2011), LR 37:3220 (November 2011).

# 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  | Variable  |  |  |  |
|--|---|--|--|--|
| Fee for major sources of toxic   | v arrabic   |  |  |  |
| air pollutants (based on air toxic   |   |  |  |  |
| pollutants emitted) <sup>1</sup>   |   |  |  |  |
| Annual Maintenance Fee (based  |   |  |  |  |
| on type of facility and on rated   | Variable  |  |  |  |
| production capacity/throughput)  | Variable  |  |  |  |
| New Application Fee (based on  |   |  |  |  |
| type of facility and on rated  | Variable  |  |  |  |
| production capacity/throughput)  | variable  |  |  |  |
| 1 1 1  |   |  |  |  |
| Major and Minor Modification<br>Modified Permit Fee (based on  |   |  |  |  |
| type of facility and on rated  | Variable  |  |  |  |
| production capacity/throughput)  |   |  |  |  |
| PSD Application Fee (based on  | Cymphones of 500/ of the                                |  |  |  |
| type of facility and on rated  | Surcharge of 50% of the application fee when a PSD      |  |  |  |
| production capacity/throughput)  | permit application is being                             |  |  |  |
| production capacity/unoughput)   | processed   |  |  |  |
| "NESHAP" Maintenance Fee   |   |  |  |  |
|  | Surcharge of 25% of the Annual Maintenance Fee for that |  |  |  |
| (based on type of facility and on rated production   | particular process/plant to be                          |  |  |  |
| capacity/throughput)   | added to the Annual                                     |  |  |  |
| capacity/unoughput)  | Maintenance Fee   |  |  |  |
| "NSPS" Maintenance Fee (based  | Surcharge of 25% of the permit                          |  |  |  |
| on type of facility and on rated   | application fee to be charged for                       |  |  |  |
| production capacity/throughput)  | any permit application that                             |  |  |  |
| production capacity/unoughput)   | includes the addition of new                            |  |  |  |
|  | equipment subject to NSPS                               |  |  |  |
|  | regulation  |  |  |  |
| 1 Fees shall be assessed on major s  |   |  |  |  |
| Fees shall be assessed on <i>major sources</i> as defined in LAC 33:III.5103. Sources that have reduced emissions below major source |   |  |  |  |
| 55.111.5105. Sources that have reduced emissions below major source  |   |  |  |  |

<sup>1</sup> 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 *Part 70 source* as defined in LAC 33:III.502. The permitted source must also emit or have the potential to emit less than 25 tons/year of any criteria pollutant, and less than 10 tons per year of any toxic air 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), LR 37:1145 (April 2011).

### §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. Methods of Payment

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

### B. Electronic Methods of Payment

- 1. Persons wishing to make payments using the electronic pay (e-pay) method shall access the department's website and follow the instructions provided on the website.
- 2. Persons wishing to make payments using the electronic funds transfer (EFT) method shall contact the Office of Management and Finance for further instructions.
  - C. Cash is not an acceptable form of payment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054, and R.S. 49:316.1(A)(2)(a) and (c)

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), amended by the Office of the Secretary, Legal Affairs Division, LR 35:2179 (October 2009).

### §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<br>Number        | Air Contaminant Source   | SICC | Annual<br>Maintenance<br>Fee | New Permit<br>Application Fee | Modified Pe | ermit Fees |  |
|                      |  |      |                              |                               | Major       | Minor      |  |
| 0010                 | Reserved   |      |                              |                               |             |            |  |
| 0015<br>*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   |  |
| 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 | 15.11                        | 75.65                         | 45.38       | 15.11      |  |
|                      |  | MIN. | 1,866.00                     | 9,340.00                      | 5,603.00    | 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     |  |

|                  | Table 1 Fee Schedule Listing   |              |                              |                               |                      |                    |
|------------------|--|--------------|------------------------------|-------------------------------|----------------------|--------------------|
| Fee<br>Number    | Air Contaminant Source   |              | Annual<br>Maintenance<br>Fee | New Permit<br>Application Fee | Modified P           |                    |
| 0200             | Coffee Deserting and 1000 000 Hz Wy Detect Consider                  | 2005         | 150.40                       | 756.26                        | <b>Major</b> 452.76  | Minor              |
| 0200             | Coffee Roasting per 1,000,000 Lb/Yr Rated Capacity                   | 2095<br>MIN. | 150.48<br>359.00             | 756.36<br>1,795.00            | 1,077.00             | 150.48<br>359.00   |
|                  |  | MAX.         | 9,495.00                     | 47,480.00                     | 28,488.00            | 9,495.00           |
| 0210<br>*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<br>*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<br>*Note 9* | Hardwood Mill  | 2426         | 680.00                       | 3,404.00                      | 2,042.00             | 680.00             |
| 0240<br>*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  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<br>MIN. | 5.65<br>3,892.00             | 28.35<br>19,459.00            | 17.03<br>11,675.00   | 5.65<br>3,891.00   |
| 0340             | Paper Mill per Ton Daily Rated Capacity                              | 2621         | 5.65                         | 28.35                         | 17.03                | 5.65               |
| *Note 1*         |  | MIN.         | 3,892.00                     | 19,459.00                     | 11,675.00            | 3,891.00           |
| 0350             | Paperboard Mills per Ton Daily Rated Capacity                        | 2631         | 5.65                         | 28.35                         | 17.03                | 5.65               |
|                  |  | MIN.         | 3,892.00                     | 19,459.00                     | 11,675.00            | 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<br>MIN. | 379.00<br>1,866.00           | 1,892.00<br>9,340.00          | 1,134.00<br>5,603.00 | 379.00<br>1,866.00 |
| 0380             | Corrugated Boxes: Converters (with Boilers)                          | 2653         | 566.00                       | 2,835.00                      | 1,703.00             | 566.00             |
| 0380             | 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         | 226.00                       | 1,134.00                      | 680.00               | 226.00             |
|                  | ·  | MIN.         | 1,089.00                     | 5,448.00                      | 3,268.00             | 1,089.00           |
| 0410             | Commercial Printing: Color per Press                                 | 2752<br>MIN. | 378.00<br>1,866.00           | 1,890.00<br>9,340.00          | 1,135.00<br>5,603.00 | 378.00<br>1,866.00 |
| 0420             | Caustic/Chlorine per 1,000,000 Lb/Yr Rated Cap Posed on Chlorine     | 2812         | 3.79                         | 18.92                         | 11.34                | 3.79               |
| *Note 2*         |  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 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         | 1.87                         | 9.46                          | 5.65                 | 1.87               |
| 0470             | Alumina per 1,000,000 Lb/Yr Rated Capacity                           | MIN.<br>2819 | 1,556.00<br>7.54             | 7,783.00<br>37.80             | 4,670.00<br>22.68    | 1,556.00<br>7.54   |
|                  | 1 2  | MIN.         | 1,556.00                     | 7,783.00                      | 4,670.00             | 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<br>MIN. | 1.87<br>1,089.00             | 9.46<br>5,448.00              | 5.65<br>3,268.00     | 1.87<br>1,089.00   |
| 0510             | Industrial Inorganic Acids N.E.C. per 1,000,000 Lb/Yr Rated Capacity | 2819<br>MIN. | 18.92<br>1,866.00            | 94.55<br>9,340.00             | 56.73<br>5,603.00    | 18.92<br>1,866.00  |
| 0520             | Nitric Acid Manufacture per 1,000 Ton/Yr Rated Capacity              | 2819         | 7.54                         | 37.80                         | 22.68                | 7.54               |
|                  |  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00           |
| 0530             | Phosphoric Acid Mfg. per Ton Daily Rated Capacity                    | 2819<br>MIN. | 1.87<br>1,556.00             | 9.46<br>7,783.00              | 5.65<br>4,670.00     | 1.87<br>1,556.00   |
| 0540             | Sulphuric Acid Manufacture per Ton Daily Rated Capacity              | 2819<br>MIN. | 1.87<br>1,556.00             | 9.46<br>7,783.00              | 5.65<br>4,670.00     | 1.87<br>1,556.00   |
| 0550             | Polyethylene/Polypropolene Manufacture per 1,000,000 Lb/Yr Rated     | 2821         | 15.11                        | 75.65                         | 45.38                | 15.11              |
|                  | Capacity   | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00           |
| 0560             | PVC Manufacture per 1,000,000 Lb/Yr Rated Capacity                   | 2821<br>MIN. | 18.92<br>1,866.00            | 94.55<br>9,340.00             | 56.73<br>5,603.00    | 18.92<br>1,866.00  |
| 0570             | Synthetic Resins Manufacture N.E.C. per 1,000,000 Lb/Yr Rated        | 2821         | 18.92                        | 94.55                         | 56.73                | 18.92              |
|                  | Capacity   | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00           |

|                   | Table  |              |                              |                               |                      |                      |
|-------------------|--|--------------|------------------------------|-------------------------------|----------------------|----------------------|
| Fee<br>Number     | Fee Schedule Air Contaminant Source  | SICC         | Annual<br>Maintenance<br>Fee | New Permit<br>Application Fee | Modified Permit Fees |                      |
|                   |  |              |                              |                               | Major                | Minor                |
| 0580              | Rubber Mfg. per 1,000,000 Lb/Yr Rated Capacity   | 2822         | 18.92                        | 94.55                         | 56.73                | 18.92                |
| 0505              | Deint Manufacturing and Disputing  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00             |
| 0585<br>0590      | Paint Manufacturing and Blending Charcoal per Oven   | 2851<br>2861 | 704.00<br>379.00             | 3,518.00<br>1,892.00          | 2,111.00<br>1,134.00 | 704.00<br>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         | 7.54                         | 37.80                         | 22.68                | 7.54                 |
| 0010              | Styrene Wonomer per 1,000,000 Et Trialed Capacity  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00             |
| 0620              | Halogenated Hydrocarbons per 1,000,000 Lb/Yr Rated Capacity  | 2869<br>MIN. | 11.34<br>1,866.00            | 56.73<br>9,340.00             | 34.04<br>5,603.00    | 11.34<br>1,866.00    |
| 0630              | Organic Oxides, Alcohols, Glycols per 1,000,000 Lb/Yr Rated  | 2869         | 7.54                         | 37.80                         | 22.68                | 7.54                 |
|                   | Capacity   | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00             |
| 0635              | Olefins and Aromatics N.E.C. per 1,000,000 Lb/Yr Rated Capacity  | 2869<br>MIN. | 7.54<br>1,866.00             | 37.80<br>9,340.00             | 22.68<br>5,603.00    | 7.54<br>1,866.00     |
| 0640              | Ammonia Manufacture per Ton Daily Rated Capacity   | 2873         | 3.78                         | 18.92                         | 11.34                | 3.78                 |
|                   |  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00             |
| 0650              | Fertilizer Manufacture per 1,000 Ton/Yr Rated Capacity   | 2873         | 1.87                         | 9.46                          | 5.65                 | 1.87                 |
| 0.00              | III III C 1000 T N D 1 1 C 1   | MIN.         | 1,089.00                     | 5,448.00                      | 3,268.00             | 1,089.00             |
| 0660              | Urea and Ureaform per 1,000 Ton/Yr Rated Capacity  | 2873<br>MIN. | 3.78<br>1,089.00             | 18.92<br>5,448.00             | 11.34<br>3,268.00    | 3.78<br>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         | 22.68                        | 113.44                        | 68.09                | 22.68                |
|                   |  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00             |
| 0690              | Chemical and Chemical Prep. N.E.C. per 1,000,000 Lb/Yr   | 2899         | 18.92                        | 94.55                         | 56.73                | 18.92                |
| 0695              | Chemical and Chemical Prep. N.E.C. with Output Less than   | MIN.<br>2899 | 1,556.00<br>1,077.00         | 7,783.00<br>5,388.00          | 4,670.00<br>3,233.00 | 1,556.00<br>1,077.00 |
|                   | 1,000,000 Lb/Yr  |              | ,                            | .,                            | ,                    | ,                    |
| 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<br>MIN  | 0.30                         | 1.54                          | 0.92                 | 0.30                 |
| 0720              | Petroleum Refining per 1,000 BBL/Day Rated Capacity Crude  | MIN.<br>2911 | 467.00<br>94.55              | 2,335.00<br>472.77            | 1,400.00<br>284.00   | 467.00<br>95.55      |
| *Note 3*          | Thruput  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00             |
| 0730              | Asphaltic Concrete Paving Plants per Ton/Hr Rated Capacity   | 2951         | 2.85                         | 14.22                         | 8.53                 | 2.85                 |
| *Note 4*          |  | MIN.         | 777.00                       | 3,891.00                      | 2,335.00             | 777.00               |
| 0740<br>0760      | Asphalt Blowing Plant (Not to be Charged Separately if in Refinery)  Blending, Compounding, or Refining of Lubricants per Unit | 2951<br>2992 | 1,134.00<br>1,134.00         | 5,673.00<br>5,673.00          | 3,404.00<br>3,404.00 | 1,134.00<br>1,134.00 |
| *Note 5*          | blending, Compounding, or Kerming of Lubricants per Onit   | 2992         | 1,154.00                     | 3,073.00                      | 3,404.00             | 1,134.00             |
| 0770              | Petroleum Coke Calcining per 1,000 Ton/Yr Rated Capacity   | 2999         | 15.11                        | 75.65                         | 45.38                | 15.11                |
|                   |  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 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<br>MIN. | 11.34<br>1,556.00            | 56.73<br>7,783.00             | 34.04<br>4,670.00    | 11.34<br>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         | 5.65                         | 28.35                         | 17.03                | 5.65                 |
|                   |  | MIN.         | 777.00                       | 3,891.00                      | 2,335.00             | 777.00               |
| 0815              | Concrete Products  | 3272         | 383.00                       | 1,915.00                      | 1,148.00             | 383.00               |
| 0820<br>*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         | 11.34                        | 56.73                         | 34.04                | 11.34                |
| 0040              | Common Manufacture and 1 000 T. AV D. 1 C.   | MIN.         | 1,089.00                     | 5,448.00                      | 3,268.00             | 1,089.00             |
| 0840              | Gypsum Manufacture per 1,000 Ton/Yr Rated Capacity   | 3275<br>MIN. | 11.34<br>1,089.00            | 56.73<br>5,448.00             | 34.04<br>3,268.00    | 11.34<br>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<br>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               |

| Table 1                      |  |              |                              |                               |                      |                    |
|------------------------------|--|--------------|------------------------------|-------------------------------|----------------------|--------------------|
| Fee Schedule Listing         |  |              |                              |                               |                      |                    |
| Fee<br>Number                | Air Contaminant Source   |              | Annual<br>Maintenance<br>Fee | New Permit<br>Application Fee | Modified Permit Fees |                    |
| 00.10                        |  |              | -000                         |                               | Major                | Minor              |
| 0940<br>0950                 | Steel Foundries N.E.C.: A) 3,500 or More Ton/Yr Production   | 3325<br>3325 | 606.00<br>301.00             | 3,024.00                      | 1,815.00<br>906.00   | 606.00<br>301.00   |
| 0950                         | Steel Foundries N.E.C.: B) Less than 3,500 Ton/Yr Production Primary Smelting and Refining of Copper per 100,000 Lb/Yr Rated | 3331         | 7.54                         | 1,513.00<br>37.80             | 22.68                | 7.54               |
| 0900                         | Capacity   | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00           |
| 0970                         | Aluminum Production per Pot  | 3334         | 37.80                        | 189.12                        | 113.00               | 37.80              |
|                              | •  | MIN.         | 1,866.00                     | 9,340.00                      | 5,603.00             | 1,866.00           |
| 0980                         | Refining of Non-Ferrous Metals N.E.C. per 1,000 Lb/Yr Rated  | 3339         | 0.04                         | 0.36                          | 0.21<br>5,603.00     | 0.04<br>1,866.00   |
| 0990                         | Capacity Secondary Smelting of Non-Ferrous Metals per Furnace  | MIN. 3341    | 1,866.00<br>1,134.00         | 9,340.00<br>5,673.00          | 3,404.00             | 1,134.00           |
| 0,7,0                        | becomedly blicking of 11011 Ferrous Freeding per Furnace   | MIN.         | 2,335.00                     | 11,675.00                     | 7,005.00             | 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<br>1059                 | Drum Manufacturing and/or Reconditioning   | 3412<br>3441 | 1,134.00                     | 5,673.00                      | 3,404.00             | 1,134.00           |
| 1059                         | Fabricated Structural Steel with 5 or More Welders Fabricated Plate Work with 5 or More Welders                              | 3441         | 756.00<br>957.00             | 3,780.00                      | 2,270.00<br>2,874.00 | 756.00<br>957.00   |
| 1070                         | Electroplating, Polishing and Anodizing with 5 or More Employees   | 3443         | 227.00                       | 4,789.00<br>1,134.00          | 680.00               | 227.00             |
| 1070                         | Sandblasting or Chemical Cleaning of Metal: A) 10 or More  | 3471         | 1,134.00                     | 5,673.00                      | 3,404.00             | 1,134.00           |
|                              | Employees Sandblasting or Chemical Cleaning of Metal: B) Less than 10  |              | ,                            | ,                             | ,                    | ,                  |
| 1090                         | 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             |
| 1170<br>1180                 | Oil Field Machinery and Equipment  | 3533         | 379.00                       | 1,892.00                      | 1,134.00             | 379.00<br>566.00   |
| 1190                         | Power Chain Saw Manufacture per Line Commercial Grain Dryer  | 3546<br>3559 | 566.00<br>454.00             | 2,835.00<br>2,270.00          | 1,703.00<br>1,362.00 | 454.00             |
| 1190                         | 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         | 175.92                       | 879.56                        | 527.74               | 175.92             |
| 1170                         | 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2   | MIN.         | 478.00                       | 2,394.00                      | 1,436.00             | 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<br>MIN. | 189.12<br>1,197.00           | 945.50<br>5,998.00            | 567.30<br>3,592.00   | 189.12<br>1,197.00 |
|                              | Сараспу  | MAX.         | 37,829.00                    | 189,145.00                    | 113,487.00           | 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<br>*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<br>*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                         | C) Petroleum, Chemical Bulk Storage and Terminal (500,001 -  | 4226         | 3,780.00                     | 18,912.00                     | 11,347.00            | 3,780.00           |
| *Note 6*<br>1360<br>*Note 6* | 1,000,000 BBL Capacity) 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<br>*Note 8*             | Wholesale Distribution of Coke and Other Bulk Goods per 1,000 Ton/Yr Capacity  | 4463<br>MIN. | 0.77<br>1,866.00             | 3.79<br>9,340.00              | 2.24<br>5,603.00     | 0.77<br>1,866.00   |

|                                | Table 1  |              |                              |                               |                   |                   |
|--------------------------------|--|--------------|------------------------------|-------------------------------|-------------------|-------------------|
|                                | Fee Schedule Listing   |              |                              |                               |                   |                   |
| Fee<br>Number                  | Air Contaminant Source   | SICC         | Annual<br>Maintenance<br>Fee | New Permit<br>Application Fee | Modified P        | ermit Fees        |
|                                |  |              |                              |                               | Major             | Minor             |
| 1362                           | Crude Oil Pipeline: Facility with Less than 100,000 BBLS Storage<br>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<br>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<br>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<br>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         | 17.57                        | 87.94                         | 52.76             | 17.57             |
|                                | ,,   | MIN.         | 3,580.00                     | 17,902.00                     | 10,741.00         | 3,580.00          |
| 1410                           | B) Electric Power Gen. per MW (0.7 Percent S or Less in Fuel)                      | 4911         | 10.53                        | 52.76                         | 31.65             | 10.53             |
| *Note 7*                       | •  | MIN.         | 1,712.00                     | 8,562.00                      | 5,137.00          | 1,712.00          |
| 1420                           | C) Electric Power Gen. per MW (Natural Gas Fired)                                  | 4911<br>MIN  | 5.29                         | 26.39                         | 15.83             | 5.29              |
| 1430                           | Natural Gas Comp per 100 H.P. (Turbines)   | MIN.<br>4922 | 1,245.00<br>7.54             | 6,226.00<br>37.80             | 3,736.00<br>22.68 | 1,245.00<br>7.54  |
| *Note 11*<br>1440<br>*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<br>*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<br>*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<br>*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<br>*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             |
| 1490<br>*Note 11*              | Recip. Nat Gas Comp: F) Less than 1,000 H.P.                                       | 4922         | 756.00                       | 1,892.00                      | 756.00            | 756.00            |
| 1500                           | Coal Gassification per \$100,000 Capital Cost                                      | 4925         | 7.54                         | 37.80                         | 22.68             | 7.54              |
| *Note 10*                      | F  | MIN.         | 1,197.00                     | 5,988.00                      | 3,592.00          | 1,197.00          |
|                                |  | MAX.         | 60,558.00                    | 302,788.00                    | 181,672.00        | 60,558.00         |
| 1510                           | Co-Generation per \$100,000 Capital Cost   | 4939         | 7.54                         | 37.80                         | 22.68             | 7.54              |
| *Note 10*                      |  | MIN.         | 1,197.000                    | 5,988.00                      | 3,592.00          | 1,197.00          |
|                                |  | MAX.         | 37,829.00                    | 189,145.00                    | 113,487.00        | 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<br>MIN. | 132.00<br>264.00             | 660.00<br>1,320.00            | 396.00<br>792.00  | 132.00<br>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                       | 4953         | 217.95                       | 1,089.73                      | 653.84            | 217.95            |
| 1332                           | Hour Thermal Capacity  | MIN.         | 4,789.00                     | 23,950.00                     | 14,370.00         | 4,789.00          |
| 1533                           | Noncommercial Hazardous Waste Incinerator (per 1,000,000 Btu/Hr                    | 4953         | 108.97                       | 545.61                        | 326.91            | 108.97            |
| 4=4:                           | Thermal Capacity)  | MIN.         | 3,113.00                     | 15,567.00                     | 9,340.00          | 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                      | 4953         | 108.97                       | 544.86                        | 326.91            | 108.97            |
|                                | Btu/Hr Thermal Capacity)   | MIN.         | 3,113.00                     | 15,567.00                     | 9,340.00          | 3,113.00          |
| 1540                           | Steam Gen. Units per 1000 Lb/Hr Steam Cap: Natural Gas or Comb                     | MAX.<br>4961 | 15,567.00<br>1.87            | 77,838.00<br>9.46             | 46,702.00<br>5.65 | 15,567.00<br>1.87 |
|                                | Non-Fossil Fuels   | MIN.         | 310.00                       | 1,556.00                      | 933.00            | 310.00            |
| 1550                           | Steam Gen. Units per 1000 Lb/Hr Steam Cap: Fuels with 0.7 Percent S or Less        | 4961<br>MIN. | 3.79<br>777.00               | 18.92<br>3,891.00             | 11.34<br>2,335.00 | 3.79<br>777.00    |
| 1560                           | Steam Gen. Units per 1000 Lb/Hr Steam Cap: Fuels with More than                    | 4961         | 5.65                         | 28.35                         | 17.03             | 5.65              |
| 4.5-0                          | 0.7 Percent S  | MIN.         | 1,089.00                     | 5,448.00                      | 3,268.00          | 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<br>MIN. | 0.36<br>1,089.00             | 1.87<br>5,448.00              | 1.11<br>3,268.00  | 0.36<br>1,089.00  |

|                       | m   |                      |                              |                                 |                                 |                              |  |
|-----------------------|---|----------------------|------------------------------|---------------------------------|---------------------------------|------------------------------|--|
|                       | Table 1 Fee Schedule Listing  |                      |                              |                                 |                                 |                              |  |
| Fee<br>Number         | Air Contaminant Source  | SICC                 | Annual<br>Maintenance<br>Fee | New Permit<br>Application Fee   | Modified Permit Fees            |                              |  |
|                       |   |                      |                              |                                 | Major                           | Minor                        |  |
| 1590                  | Automobile Recycling Scrap per 1000 Ton/Yr  | 5093<br>MIN.<br>MAX. | 15.56<br>777.00<br>37,829.00 | 77.83<br>3,891.00<br>189,145.00 | 46.70<br>2,335.00<br>113,487.00 | 15.56<br>777.00<br>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<br>*Note<br>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<br>*Note<br>14a* | Bulk Loader: 25,000 Ton/Yr or Less Throughput                                     | 5153                 | 1,077.00                     | 5,388.00                        | 3,233.00                        | 1,077.00                     |  |
| 1612<br>*Note<br>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<br>MIN.         | 0.36<br>1,712.00             | 1.87<br>8,562.00                | 1.11<br>5,137.00                | 0.36<br>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<br>*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<br>Number        | Fee Description   | Amount          |  |  |  |
| 2000                 | Company Ownership/Operator Change or Name<br>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   | 300.00          |  |  |  |
| 2015                 | Exemptions The Issuance or Denial of Relocation,  | 143.00          |  |  |  |
| *Note<br>15*         | Administrative Amendments, Variances,<br>Authorization to Construct, Change of Tank<br>Service, Research & Development, and<br>Exemptions for Small Business Sources  |                 |  |  |  |
| 2020                 | The Issuance of an Asbestos Disposal Verification Form (ADVF)—(at least 10 working days notification given)—Fee is nontransferable and nonrefundable.   | 66.00           |  |  |  |
| 2030                 | The Issuance of an Asbestos Disposal Verification Form (ADVF)—(less than 10 working days notification given)—Fee is nontransferable and nonrefundable.  | 99.00           |  |  |  |
| 2040                 | Agent Accreditation for Asbestos: Includes Contractor/Supervisor, Inspector, Management Planner, or Project Designer—Normal Application Processing per Discipline (greater than five working days after receipt of required documentation and fees)—Fee is nontransferable and nonrefundable.             | 264.00          |  |  |  |
| 2050                 | Agent Accreditation for Asbestos: Includes Contractor/Supervisor, Inspector, Management Planner, or Project Designer—Emergency Application Processing per Discipline (less than or equal to five working days after receipt of required documentation and fees)—Fee is nontransferable and nonrefundable. | 396.00          |  |  |  |
| 2060                 | Worker Accreditation for Asbestos—Normal Application Processing (greater than five working days after receipt of required documentation and fees)—Fee is nontransferable and nonrefundable.   | 66.00           |  |  |  |
| 2070                 | Worker Accreditation for Asbestos—Emergency<br>Application Processing (less than or equal to five<br>working days after receipt of required<br>documentation and fees)—Fee is nontransferable<br>and nonrefundable.   | 99.00           |  |  |  |
| 2080                 | Duplicate Certificate—Fee is nontransferable and nonrefundable.   | 33.00           |  |  |  |
| 2090                 | Asbestos Training Organization Recognition Plus Trainer Recognition per Trainer—Normal Application Processing (greater than five working days after receipt of required documentation and fees)—Fee is nontransferable and nonrefundable.   | 396.00<br>66.00 |  |  |  |
| 2100                 | Asbestos Training Organization Recognition Plus Trainer Recognition per Trainer—Emergency Application Processing (less than or equal to five working days after receipt of required documentation and fees)—Fee is nontransferable and nonrefundable.   | 594.00<br>99.00 |  |  |  |
| 2200<br>*Note<br>13* | Air Toxics Annual Fee per Ton Emitted on an Annual Basis:   |                 |  |  |  |
|                      | Class I Pollutants Class II Pollutants Class II Pollutants  | 142.56<br>71.28 |  |  |  |
| ]                    | Class III Pollutants  | 35.64           |  |  |  |

|                      | Table 2   |                  |  |  |  |
|----------------------|---|------------------|--|--|--|
| Fee                  | Additional Fees   |                  |  |  |  |
| Number               | Fee Description   | Amount           |  |  |  |
| 2300<br>*Note<br>14* | Criteria Pollutant Annual Fee per Ton Emitted on an Annual Basis (Non-Title V Facility): Nitrogen oxides (NO <sub>x</sub> ) Sulfur dioxide (SO <sub>2</sub> ) Non-toxic organic (VOC) Particulate (PM <sub>10</sub> ) | 12.83/ton        |  |  |  |
| 2310<br>*Note<br>14* | Criteria Pollutant Annual Fee per Ton Emitted on an Annual Basis (Title V Facility):  Nitrogen oxides (NO <sub>x</sub> )  Sulfur dioxide (SO <sub>2</sub> )  Non-toxic organic (VOC)  Particulate (PM <sub>10</sub> ) | 12.83/ton        |  |  |  |
| 2400                 | An application approval fee for Stage II Vapor<br>Recovery<br>An annual facility inspection fee for Stage II<br>Vapor Recovery  | 132.00<br>198.00 |  |  |  |
| 2600<br>*Note<br>16* | Accident Prevention Program Annual<br>Maintenance Fee: Program 1  | 264.00           |  |  |  |
| 2620<br>*Note<br>16* | Accident Prevention Program Annual<br>Maintenance Fee: Program 2  | 528.00           |  |  |  |
| 2630<br>*Note<br>16* | Accident Prevention Program Annual<br>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<br>*Note<br>19* | Lead Contractor License Evaluation Processing Fee—Fee is nontransferable and nonrefundable.   | 500.00           |  |  |  |
| 2901<br>*Note<br>19* | Lead Project Supervisor Accreditation Application Processing Fee—Fee is nontransferable and nonrefundable.  | 250.00           |  |  |  |
| 2902<br>*Note<br>19* | Lead Project Designer Accreditation Application Processing Fee—Fee is nontransferable and nonrefundable.  | 500.00           |  |  |  |
| 2903<br>*Note<br>19* | Lead Risk Assessor Accreditation Application Processing Fee—Fee is nontransferable and nonrefundable.   | 250.00           |  |  |  |
| 2904<br>*Note<br>19* | Lead Inspector Accreditation Application<br>Processing Fee—Fee is nontransferable and<br>nonrefundable.   | 150.00           |  |  |  |
| 2905<br>*Note<br>19* | Lead Worker Accreditation Application<br>Processing Fee—Fee is nontransferable and<br>nonrefundable.  | 50.00            |  |  |  |
| 2906<br>*Note<br>19* | Recognition Application Processing Fee for In-<br>State Louisiana Lead Training Organizations per<br>Training Organization—Fee is nontransferable<br>and nonrefundable.   | 500.00           |  |  |  |
| 2907<br>*Note<br>19* | Recognition Application Processing Fee for Louisiana Lead Training Organizations per Instructor—Fee is nontransferable and nonrefundable.   | 50.00            |  |  |  |
| 2908<br>*Note<br>19* | Recognition Application Processing Fee for Out of State Lead Training Organizations per Out of State Training Organization—Fee is nontransferable and nonrefundable.  | 750.00           |  |  |  |

|                      | Table 2  |        |  |  |  |
|----------------------|--|--------|--|--|--|
|                      | Additional Fees  |        |  |  |  |
| Fee<br>Number        | Foo Description  |        |  |  |  |
| 2909<br>*Note<br>19* | Recognition Application Processing Fee for Out of State Lead Training Organizations per Instructor—Fee is nontransferable and nonrefundable.                               | 100.00 |  |  |  |
| 2910<br>*Note<br>19* | Lead Abatement Project Notification Processing Fee, 2000 Square Feet and under—Fee is nontransferable and nonrefundable.   | 200.00 |  |  |  |
| 2911<br>*Note<br>19* | Lead Abatement Project Notification Processing<br>Fee for Each Additional Increment of 2000 Square<br>Feet or Portion Thereof—Fee is nontransferable<br>and nonrefundable. | 100.00 |  |  |  |
| 2912<br>*Note<br>19* | Lead Abatement Project Notification Processing<br>Fee (Fee Per Revision)—Fee is nontransferable<br>and nonrefundable.  | 50.00  |  |  |  |
| 2913<br>*Note<br>19* | Soil Lead Abatement Project Notification<br>Processing Fee, Half Acre or Less—Fee is<br>nontransferable and nonrefundable.   | 200.00 |  |  |  |
| 2914<br>*Note<br>19* | Soil Lead Abatement Project Notification Processing Fee, Each Additional Half Acre or Portion Thereof—Fee is nontransferable and nonrefundable.                            | 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 criteria 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<br>Application  | Normal Processing  | <b>Emergency Processing</b>  |  |  |  |  |
| Asbestos and Lead<br>Training<br>Organizations' and<br>Trainers'<br>Recognition | 30 days  | Application to be<br>processed less than or<br>equal to five working days<br>after receipt of required<br>documentation and fees               |  |  |  |  |
| Asbestos and Lead<br>Accreditation  | 30 days  | Application to be<br>processed less than or<br>equal to five working days<br>after receipt of required<br>documentation and fees               |  |  |  |  |
| Asbestos<br>Demolition and<br>Renovation<br>Notification                        | Notification to be<br>processed less than<br>or equal to 10<br>working days after<br>receipt or postmark<br>of required<br>documentation and<br>fees | Notification to be<br>processed less than or<br>equal to 10 working days<br>after receipt or postmark of<br>required documentation<br>and fees |  |  |  |  |

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| Processing Timelines                   |                   |   |  |  |  |  |
|--|-------------------|---|--|--|--|--|
| Notification or<br>Application         | Normal Processing | <b>Emergency Processing</b>   |  |  |  |  |
| Lead Contractors' "Letter of Approval" | 30 days           | Notification to be<br>processed less than or<br>equal to five working days<br>after receipt of required<br>documentation and fees |  |  |  |  |

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), LR 34:2560 (December 2008), LR 37:1145 (April 2011).

# **Chapter 3. Regulatory Permits**

### §301. Purpose

A. This Chapter establishes regulatory permits as authorized by R.S. 30:2054(B)(9). Regulatory permits may be used to authorize emissions of *air contaminants* as defined in LAC 33:III.111 from the sources and activities identified in this Chapter by notifying the department of the planned activity using the appropriate form provided by the department. Sources and activities not addressed by a regulatory permit must be authorized in accordance with LAC 33:III.Chapter 5.

B. Eligibility for a regulatory permit does not confer a vested right to coverage under such a permit. The department may require any person authorized to emit under a regulatory permit to apply for and/or obtain a site-specific air permit in accordance with LAC 33:III.Chapter 5. If the department requires a permittee authorized to emit under a regulatory permit to apply for a site-specific air permit, the department will notify the permittee in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision, a deadline for the permittee to file the application, and a statement that on the effective date of issuance or denial of the site-specific air permit, coverage under the regulatory permit will

automatically terminate. If a permittee fails to submit a site-specific air permit application as required by the date specified by the department, then the applicability of the regulatory permit to the individual permittee will be automatically terminated at the end of the date specified by the department for application submittal. The department may grant additional time to submit the application for a site-specific air permit upon request of the applicant.

C. The department is not precluded from using a regulatory permit to authorize air emissions from an activity at a source operating under a site-specific air permit issued pursuant to LAC 33:III.Chapter 5 provided all eligibility requirements of the regulatory permit are satisfied.

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 35:456 (March 2009).

# §303. Requirements and Limitations of Regulatory Permits

A. Regulatory permits cannot be used to authorize construction of a *major source*, as defined in LAC 33:III.502, or a *major modification*, as defined in LAC 33:III.504.K and 509.B.

- B. Use of a regulatory permit may be precluded by specific permit conditions contained within a Part 70 operating permit.
- C. Regulatory permits shall not authorize the maintenance of a nuisance or a danger to public health or safety.
- D. All emissions control equipment specifically required by, or otherwise installed in order to comply with, the terms and conditions of a regulatory permit shall be maintained in good condition and operated properly.
- E. Regulatory permits shall not preclude the administrative authority from exercising all powers and duties as set forth in R.S. 30:2011(D) including, but not limited to, the authority to conduct inspections and investigations and enter facilities, as provided in R.S. 30:2012, and to sample or monitor, for the purpose of assuring compliance with a regulatory permit or as otherwise authorized by the Louisiana Environmental Quality Act, the Clean Air Act, or regulations adopted thereunder, any substance or parameter at any location.
- F. Regulatory permits shall require compliance with all applicable provisions of the Louisiana air quality regulations, the Louisiana Environmental Quality Act, and the federal Clean Air Act. Violation of the terms or conditions of a regulatory permit constitutes a violation of the Louisiana air quality regulations, the Louisiana Environmental Quality Act, or the federal Clean Air Act, as applicable.
- G. Regulatory permits shall, as appropriate, prescribe such emission limitations, necessary control requirements, and other enforceable conditions, and associated monitoring,

recordkeeping, and reporting provisions, as are necessary for the protection of public health and the environment.

- H. Regulatory permits shall require any person seeking such a permit to submit a written notification describing the planned activity and any appropriate fee to the department. Submission of a written notification and appropriate fee shall be in lieu of submission of an individual permit application. The written notification shall be signed and certified by a *responsible official* as defined in LAC 33:III.502. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the notification are true, accurate, and complete.
- I. All regulatory permits shall establish notification procedures, permit terms, and provisions for confirmation of notification by the administrative authority and shall be promulgated in accordance with the procedures provided in R.S. 30:2019.

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 35:456 (March 2009).

### §305. Construction and Operation

- A. No operation of any source or activity addressed by a regulatory permit shall commence until the appropriate permit fee has been paid and the administrative authority has notified the applicant that the application (i.e., notification form) submitted in accordance with LAC 33:III.303.H has been determined to be complete.
- B. Construction of any source addressed by a regulatory permit may be prohibited by the terms of that regulatory permit until such time as the appropriate permit fee has been paid and the administrative authority has notified the applicant that the application (i.e., notification form) submitted in accordance with LAC 33:III.303.H is complete.

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 35:457 (March 2009).

### §307. Regulatory Permit for Oil and Gas Well Testing

- A. Applicability. This regulatory permit authorizes the operation of temporary separators, tanks, meters, and fluid-handling equipment, including loading facilities, necessary to test the content of a subsurface stratum believed to contain petroleum liquids or natural gas and/or to establish the proper design of a permanent fluid-handling facility, subject to the requirements established herein, upon notification by the administrative authority that the application (i.e., notification form) submitted in accordance with Subsection C of this Section has been determined to be complete.
- B. Control Requirements. For purposes of this Section, volumes of natural gas should be calculated at *standard conditions*, as defined in LAC 33:III.111.

- 1. Releases of natural gas less than 2.5 million (MM) cubic feet in volume require no controls.
- 2. Releases of natural gas greater than or equal to 2.5 MM cubic feet in volume shall be controlled by flaring. Flaring must continue until less than 0.25 MM cubic feet of gas remains to be released, at which time flaring is no longer required.
- 3. Notwithstanding the volumes specified in Paragraphs B.1 and 2 of this Section, releases that will result in total VOC emissions of 5,000 pounds or more; benzene emissions equal to or exceeding its minimum emission rate (MER) established by LAC 33:III.5112, Table 51.1; or total benzene, toluene, ethylbenzene, and xylene (BTEX) emissions of 2,000 pounds or more shall be controlled by flaring. Flaring must continue until less than 0.25 MM cubic feet of gas remains to be released, at which time flaring is no longer required.

### C. Notification Requirements

- 1. The following information shall be submitted to the Office of Environmental Services using the appropriate form provided by the department:
  - a. the name of the owner or operator;
  - b. the physical location of the well;
  - c. the date(s) and expected duration of the activity;
- d. a description of the processes and equipment involved, including control measures, if required; and
- e. the estimated emissions associated with the testing event, including the anticipated volume of natural gas to be flared or released and the amount of crude oil and condensate to be produced. Emissions of toxic air pollutants (TAPs) listed in LAC 33:III.5112, Tables 51.1 and 51.3, shall be speciated.
- 2. A copy of the notification required by Paragraph C.1 of this Section shall be submitted to the appropriate DEQ Regional Office.
- 3. A separate notification shall be submitted for each testing event.
- 4. The notification shall be submitted such that it is received by the department at least three working days prior to the testing event.
- D. The authorization for the specific testing event addressed by the application submitted in accordance with Subsection C of this Section shall remain effective for 180 days following the date on which the administrative authority determines that the application is complete.
- E. Operation of temporary separators, tanks, meters, and fluid-handling equipment beyond 10 operating days shall not be authorized by this regulatory permit and must be approved separately by the administrative authority.
- F. Recordkeeping and Reporting. The following information shall be recorded and submitted to the Office of

Environmental Services no later than 30 calendar days after completion of the testing event:

- 1. the date(s) and duration of the testing event;
- 2. the actual volumes of natural gas flared and natural gas released, as well as the total amount of crude oil and condensate produced; and
- 3. the actual criteria pollutant and TAP emissions associated with the testing event.
- G. In accordance with LAC 33:III.Chapter 2, the fee for this regulatory permit shall be \$300 (fee number 1710). There shall be no annual maintenance fee associated with this regulatory permit.

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 35:457 (March 2009).

# §309. Regulatory Permit for Release of Natural Gas from Pipelines and Associated Equipment

- A. Applicability. This regulatory permit authorizes the release of natural gas from pipelines and associated equipment resulting from metering, purging, and maintenance operations, subject to the requirements established herein, upon notification by the administrative authority that the application (i.e., notification form) submitted in accordance with Subsection C of this Section has been determined to be complete.
- B. Control Requirements. For purposes of this Section, volumes of natural gas should be calculated at *standard conditions*, as defined in LAC 33:III.111.
- 1. Releases of natural gas greater than or equal to 1.0 million (MM) cubic feet, but less than 2.5 MM cubic feet, in volume require no controls.
- 2. Releases of natural gas greater than or equal to 2.5 MM cubic feet in volume shall be controlled by flaring. Flaring must continue until less than 0.25 MM cubic feet of gas remains to be released, at which time flaring is no longer required.
- 3. Notwithstanding the volumes specified in Paragraphs B.1 and 2 of this Section, releases that will result in total VOC emissions of 5,000 pounds or more; benzene emissions equal to or exceeding its minimum emission rate (MER) established by LAC 33:III.5112, Table 51.1; or total benzene, toluene, ethylbenzene, and xylene (BTEX) emissions of 2,000 pounds or more shall be controlled by flaring. Flaring must continue until less than 0.25 MM cubic feet of gas remains to be released, at which time flaring is no longer required.
- 4. Natural gas releases covered by this regulatory permit shall have a hydrogen sulfide (H<sub>2</sub>S) content of no more than 1.5 grains per 100 standard cubic feet.

### C. Notification Requirements

- 1. The following information shall be submitted to the Office of Environmental Services using the appropriate form provided by the department:
  - a. the name of the owner or operator;
  - b. the type of, and reason for, the activity;
  - c. the physical location;
  - d. the date(s) and expected duration of the activity;
- e. a description of the processes and equipment involved, including control measures, if required;
- f. the estimated emissions associated with the metering, purging, or maintenance operation, including the volume of natural gas to be flared or released. Emissions of toxic air pollutants (TAPs) listed in LAC 33:III.5112, Tables 51.1 and 51.3, shall be speciated; and
  - g. the approximate  $H_2S$  content in the natural gas.
- 2. A copy of the notification required by Paragraph C.1 of this Section shall be submitted to the appropriate DEQ Regional Office.
- 3. A separate notification shall be submitted for each metering, purging, or maintenance operation.
- 4. The notification shall be submitted such that it is received by the department at least three working days prior to the metering, purging, or maintenance event. In emergency situations, the department will waive the three-working day requirement.
- D. The authorization for a release from the specific metering, purging, or maintenance operation addressed by the application submitted in accordance with Subsection C of this Section shall remain effective for 60 days following the date on which the administrative authority determines that the application is complete.
- E. This regulatory permit does not authorize releases from metering, purging, or maintenance operations associated with pipelines carrying refined petroleum products (e.g., ethylene, propylene, 1,3-butadiene).
- F. Conducting metering, purging, and maintenance operations beyond 10 operating days at a single location shall not be authorized by this regulatory permit and must be approved separately by the administrative authority.
- G. Resetting of flow meters (changing orifice plates, etc.) and calibration of meters are considered routine activities and are not classified as purging or maintenance operations.
- H. Recordkeeping and Reporting. The following information shall be recorded and submitted to the Office of Environmental Services no later than 30 calendar days after completion of the metering, purging, or maintenance operation:
- 1. the date(s) and duration of the metering, purging, or maintenance operation;

- 2. the actual volumes of natural gas flared and natural gas released; and
- 3. the actual criteria pollutant and TAP emissions associated with the metering, purging, or maintenance operation.
- I. In accordance with LAC 33:III.Chapter 2, the fee for this regulatory permit shall be \$300 (fee number 1710). There shall be no annual maintenance fee associated with this regulatory permit.

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 35:458 (March 2009).

#### **Regulatory Permit for Stationary Internal** §311. **Combustion Engines**

### A. Applicability

- 1. This regulatory permit authorizes the installation and use of stationary internal combustion engines, including, but not limited to, electrical power generators, firewater pumps, and air compressors, subject to the requirements established herein, upon notification by the administrative authority that the application (i.e., notification form) submitted in accordance with Subsection L of this Section has been determined to be complete. This regulatory permit also authorizes the associated fuel storage tank provided the capacity of the tank is less than 10,000 gallons.
- 2. This regulatory permit may be used to authorize the use of both permanent and temporary engines.
  - 3. This regulatory permit does not apply to:
- a. emergency electrical power generators deemed insignificant in accordance with item B.45 in the insignificant activities list in LAC 33:III.501.B.5; and
- b. nonroad engines, defined in LAC as 33:III.502.A.
- 4. This regulatory permit shall not be used to authorize use of an engine that combusts noncommercial fuels, including used crankcase oil or any other used oil, facility byproducts, or any other type of waste material.
- 5. This regulatory permit shall not be used to authorize use of an engine that, when considering potential emissions from the engine and potential emissions from the remainder of the stationary source, would result in the creation of a major source of criteria pollutants, hazardous air pollutants, or toxic air pollutants.

### B. Definitions

Emergency Engine—any stationary internal combustion engine (ICE) whose operation is limited to emergency situations (e.g., involuntary power curtailment, power unavailability, maintenance activity that requires the main source of power to be shut down) and required readiness testing and maintenance checks.

### C. Opacity

### 1. Limitations

- a. Smoke. The emission of smoke shall be controlled so that the shade or appearance of the emission is not darker than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- b. Particulate Matter. The emission of particulate matter shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- c. When the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this Subsection, this Subsection will not apply.
- 2. Monitoring and Recordkeeping for Emergency Engines
- a. The permittee shall inspect each emergency engine's stack for visible emissions once each month or at each readiness testing event if the engine is tested at a frequency less than monthly.
- b. If visible emissions are detected for more than one 6-minute period over a 60 consecutive minute test period using method 22 of 40 CFR 60, appendix A, the permittee shall conduct a 6-minute opacity reading in accordance with method 9 of 40 CFR 60, appendix A, during the next required visible emissions check.
- c. If the shade or appearance of the emission is darker than 20 percent average opacity (per method 9), the permittee shall take corrective action to return the engine to its proper operating condition, and the 6-minute opacity reading in accordance with method 9 shall be repeated. The permittee shall notify the Office of Environmental Compliance no later than 30 calendar days after any method 9 reading in excess of 20 percent average opacity. This notification shall include the date the visual check was performed, results of the method 9 testing, and a record of the corrective action employed.
- d. Records of visible emissions checks shall include the emergency engine's ID number, the engine's serial number, the date the visual check was performed, a record of emissions if visible emissions were detected for a period longer than 6 consecutive minutes, the results of any method 9 testing conducted, and a record of any corrective action employed. These records shall be kept on-site and available for inspection by the Office of Environmental Compliance.
- 3. Monitoring and Recordkeeping for Nonemergency Engines
- a. The permittee shall inspect each engine's stack for visible emissions no less than once each calendar week. If visible emissions are not detected during the initial six minutes of the inspection, the inspection may be concluded.

- b. If visible emissions are detected for more than one six-minute period over a 60 consecutive minute test period using method 22 of 40 CFR 60, appendix A, the permittee shall conduct a 6-minute opacity reading in accordance with method 9 of 40 CFR 60, appendix A, within three calendar days.
- c. If the shade or appearance of the emission is darker than 20 percent average opacity (per method 9), the permittee shall take corrective action to return the engine to its proper operating condition, and the 6-minute opacity reading shall be repeated in accordance with method 9. The permittee shall notify the Office of Environmental Compliance no later than 30 calendar days after any method 9 reading in excess of 20 percent average opacity or, for *Part 70 sources*, as defined in LAC 33:III.502.A, in accordance with Part 70 General Condition R of LAC 33:III.535.A. This notification shall include the date the visual check was performed, results of the method 9 testing, and a record of the corrective action employed.
- d. Records of visible emissions checks shall be kept on-site and available for inspection by the Office of Environmental Compliance. These records shall include:
  - i. the engine's ID number;
  - ii. the engine's serial number;
  - iii. the date the visual check was performed;
- iv. a record of emissions, if visible emissions were detected for more than one six-minute period;
- $\mbox{ v.} \qquad \mbox{the results of any method 9 testing conducted;} \\ \mbox{and} \\ \mbox{}$ 
  - vi. a record of any corrective action employed.
- 4. This Subsection shall not apply to engines described in LAC 33:III.1107.B.1 and 2.

### D. Fuel Sulfur Content

- 1. The permittee shall not combust distillate oil that contains greater than 0.5 weight percent sulfur.
- 2. A statement from the fuel oil supplier that each shipment of distillate oil delivered to the facility complies with the specifications of this Subsection shall be kept onsite and available for inspection by the Office of Environmental Compliance.

### E. Operating Time of Emergency Engines

- 1. Operating time of each emergency engine shall be limited to 500 hours per 12-consecutive-month period. The department may suspend this limit by a declaration of emergency.
- 2. Operating time of each emergency engine shall be monitored by any technically-sound means, except that a run-time meter shall be required for all permanent units.
- 3. Operating time of each emergency engine shall be recorded each month, as well as its operating time for the last 12 months. These records shall be kept on-site for five

years and available for inspection by the Office of Environmental Compliance.

### F. Emission Standards

### 1. New Source Performance Standards

- a. Each stationary compression ignition (CI) internal combustion engine (ICE) described in 40 CFR 60.4200(a) shall comply with the applicable provisions of 40 CFR 60, subpart IIII–Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, unless the engine is exempted as described in 40 CFR 60.4200(d) or meets the conditions set forth in 40 CFR 60.4200(e).
- b. Each stationary spark ignition (SI) ICE described in 40 CFR 60.4230(a) shall comply with the applicable provisions of 40 CFR 60, subpart JJJJ–Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, unless the engine is exempted as described in 40 CFR 60.4230(e) or meets the conditions set forth in 40 CFR 60.4230(f).
- 2. National Emissions Standards for Hazardous Air Pollutants. Each stationary reciprocating ICE described in 40 CFR 63.6590 shall comply with the applicable provisions of 40 CFR 63, subpart ZZZZ–National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, unless the engine is exempted as described in 40 CFR 63.6585(e) or identified in 40 CFR 63.6585(f).
- 3. Engines that are *affected point sources* as defined in LAC 33:III.2201.B shall comply with the applicable provisions of LAC 33:III.Chapter 22, Control of Emissions of Nitrogen Oxides ( $NO_X$ ), including:
- a. the appropriate  $NO_X$  emission factor set forth in Table D-1A or Table D-1B of LAC 33:III.2201.D;
- b. the initial and continuous demonstrations of compliance required by LAC 33:III.2201.G and H; and
- c. the notification, recordkeeping, and reporting requirements of LAC 33:III.2201.I.
- G. Performance Testing and Monitoring. The following performance testing and monitoring requirements shall apply to nonemergency engines with a manufacturer's horsepower rating of 500 or above and represented to operate more than 720 hours in any 6-month period on the application submitted in accordance with Subsection L of this Section.
- 1. No later than 180 days after the engine commences operation, the permittee shall conduct a performance test to determine  $NO_X$  and CO emissions using methods 7E (Determination of Nitrogen Oxides Emissions from Stationary Sources) and 10 (Determination of Carbon Monoxide Emissions from Stationary Sources) of 40 CFR 60, appendix A. Each test run shall be conducted within 80 percent of the engine's maximum rated capacity or within 10 percent of the maximum achievable load. Alternate stack test methods may be used only with the prior approval of the Office of Environmental Services.

- a. The permittee shall notify the Office of Environmental Services at least 30 days prior to the performance test in order to provide the department with the opportunity to conduct a pretest meeting and/or observe the test.
- b. The permittee shall submit the performance test results to the Office of Environmental Services no later than 60 days after completion of the test.
- 2. The permittee shall monitor  $NO_X$ , CO, and oxygen  $(O_2)$  concentrations in the engine's stack gas semiannually (6 months after the performance test or previous semiannual test, plus or minus 30 days) using a portable analyzer calibrated before each test using a known reference sample.  $NO_X$ , CO, and  $O_2$  concentrations may be monitored annually (12 months after the performance test or previous annual test, plus or minus 30 days) if the engine is equipped with catalytic controls.
- 3. Where monitoring of  $NO_X$  or CO is required by 40 CFR 60, subpart IIII; 40 CFR 60, subpart JJJJ; 40 CFR 63, subpart ZZZZ; or LAC 33:III.2201, the performance testing and monitoring requirements of this Subsection shall not apply for that pollutant.
- 4. This Subsection shall not apply to nonemergency engines identified as being temporary.

### H. Temporary Engines

- 1. Records of each temporary engine brought on-site shall be maintained and made available for inspection by the Office of Environmental Compliance. These records shall include:
  - a. the date the unit was delivered;
  - b. the make and model;
  - c. the manufacturer's rated horsepower;
  - d. the fuel type; and
  - e. the date the unit was removed from the site.
- 2. The authorization for the use of any engine identified as being temporary shall remain effective for 12 months following the date on which the administrative authority determines that the application submitted in accordance with Subsection L of this Section is complete. If the permittee determines that an engine originally identified as temporary will remain on-site longer than 12 months, a new application (i.e., notification form) shall be submitted in accordance with Subsection L of this Section prior to expiration of the authorization to operate under this regulatory permit as provided in this Paragraph.
- I. Permanent Engines. Permanent engines authorized by this regulatory permit shall be included in the next renewal or modification of the facility's existing permit.
- J. Gasoline storage tanks associated with an engine and with a nominal capacity of more than 250 gallons shall be equipped with a submerged fill pipe.

- K. Emissions Inventory. Each facility subject to LAC 33:III.919 shall include emissions from all engines, including temporary units, authorized by this regulatory permit in its annual emissions inventory.
- L. Notification Requirements. Written notification describing the planned activity shall be submitted to the Office of Environmental Services using the appropriate form provided by the department. A separate notification shall be submitted for each engine.
- M. In accordance with LAC 33:III.Chapter 2, the fee for this regulatory permit is \$713. In accordance with LAC 33:III.209 and 211, the annual maintenance fee associated with this regulatory permit shall be \$143. Applicable surcharges as described in LAC 33:III.211.A shall also be assessed.

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 35:459 (March 2009), amended LR 37:3221 (November 2011), amended by the Office of the Secretary, Legal Division, LR 40:780 (April 2014).

# §313. Regulatory Permit for Portable Air Curtain Incinerators

### A. Applicability

- 1. This regulatory permit authorizes the installation and use of portable air curtain incinerators, subject to the requirements established herein, upon notification by the administrative authority that the application (i.e., notification form) submitted in accordance with Subsection E of this Section has been determined to be complete. This regulatory permit also authorizes the engine that drives the fan mechanism and the associated fuel storage tank.
- 2. This regulatory permit does not apply to an air curtain incinerator that:
- a. has a manufacturer's rated capacity greater than 10 tons per hour;
- b. is operated at a commercial/industrial or institutional facility;
- c. combusts *construction/demolition (C&D) debris* as defined in LAC 33:VII.115;
- d. incinerates waste, including yard waste, collected from the general public; collected from residential, commercial, institutional, or industrial sources; or otherwise generated at a location other than the operational site; or
- e. remains at a single operational site (not to include storage locations) for more than 90 consecutive days.

### B. Definitions

Air Curtain Incinerator (ACI)—an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor.

Commercial/Industrial Facility—any facility involved and/or used in the production, manufacture, storage, transportation, distribution, exchange, or sale of goods and/or commodities, and any facility involved and/or used in providing professional and non-professional services. Such facilities include stores, offices, restaurants, warehouses, and other similar establishments.

*Institutional Facility*—a facility operated by an organization having a governmental, educational, civic, or religious purpose, such as a school, hospital, prison, military installation, church, or other similar establishment.

Yard Waste—grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs, originating from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.

### C. Operating Requirements

### 1. Visible Emissions

- a. Opacity from the ACI shall not exceed 20 percent, except for a 30-minute start-up period once per day during which opacity shall not exceed 35 percent.
- b. The emission of smoke, suspended particulate matter, or uncombined water, or any air contaminants or combinations thereof, that 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.
- c. The owner or operator shall conduct a 6-minute opacity reading in accordance with method 9 of 40 CFR 60, appendix A, upon request of the department. Results shall be kept on-site and available for inspection by the Office of Environmental Compliance.

### 2. Approved Wastes

- a. The ACI shall be used to burn only untreated wood, wood refuse, untreated wood products (i.e., crates, pallets, etc.), trees, branches, leaves, grass, and/or other vegetable matter.
- b. The owner or operator shall use only clean oils (e.g., diesel fuel, No. 2 fuel oil, kerosene) to ignite waste.

### 3. Operating Locations

- a. The owner or operator shall not locate the ACI at any permitted municipal or sanitary landfill.
- b. The ACI must be situated at least 1,000 feet from any dwelling other than a dwelling or structure located on the property on which the burning is conducted, unless the location has been approved by the appropriate DEQ Regional Office.
- c. Relocation. The owner or operator shall notify the department prior to moving the ACI to a new operating site. Approval must be obtained before operations at the new site can commence.

- 4. The owner or operator shall restrict incineration to the time period from 8 a.m. to 5 p.m. each day. Piles of combustible material should be of such size as to allow complete reduction in this time interval.
- 5. The owner or operator shall obtain all necessary permits from local and/or state agencies.
- 6. The owner or operator shall install on the ACI a manufacturer's nameplate giving the manufacturer's name and the unit's model number and capacity.
- 7. The owner or operator shall maintain the ACI to design standards and shall not operate the ACI if any equipment is malfunctioning.
- 8. The owner or operator shall use care to minimize the amount of dirt on the material being burned.
- 9. Material shall not be added to the ACI in such a manner as to be stacked above the air curtain.
- 10. An operator shall remain with the ACI at all times when it is operating.
- 11. Operation of the ACI shall be limited to no more than 1,500 hours per calendar year.

### D. Recordkeeping and Reporting

- 1. A daily record of the hours of operation of the ACI shall be kept on-site and available for review by the Office of Environmental Compliance. Daily records shall include the time combustion commences and the time the fire is completely extinguished.
- 2. Annual hours of operation for the preceding calendar year shall be reported to the Office of Environmental Compliance annually by February 15.
- E. Notification Requirements. Written notification describing the planned activity shall be submitted to the Office of Environmental Services using the appropriate form provided by the department. A separate notification shall be submitted for each air curtain incinerator.
- F. In accordance with LAC 33:III.Chapter 2, the fee for this regulatory permit is \$2,394 (fee number 1520). If emissions from the ACI are such that it qualifies for a small source permit as described in LAC 33:III.503.B.2, the fee is \$713 (fee number 1722), in accordance with LAC 33:III.211.B.13.e. In accordance with LAC 33:III.209 and 211, the annual maintenance fee associated with this regulatory permit shall be \$478, if fee number 1520 is applicable, or \$143, if fee number 1722 is applicable.

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 35:460 (March 2009).

# §315. Regulatory Permit for Concrete Manufacturing Facilities

### A. Applicability

- 1. This regulatory permit authorizes the construction and operation of facilities engaged in the manufacture of ready-mixed portland cement concrete, including central-mixed concrete, shrink-mixed concrete, and truck-mixed concrete, subject to the requirements established herein, upon notification by the administrative authority that the application (i.e., notification form) submitted in accordance with Subsection E of this Section has been determined to be complete.
- 2. This regulatory permit may be used to authorize both stationary and portable concrete manufacturing facilities.
- 3. The monitoring and recordkeeping requirements herein do not apply during each day when the concrete manufacturing facility is not operational.

### B. Control of Fugitive Emissions

- 1. Best housekeeping and maintenance practices shall be employed to minimize organic compound emissions. Good housekeeping shall include, but not be limited to, the practices described in LAC 33:III.2113.A.1-4.
- 2. 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.
- 3. All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. These precautions shall include, but not be limited to, the following.
- a. Open-bodied trucks transporting materials likely to give rise to airborne dust shall be covered at all times when in motion.
- b. Earth or other material on paved areas within the facility due to transport by trucking or other means shall be promptly removed.
- c. In-plant roads, vehicle work areas, material stockpiles, and other surfaces at the facility shall be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned as necessary to minimize dust emissions to the greatest extent practicable.

### C. Filter Vents (Baghouses)

### 1. Monitoring and Repair

- a. Filter vents shall be inspected for visible emissions on a daily basis.
- b. Filter elements (bags) shall be inspected every six months or whenever visual checks indicate maintenance may be necessary.
- c. Elements shall be changed in accordance with the manufacturer's recommendations, or more frequently if maintenance inspections reveal damage or other impairments impacting the design efficiency of the unit.
- 2. Recordkeeping. The following records shall be kept on-site and available for inspection by the Office of Environmental Compliance:

- a. the results of the visual checks required by Subparagraph C.1.a of this Section;
- b. the dates and results of the maintenance inspections required by Subparagraph C.1.b of this Section; and
- c. the dates and a description of any maintenance or repair conducted in accordance with Subparagraph C.1.c of this Section.

### D. Internal Combustion Engines

### 1. Fuels and Fuel Sulfur Content

- a. Internal combustion engines (ICEs) shall not combust noncommercial fuels, including used crankcase oil or any other used oil, facility byproducts, or any other type of waste material. Only commercially-available fuels such as diesel or gasoline shall be used.
- b. The permittee shall not combust distillate oil that contains greater than 0.5 weight percent sulfur.

### 2. Opacity

### a. Limitations

- i. Smoke. The emission of smoke shall be controlled so that the shade or appearance of the emission is not darker than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- ii. Particulate Matter. The emission of particulate matter shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- iii. When the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this Paragraph, this Paragraph will not apply.

### b. Monitoring and Recordkeeping

- i. The permittee shall inspect each ICE's stack for visible emissions once each month.
- ii. If visible emissions are detected for more than one 6-minute period over a 60 consecutive minute test period, the permittee shall conduct a 6-minute opacity reading in accordance with method 9 of 40 CFR 60, appendix A, during the next monthly visible emissions check.
- iii. If the shade or appearance of the emission is darker than 20 percent average opacity (per method 9), the permittee shall take corrective action to return the ICE to its proper operating condition, and the 6-minute opacity reading in accordance with method 9 shall be repeated. The permittee shall notify the Office of Environmental Compliance no later than 30 calendar days after any method 9 reading in excess of 20 percent average opacity. This

notification shall include the date the visual check was performed, results of the method 9 testing, and a record of the corrective action employed.

iv. Records of visible emissions checks shall include the ICE's serial number, the date the visual check was performed, a record of emissions if visible emissions were detected for a period longer than 6 consecutive minutes, the results of any method 9 testing conducted, and a record of any corrective action employed. These records shall be kept on-site and available for inspection by the Office of Environmental Compliance.

### 3. Operating Time

- a. Operating time of each ICE shall be monitored by any technically-sound means.
- b. Operating time of each ICE shall be recorded each month, as well as its operating time for the last 12 months. These records shall be kept on-site for five years and available for inspection by the Office of Environmental Compliance.

### 4. New Source Performance Standards

- a. Each stationary compression ignition (CI) ICE described in 40 CFR 60.4200(a) shall comply with the applicable provisions of 40 CFR 60, subpart IIII–Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, unless the ICE is exempted as described in 40 CFR 60.4200(d).
- b. Each stationary spark ignition (SI) ICE described in 40 CFR 60.4230(a) shall comply with the applicable provisions of 40 CFR 60, subpart JJJJ–Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, unless the ICE is exempted as described in 40 CFR 60.4230(e) or meets the conditions set forth in 40 CFR 60.4230(f).
- 5. National Emissions Standards for Hazardous Air Pollutants. Each stationary reciprocating ICE described in 40 CFR 63.6590 shall comply with the applicable provisions of 40 CFR 63, subpart ZZZZ–National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
- 6. Gasoline storage tanks associated with an ICE and with a nominal capacity of more than 250 gallons shall be equipped with a submerged fill pipe.
- E. Notification Requirements. Written notification describing the planned activity shall be submitted to the Office of Environmental Services using the appropriate form (the form and guidance concerning it can be obtained from the Office of Environmental Services or through the department's website).
- F. Relocation. The owner or operator shall notify the department prior to moving a portable concrete manufacturing facility to a new operating site. Approval must be obtained before operations at the new site can commence.

- G. Standby Plan. The owner or operator shall develop and retain onsite a standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency. The plan shall be in accordance with the requirements of LAC 33:III.5611.
- H. In accordance with LAC 33:III.Chapter 2, the fee for this regulatory permit is \$713 (fee number 1722). In accordance with LAC 33:III.209 and 211, the annual maintenance fee associated with this regulatory permit shall be \$143.

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 36:1541 (July 2010).

# §317. Regulatory Permit for Rock, Concrete, and Asphalt Crushing Facilities

### A. Applicability

- 1. This regulatory permit authorizes the construction and operation of rock, concrete, and asphalt crushing facilities, subject to the requirements established herein, upon notification by the department that the application (i.e., notification form) submitted in accordance with Subsection H of this Section has been determined to be complete.
- 2. This regulatory permit may be used to authorize both fixed and portable crushers. Fixed crushers are those attached by a cable, chain, turnbuckle, bolt, or other means to any anchor, slab, or structure, including bedrock.
- B. New Source Performance Standards. Each fixed crusher with a capacity of more than 25 tons per hour and each portable crusher with a capacity of more than 150 tons per hour for which construction, modification, or reconstruction commenced after August 31, 1983, shall comply with the applicable provisions of 40 CFR 60, subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants. Modification and reconstruction are described in 40 CFR 60.14 and 15, respectively.

### C. Control of Fugitive Emissions

- 1. Emission of particulate matter shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- 2. Emissions of smoke or suspended particulate matter that pass onto or across a public road and create a traffic hazard by *impairment of visibility*, as defined in LAC 33:III.111, or intensify an existing traffic hazard condition are prohibited.
- 3. All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. These precautions shall include, but not be limited to, the following.

- a. Open-bodied trucks transporting materials likely to give rise to airborne dust shall be covered at all times when in motion.
- b. Earth or other material on paved areas within the facility due to transport by trucking or other means shall be promptly removed.
- c. In-plant roads, active work areas, material stockpiles, and other surfaces at the facility shall be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned as necessary to minimize dust emissions to the greatest extent practicable.
- 4. If dust cannot be controlled by other means, the department may require permanently mounted spray bars to be installed at the inlet and outlet of the crusher, at all shaker screens, and/or at all material transfer points and used as necessary.
- 5. Best housekeeping and maintenance practices shall be employed to minimize emissions of organic compounds. Good housekeeping shall include, but not be limited to, the practices described in LAC 33:III.2113.A.1-4.

# D. Filter Vents (Baghouses)

# 1. Monitoring and Repair

- a. Filter vents shall be inspected for visible emissions on a daily basis.
- b. Filter elements (bags) shall be inspected no less than once every six months or more frequently if daily visual checks indicate maintenance may be necessary.
- c. Elements shall be changed in accordance with the manufacturer's recommendations or more frequently if maintenance inspections reveal damage or other impairments impacting the design efficiency of the unit.
- 2. Recordkeeping. The following records shall be kept on-site and available for inspection by the Office of Environmental Compliance:
- a. the results of the visual checks required by Subparagraph D.1.a of this Section;
- b. the dates and results of the maintenance inspections required by Subparagraph D.1.b of this Section; and
- c. the dates and a description of any maintenance or repair conducted in accordance with Subparagraph D.1.c of this Section.
- 3. The daily monitoring and recordkeeping requirements in this Subsection shall not apply when the crusher is not operational.

# E. Internal Combustion Engines

#### 1. Fuels and Fuel Sulfur Content

a. Internal combustion engines (ICEs) shall not combust noncommercial fuels, including any used oil, facility byproducts, or other type of waste material. Only

commercially available fuels such as diesel or gasoline shall be used as a fuel in ICEs.

b. The permittee shall not combust distillate oil that contains greater than 0.5 weight percent sulfur.

# 2. Opacity

#### a. Limitations

- Smoke. The emission of smoke shall be controlled so that the shade or appearance of the emission is not darker than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- Particulate Matter. The emission of particulate matter shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- Subparagraph E.2.a of this Section shall not apply if the presence of uncombined water is the only reason for failure of an emission to meet the opacity limitations.
  - b. Monitoring, Recordkeeping, and Reporting
- The permittee shall inspect each ICE's stack for visible emissions once each month.
- If visible emissions are detected for more than one 6-minute period over a 60 consecutive minute test period, the permittee shall conduct a 6-minute opacity reading in accordance with method 9 of 40 CFR 60, appendix A, within 3 operating days.
- If the shade or appearance of the emission is darker than 20 percent average opacity in accordance with method 9 of 40 CFR 60, appendix A, the permittee shall take corrective action to return the ICE to its proper operating condition, and the 6-minute opacity reading shall be repeated in accordance with method 9. The permittee shall notify the Office of Environmental Compliance no later than 30 calendar days after the occurrence of any method 9 readings in excess of 20 percent average opacity. This notification shall include the date the visual check was performed, results of the method 9 testing, and a record of the corrective action employed.
- Records of visible emissions checks shall include the ICE's serial number, the date the visual check was performed, a record of emissions if visible emissions were detected for a period longer than 6 consecutive minutes, the results of any method 9 testing conducted, and a record of any corrective action employed. These records shall be kept on-site and available for inspection by the Office of Environmental Compliance.

# 3. New Source Performance Standards

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a. Each stationary compression ignition (CI) ICE described in 40 CFR 60.4200(a) shall comply with the applicable provisions of 40 CFR 60, subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, unless the ICE is exempted as described in 40 CFR 60.4200(d).

- b. Each stationary spark ignition (SI) ICE described in 40 CFR 60.4230(a) shall comply with the applicable provisions of 40 CFR 60, subpart JJJJ-Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, unless the ICE is exempted as described in 40 CFR 60.4230(e) or meets the conditions set forth in 40 CFR 60.4230(f).
- 4. National Emissions Standards for Hazardous Air Pollutants. Each stationary reciprocating ICE described in 40 CFR 63.6590 shall comply with the applicable provisions of 40 CFR 63, subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
- 5. Gasoline storage tanks associated with an ICE and with a nominal capacity of more than 250 gallons shall be equipped with a submerged fill pipe.
- F. Operating Time. The crusher and associated equipment (excluding stockpiles and storage vessels) shall not operate for more than 4380 hours per calendar year.
- 1. Operating time shall be monitored by any technically sound means.
- 2. Operating time of the crusher shall be recorded each month, as well as its operating time for the last 12 months. The records shall be kept on-site for five years and available for inspection by the Office of Environmental Compliance.
- G. Monitoring of Capacity. The department may require the crusher to be equipped with a weigh hopper or scale belt to accurately determine the weight of material being crushed.
- H. Notification Requirements. Written notification describing the crusher shall be submitted to the Office of Environmental Services using the appropriate form provided by the department. A separate notification form shall be submitted for each crusher.
- I. Relocation. The permittee shall notify the department prior to moving the crusher to a new operating site. The permittee shall obtain approval from the department before commencing operations at a new site.
- J. Standby Plan. The permittee shall develop and retain on site a standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency. The plan shall be designed in accordance with the objectives set forth in LAC 33:III.5611, Tables 5, 6, and 7.
- 1. Activate the pre-planned abatement strategies listed in LAC 33:III.5611, Table 5 when the department declares an Air Pollution Alert.
- 2. Activate the pre-planned abatement strategies listed in LAC 33:III.5611, Table 6 when the department declares an Air Pollution Warning.

- 3. Activate the pre-planned abatement strategies listed in LAC 33:III.5611, Table 7 when the department declares an Air Pollution Emergency.
- K. Fees. In accordance with LAC 33:III.223, Table 1, the new permit application fee for this regulatory permit shall be \$2,080 (fee number 0870). In accordance LAC 33:III.209 and 211, the annual maintenance fee associated with this regulatory permit shall be \$416. If potential emissions from the crusher are such that it qualifies small source permit as described LAC 33:III.503.B.2, then fee number 1722 located in LAC 33:III.223, Table 1 shall apply in accordance with LAC 33:III.211.B.13.e.

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 38:1955 (August 2012).

#### **Regulatory Permit for Flaring of Materials** §319. Other than Natural Gas

# A. Applicability

- 1. This regulatory permit authorizes the flaring of gaseous materials other than natural gas (e.g., propane, ethylene, propylene, ammonia) resulting from metering, purging, and maintenance operations, subject to the requirements established herein, upon notification that the department has determined the application (i.e., notification form) submitted in accordance with Subsection G of this Section to be complete. The material to be flared may be supplemented with natural gas.
- 2. The material to be flared must have a higher heating value greater than or equal to 300 Btu per standard cubic foot.
- B. The flare must be capable of accommodating the maximum amount of material to be combusted at any point during the flaring event.

## C. Opacity

- 1. Smoke. The emission of smoke shall be controlled so that the shade or appearance of the emission is not darker than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- 2. Particulate Matter. The emission of particulate matter shall be controlled so that the shade or appearance of the emission is not denser than 20 percent average opacity, except that the emissions may have an average opacity in excess of 20 percent for not more than one 6-minute period in any 60 consecutive minutes.
- 3. Emissions of smoke or suspended particulate matter that pass onto or across a public road and create a traffic hazard by impairment of visibility, as defined in LAC 33:III.111, or intensify an existing traffic hazard condition are prohibited.

- 4. The owner or operator of the flare shall conduct a 6-minute opacity reading in accordance with method 9 of 40 CFR 60, appendix A, upon request of the department. Results shall be kept on-site and available for inspection by the Office of Environmental Compliance.
- D. The authorization for the flaring event associated with the specific metering, purging, or maintenance operation addressed by the application submitted in accordance with Subsection G of this Section shall remain effective for 60 days following the date on which the department determines that the application is complete.
- E. Flaring events with a duration of more than 10 calendar days shall not be authorized by this regulatory permit and must be approved separately by the department.
- F. When an ozone action day has been declared by the department, flaring of ethylene or propylene shall be restricted to between the hours of 4 p.m. and 10 a.m.

# G. Notification Requirements

- 1. The following information shall be submitted to the Office of Environmental Services using the appropriate form provided by the department:
  - a. name of the owner or operator;
  - b. material to be flared;
  - c. estimated volume of the material to be flared;
  - d. reason for the flaring event;
  - e. physical location;
- f. date(s) and expected duration of the flaring event; and
- g. estimated emissions of criteria pollutants and toxic air pollutants (TAPs) associated with the flaring event. TAPs are listed in LAC 33:III.5112, Tables 51.1 and 51.3.
- 2. A copy of the notification required by Paragraph G.1 of this Section shall be submitted to the appropriate DEQ regional office.
- 3. A separate notification shall be submitted for each flaring event.

## H. Monitoring, Recordkeeping, and Reporting

- 1. The volume of material combusted during the flaring event shall be monitored using a flow meter. Alternatively, the volume may be determined using engineering calculations.
- 2. The following information shall be recorded and submitted to the Office of Environmental Services no later than 30 calendar days after completion of the flaring event:
  - a. date(s) and duration of the flaring event;
- b. actual volume of material flared; including calculations if the volume was not monitored using a flow meter; and

- c. actual criteria pollutant and TAP emissions associated with the flaring event.
- I. In accordance with LAC 33:III.223, Table 1, the fee for this regulatory permit shall be \$300 (fee number 1710). There shall be no annual maintenance fee associated with this regulatory permit.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 39:1039 (April 2013).

# **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;
- 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; or

- e. a *nonroad engine*, as defined in LAC 33:III.502.A.
- 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;
- c. controlled burning in connection with timber stand management, or of pastureland or marshland in connection with trapping or livestock production; or
- d. any source that is not a *Part 70 source*, as defined in LAC 33:III.502, and for which:
  - i. facility-wide potential emissions are less than:
- (a). five tons per year for each criteria pollutant as defined by the Clean Air Act;
- (b). 15 tons per year of all such defined pollutants combined; and
- (c). the minimum emission rate (MER) for each toxic air pollutant established by Tables 51.1 and 51.3 of LAC 33:III.Chapter 51;
- ii. for purposes of this exemption, any physical limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment, shall be treated as part of its design; and
- iii. for purposes of determining applicability of 40 CFR 70 and LAC 33:III.507, *potential to emit* as defined in LAC 33:III.502 shall be used.
- 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 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 criteria 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 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.

#### Table 1. 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:

- 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 criteria pollutant 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 of criteria or toxic air pollutants, 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 of criteria or toxic air pollutants, 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 of criteria or toxic air pollutants, 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;
- 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;
- portable fuel tanks used on a temporary basis in maintenance and construction activities, provided that the aggregate criteria or toxic air pollutant emissions from all such tanks listed as insignificant do not exceed 5 tons per year;
- 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 of criteria or toxic air pollutants, 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 of criteria or toxic air pollutants, 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;

#### Table 1. Insignificant Activities List

- 11. catalyst charging operations, provided that the aggregate emissions from all such operations listed as insignificant do not exceed 5 tons per year of criteria or toxic air pollutants, 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 of criteria or toxic air pollutants, 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:

- 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 <sup>1</sup>, 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. 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. This exemption does not cover loading racks or fueling operations covered by LAC 33:III.Chapter 21;
- office activities such as photocopying, blueprint copying, and photographic processes;
- site assessment work to characterize waste disposal or remediation sites;
- 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;
- miscellaneous additions or upgrades of instrumentation or control systems;
- 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;
- 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;

#### Table 1. Insignificant Activities List

- 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;
- solid waste dumpsters;
- 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;
- emissions from natural gas odoring activities unless the permitting authority determines that a nuisance may occur;
- 30. emissions from engine crackcase vents;
- 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;
- equipment used exclusively to mill or grind coatings in roll grinding and rebuild and molding compounds where all materials charged are in paste form;
- 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;
- 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;

#### Table 1. Insignificant Activities List

- 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;
- 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.

Title 33, Part III

#### C. Based on Type of Pollutant

Emissions of the following pollutants need not be included in a permit application:

- 1. water vapor;
- oxygen;
- 3. nitrogen; and
- 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 criteria or toxic air 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.
- No new federally enforceable limitations or permit conditions are necessary to ensure compliance with any applicable requirement.
- 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.

# C. Scope

- 1. Except as specified in LAC 33:III.Chapter 3, 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. Except as specified in LAC 33:III.Chapter 3, no construction, modification, or operation of a facility which ultimately may result in an initiation of, or an increase in, emission of *air contaminants* as defined in LAC 33:III.111 shall commence until the appropriate permit fee has been 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.G.
- 12. Emissions estimation methods set forth in EPA's 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.F 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

emissions inventory required by LAC 33:III.919 differ from the emission factors or estimation methods used in the current air permit such that resulting "calculated" emissions reflect a significant change, 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. For purposes of this Paragraph, a significant change is defined as the lesser of the following:

- a. a 5 percent increase or decrease in the total potential or actual emissions from the facility;
- b. a 50 ton per year increase or decrease in the total potential or actual emissions from the facility; or
- c. a 10 ton per year increase or decrease in the potential or actual emissions from any single emission point (stack, vent, or fugitive).
- 14. If there is a change in federal law or the United States Court of Appeals for the District of Columbia Circuit or the United States Supreme Court issues an order which limits or renders ineffective the regulation of greenhouse gases from stationary sources under Part C of Title I (Prevention of Significant Deterioration of Air Quality) or Title V (Permits) of the Clean Air Act, the regulation of greenhouse gases under the corresponding programs in this Chapter shall be limited or rendered ineffective to the same extent.

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), LR 35:461 (March 2009), LR 35:2351 (November 2009), LR 37:1145, 1148 (April 2011), LR 37:1391 (May 2011), LR 37:3221, 3233 (November 2011), repromulgated LR 37:3507 (December 2011).

#### §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.

 $CO_2$  Equivalent Emissions ( $CO_2e$ )—the emitted amount of greenhouse gases (GHGs) computed by multiplying the mass amount of emissions for each of the six GHGs by its associated global warming potential, published in Table A-1 to Subpart A of 40 CFR Part 98—Global Warming Potentials, and summing the resultant value for each. (See greenhouse gases (GHGs).)

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.

Greenhouse Gases (GHGs)—an air pollutant defined as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

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, c, or d of this definition:

- a. a major source under section 112 of the Clean Air Act, which is defined as:
- 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 (except for GHGs) 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;
- d. as of July 1, 2011, any stationary source that directly emits or has the potential to emit 100 tpy or more of

*GHGs* on a mass basis (i.e., no global warming potentials applied) and 100,000 tpy or more of  $CO_2e$ .

# Nonroad Engine—

- a. Except as discussed in Subparagraph b of this definition, a nonroad engine is any internal combustion engine:
- i. used in or on a piece of equipment that is selfpropelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes, and bulldozers);
- ii. used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or
- iii. that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indications of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.
- b. An internal combustion engine is not a nonroad engine if:
- i. the engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition;
- ii. the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act (42 U.S.C. 7411); or
- iii. the engine otherwise included in Clause a.iii of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location for approximately three months (or more) each year.

[NOTE: Clause b.iii of this definition does not apply to an engine after it is removed from the location.]

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 *prevention of significant deterioration (PSD) program*, as defined in LAC 33:III.509.B.
- 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), amended by the Office of the Secretary, Legal Affairs Division, LR 36:2553 (November 2010), LR 37:1148 (April 2011), LR 37:1391 (May 2011).

## §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 *Part 70 source* as defined in LAC 33:III.502 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 criteria pollutant and 10 tons per year of any toxic air 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), amended by the Office of the Secretary, Legal Affairs Division, LR 37:1146 (April 2011).

# §504. Nonattainment New Source Review (NNSR) Procedures and Offset Requirements in Specified Parishes

- 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. 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. 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. 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. 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. Offsets shall be required at the ratio specified in Subsection L, Table 1 of this Section. All emission reductions claimed as offset credit shall be from decreases of the same regulated pollutant or pollutant class (e.g., VOC) for which the offset is required, except that direct  $PM_{2.5}$  emissions or emissions of  $PM_{2.5}$  precursors may be offset by reductions in direct  $PM_{2.5}$  emissions or emissions of any  $PM_{2.5}$  precursor, if such offsets comply with the interprecursor trading hierarchy and ratio established in the approved SIP for a particular nonattainment area.
  - Reserved.
- 3. All emission reductions claimed as offset credit shall be federally enforceable prior to commencement of

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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<sub>x</sub> 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 start-up, 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 consistent with 40 CFR 51.160 and 51.161. 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 start-up, 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.
- 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 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 start-ups, 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 start-ups, 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 onsite 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, and 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., they 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<sub>2</sub> or CO<sub>2</sub> concentrations), and to record average operational parameter values on a continuous basis.

Electric Utility Steam Generating Unit—any steamelectric 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<sub>x</sub> shall be considered major for ozone. VOC and NO<sub>x</sub> 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.

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.Actual 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<sub>2</sub> or CO<sub>2</sub> 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—

- a. any pollutant for which a national ambient air quality standard has been promulgated or any constituent or precursor for the identified pollutant, provided that such constituent or precursor pollutant is only regulated under NNSR as part of regulation of the primary pollutant. Precursors identified by the administrative authority for purposes of NNSR include the following:
- i. volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas;
- ii. sulfur dioxide is a precursor to  $PM_{2.5}$  in all  $PM_{2.5}$  nonattainment areas;
- iii. nitrogen oxides are presumed to be precursors to  $PM_{2.5}$  in all  $PM_{2.5}$  nonattainment areas, unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient  $PM_{2.5}$  concentrations; and
- iv. volatile organic compounds and ammonia are presumed not to be precursors to  $PM_{2.5}$  in any  $PM_{2.5}$  nonattainment area, unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds or ammonia from sources in a specific area are a significant contributor to that area's ambient  $PM_{2.5}$  concentrations.

b.  $PM_{2.5}$  emissions and  $PM_{10}$  emissions shall include the gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for  $PM_{2.5}$  and  $PM_{10}$  in NNSR permits. Compliance with emissions limitations for  $PM_{2.5}$  and  $PM_{10}$  issued prior to this date shall not be based on condensable particulate matter. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this Section.

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                  |  |

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| Pollutant         | Emission Rate   |  |
|-------------------|---|--|
| Sulfur dioxide    | 40 tpy  |  |
| Ozone             | 40 tpy of volatile organic compounds or nitrogen oxides   |  |
| Lead              | 0.6 tpy   |  |
| $PM_{10}$         | 15 tpy  |  |
| PM <sub>2.5</sub> | 10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide <sup>1</sup> |  |

<sup>1</sup>Nitrogen oxides are presumed to be precursors to PM<sub>2.5</sub> in all PM<sub>2.5</sub> nonattainment areas unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM<sub>2.5</sub> concentrations.

*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<br>Source Threshold<br>Values<br>(tons/year) | Major<br>Modification<br>Significant Net<br>Increase<br>(tons/year) | Offset Ratio<br>Minimum                                  |  |  |
| Ozone<br>VOC/NO <sub>x</sub>   |   | Trigger Values  |  |  |  |
| Marginal   | 100   | $40(40)^2$  | 1.10 to 1  |  |  |
| Moderate   | 100   | $40(40)^2$  | 1.15 to 1  |  |  |
| Serious  | 50  | 25 <sup>3</sup> (5) <sup>4</sup>                                    | 1.20 to 1 w/LAER<br>or 1.40 to 1<br>internal w/o<br>LAER |  |  |
| Severe   | 25  | 25 <sup>3</sup> (5) <sup>4</sup>                                    | 1.30 to 1 w/LAER<br>or 1.50 to 1<br>internal w/o<br>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 <sub>2</sub>  | 100   | 40  | >1.00 to 1   |  |  |
| $PM_{10}^{-1}$   |   |   |  |  |  |
| Moderate   | 100   | 15  | >1.00 to 1   |  |  |
| Serious  | 70  | 15  | >1.00 to 1   |  |  |
| $PM_{2.5}^{5}$   | 100   | 10  | >1.00 to 1   |  |  |
| Lead   | 100   | 0.6   | >1.00 to 1   |  |  |

 $<sup>^{1}</sup>$  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.

- <sup>2</sup> 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.
- $^5$  Sulfur dioxide is a precursor to  $PM_{2.5}$  in all  $PM_{2.5}$  nonattainment areas. Nitrogen oxides are presumed to be precursors to  $PM_{2.5}$  in all  $PM_{2.5}$  nonattainment areas unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient  $PM_{2.5}$  concentrations. Volatile organic compounds and ammonia are presumed not to be precursors to  $PM_{2.5}$  in any  $PM_{2.5}$  nonattainment area unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds or ammonia from sources in a specific area are a significant contributor to that area's ambient  $PM_{2.5}$  concentrations.

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  $PM_{2.5}$  = particulate matter of less than 2.5 microns in diameter

- M. Offset Requirements in Specified Parishes. Except as provided in Paragraph M.4 of this Section, the provisions of this Subsection shall apply to stationary sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge if the parish's designation with respect to the 8-hour national ambient air quality standard (NAAQS) for ozone is attainment, marginal nonattainment, or moderate nonattainment.
- 1. New Stationary Sources. The owner or operator of a new stationary source shall provide offsets for potential VOC and  $NO_X$  emissions in excess of 50 tons per year.

#### 2. Existing Stationary Sources

- a. Consideration of the net emissions increase shall be triggered for any physical change or change in the method of operation that would increase emissions of VOC or  $NO_X$  by 25 tons per year or more, without regard to any project decreases.
- b. The owner or operator of an existing stationary source with a potential to emit 50 tons per year or more of VOC shall provide VOC offsets for each physical change or change in the method of operation that would result in a net emissions increase of 25 tons per year or more of VOC.
- c. The owner or operator of an existing stationary source with a potential to emit 50 tons per year or more of  $NO_X$  shall provide  $NO_X$  offsets for each physical change or change in the method of operation that would result in a net emissions increase of 25 tons per year or more of  $NO_X$ .
  - 3. Offsets shall be required at a ratio of 1.1 to 1.

4. The provisions of this Subsection shall not apply to any new *major stationary source* or *major modification* as defined in Subsection K 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 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), LR 34:1890 (September 2008), LR 37:1568 (June 2011), LR 38:1232 (May 2012), amended by the Office of the Secretary, Legal Division, LR 38:2766 (November 2012).

# §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 25328-25469 and as amended on October 19, 2007, at 72 FR 59190-59207. All

provisions of 40 CFR Part 97, subparts AA – HH, continue to apply, with the exception of  $\S97.141$  (Timing Requirements for CAIR NO<sub>x</sub> Allowance Allocations) and  $\S97.142$  (CAIR NO<sub>x</sub> Allowance Allocations). The provisions of this Subsection state how the CAIR NO<sub>x</sub> 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—an electricity-generating unit 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.

Electric Public Utility—any person furnishing electric service within this state, including any electric cooperative transacting business in this state, provided, however, that the term shall not be construed to apply to any co-generator who consumes any or all of the electric power and energy that it generates or to any independent power producer who sells its entire production of electric power and energy to an electric public utility as herein defined.

*Fuel Types*—for the allocation of allowances under Louisiana's program, *fuel types* include solid, gaseous, or liquid fuel. The following definitions apply to *fuel types*.

- i. Solid Fuel—includes, but is not limited to, coal and petroleum coke. Any amount of solid fuel that is combusted, alone, in series, or in combination with any other fuel, during any control period shall meet the definition of solid fuel.
- ii. *Gaseous Fuel*—includes, but is not limited to, natural gas, propane, coal gas, and blast furnace gas. Any mixture containing at least 50 percent of gaseous fuel that is combusted with any liquid fuel during any control period shall meet the definition of gaseous fuel.
- iii. *Liquid Fuel*—includes, but is not limited to, petroleum-based oils and glycerol.

LPSC—the Louisiana Public Service Commission.

LPSC or Municipal Certification—the process under which the LPSC certifies, or the relevant municipal authority approves, construction, conversion, or repowering of an electricity-generating unit 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, a non-utility unit purchased by an electric public utility, 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<sub>x</sub> allowances shall be equal to the average of the actual NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> annual emissions data for those two years shall be used. When actual reported NO<sub>x</sub> annual emissions data are available for only one of the three calendar years, the actual reported NO<sub>x</sub> annual emissions data for that one year shall be used. When no actual reported NO<sub>x</sub> 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 and permitted 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. Repowered utility units will be allocated in the same manner as certified units in the control period of certification. Converted heat input is calculated as follows.

- i. For a solid fuel-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 gaseous or liquid fuel-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 heat input of the CAIR utility unit to the total amount of adjusted 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 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 solid fuel-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 liquid fuel-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, fuel type, 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.
- 4. Reclassification of Units. When the ownership of a unit is transferred, the unit is reclassified accordingly as a utility or non-utility unit. The department will allocate future allowances using the new classification, beginning with the allocation submission deadline after the effective date of the unit reclassification. The electric public utility must notify the department of the transfer of ownership. No changes will be made without written notification from the electric public utility.
- 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 25328-25469 and as amended on October 19, 2007, at 72 FR 59190-59207. All provisions of 40 CFR part 97, subparts AAAA HHHH, continue to apply, with the exception of  $\S 97.341$  (Timing Requirements for CAIR  $NO_x$  Ozone Season Allowance Allocations) and  $\S 97.342$  (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<sub>x</sub> allowances shall be equal to the average of the actual NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> ozone season emissions data for those two years shall be used. When actual reported NO<sub>x</sub> ozone season emissions data are available for only one of the three calendar years, the actual reported NO<sub>x</sub> ozone season emissions data for that one year shall be used. When no actual reported NO<sub>x</sub> 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 and permitted unit subject to CAIR shall be allocated NO<sub>x</sub> 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 NOx 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. Repowered utility units will be allocated in the same manner as certified units in the control period of certification. Ozone season converted heat input is calculated as follows.
- For a solid fuel-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. If the control period gross electrical output is unavailable, the hourly heat input for a specified calendar year shall equal the annual 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.

- For a gaseous or liquid fuel-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. If the control period gross electrical output is unavailable, the hourly heat input for a specified calendar year shall equal the annual 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 heat input of the CAIR utility unit to the total amount of ozone season adjusted 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 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 solid fuel-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 liquid fuel-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, fuel type, 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.
- 4. Reclassification of Units. When the ownership of a unit is transferred, the unit is reclassified accordingly as a utility or non-utility unit. The department will allocate future allowances using the new classification, beginning with the allocation submission deadline after the effective date of the unit reclassification. The electric public utility must notify the department of the transfer of ownership. No changes will be made without written notification from the electric public utility.
- C. Annual Sulfur Dioxide. Except as specified in this Section, The federal SO<sub>2</sub> model rule, published in the *Code* of Federal Regulation at 40 CFR part 96, July 1, 2012, is hereby incorporated by reference, except for subpart III-CAIR SO<sub>2</sub> OPT-in Units and all references to opt-in units.
- D. The volumes containing those federal regulations incorporated by reference may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402 or their website, www.gpoaccess.gov/cfr/index.html.
- 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), LR 34:978 (June 2008), LR 35:1107 (June 2009), LR 36:2272 (October 2010), repromulgated LR 36:2551 (November 2010), amended LR 37:2989 (October 2011), LR 38:1229 (May 2012), amended by the Office of the Secretary, Legal Division, LR 39:1276 (May 2013).

# §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:
  - 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;
- 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
- any solid waste incineration unit required to obtain a permit pursuant to section 129(e) of the federal Clean Air Act.
- 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 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 complete in accordance with LAC certified as 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, 2012. 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

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- 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 Compliance. Each permit issued to a Part 70 source shall include the following elements with regard to compliance:
- 1. compliance certification, testing, 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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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 20:1375 (December 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2447 (November 2000), LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 29:698 (May 2003), LR 30:1008 (May 2004), amended by the Office of Environmental Assessment, LR 31:1061 (May 2005), LR 31:1568 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2437 (October 2005), LR 32:808 (May 2006), LR 33:1619 (August 2007), LR 33:2083 (October 2007), LR 33:2630 (December 2007), LR 34:1391 (July 2008), LR 35:1107 (June 2009), LR 36:2272 (October 2010), LR 37:2990 (October 2011), LR 38:1229 (May 2012), amended by the Office of the Secretary, Legal Division, LR 39:1276 (May 2013).

## §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  $40\ \text{CFR}$  Parts  $60\ \text{and}\ 61$ ; 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 start-ups, 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 start-ups, 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)(A)(ii) or (iii) 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 the following amounts of the pollutant for which the minor source baseline date is established: 1  $\mu g/m^3$  (annual average) for  $SO_2,\,NO_2,$  or  $PM_{10};$  or 0.3  $\mu g/m^3$  (annual average) for  $PM_{2.5};$
- b. area redesignations under section 107(d)(1)(A)(ii) or (iii) 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
- 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;
- ii. in the case of nitrogen dioxide, February 8, 1988; and
  - iii. in the case of PM<sub>2.5</sub>, October 20, 2011.
- 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;
- ii. in the case of nitrogen dioxide, February 8, 1988; and
  - iii. in the case of  $PM_{2.5}$ , October 20, 2011.
- 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)(1)(A)(ii) or (iii) 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 onsite 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).

CO<sub>2</sub> Equivalent Emissions (CO<sub>2</sub>e)—the emitted amount of greenhouse gases (GHGs) computed by multiplying the mass amount of emissions for each of the six greenhouse gases in the pollutant GHGs by the gas's associated global warming potential published in Table A-1 to Subpart A of 40 CFR, Part 98—Global Warming Potentials, and summing the resultant value for each.

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<sub>2</sub> or CO<sub>2</sub> concentrations),

and to record average operational parameter values on a continuous basis.

Electric Utility Steam Generating Unit—any steamelectric 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.

Greenhouse Gases (GHGs)—an air pollutant defined as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

*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 (except for GHGs) 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 (except for GHGs) subject to regulation under this Section;
- c. as of July 1, 2011, any stationary source listed in Table A of this definition which emits, or has the potential to emit, 100 tpy or more of GHGs on a mass basis (i.e., no global warming potentials applied) and 100,000 tons per year or more of  $CO_2e$ ; or any stationary source not listed in Table A that emits, or has the potential to emit, 250 tpy or more of GHGs on a mass basis and 100,000 tons per year or more of  $CO_2e$ ; or
- d. any physical change that would occur at a source not otherwise qualifying as a major stationary source under Subparagraphs a, b, or c of this definition if the change would constitute a major source by itself;
- e. a major source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone;
- f. 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)                            |  |

| Table A – Stationary Sources of Air Pollutants |   |  |
|--|---|--|
| 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  |  |

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<sub>2</sub> or CO<sub>2</sub> 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 New Source Review (NSR) Pollutant—

a. any pollutant for which a national ambient air quality standard has been promulgated or any constituent or precursor for the identified pollutant. Precursors identified by the administrative authority for purposes of PSD include the following:

- i. volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas;
- ii. sulfur dioxide is a precursor to  $PM_{2.5}$  in all attainment and unclassifiable areas;
- iii. nitrogen oxides are presumed to be precursors to  $PM_{2.5}$  in all attainment and unclassifiable areas unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient  $PM_{2.5}$  concentrations; and
- iv. volatile organic compounds are presumed not to be precursors to  $PM_{2.5}$  in any attainment or unclassifiable area unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient  $PM_{2.5}$  concentrations;
- 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;
- 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; or
- e.  $PM_{2.5}$  emissions and  $PM_{10}$  emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for  $PM_{2.5}$  and  $PM_{10}$  in PSD permits. Compliance with emissions limitations for  $PM_{2.5}$  and  $PM_{10}$  issued prior to this date shall not be based on condensable particulate matter. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this Section.

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 <sub>10</sub> emissions  |  |
|  | 10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions <sup>1</sup> |  |
| 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 <sub>2</sub> S)                    | 10 tpy  |  |
| Total reduced sulfur (including H <sub>2</sub> S)      | 10 tpy  |  |
| Reduced sulfur compounds (including H <sub>2</sub> S)  | 10 tpy  |  |
| Municipal waste combustor organics <sup>2</sup>        | 0.0000035 tpy   |  |
| Municipal waste combustor metals <sup>3</sup>          | 15 tpy  |  |
| Municipal waste combustor acid gases <sup>4</sup>      | 40 tpy  |  |
| Municipal solid waste landfills emissions <sup>5</sup> | 50 tpy  |  |
| GHGs and GHGs as CO <sub>2</sub> e                     | 0 tpy and 75,000 tpy, respectively <sup>6</sup>   |  |

#### Pollutant Emission Rate

<sup>1</sup>Nitrogen oxides are presumed to be precursors to PM<sub>2.5</sub> in all attainment and unclassifiable areas unless the administrative authority demonstrates to the administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM<sub>2.5</sub> concentrations. <sup>2</sup>Measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

- <sup>3</sup>Measured as particulate matter.
- <sup>4</sup>Measured as sulfur dioxide and hydrogen chloride.
- <sup>5</sup>Measured as nonmethane organic compounds.
- <sup>6</sup>Both of the following conditions must be met: (1) the net emissions increase of *GHGs* calculated as the sum of the six GHGs on a mass basis (i.e., no global warming potentials applied) equals or exceeds 0 tpy; and (2) the net emissions increase of *GHGs* calculated as the sum of the six GHGs on a CO<sub>2</sub>e basis (i.e., global warming potentials applied) equals or exceeds 75,000 tpy CO<sub>2</sub>e.
- 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);
- d. notwithstanding Subparagraph a of this definition, between January 2, 2011, and June 30, 2011, the pollutant *GHGs* is "subject to regulation" only if the stationary source is:
- i. a new major stationary source for a regulated NSR pollutant that is not *GHGs* and also will emit or have the potential to emit *GHGs* in a significant amount; or
- ii. an existing major stationary source for a regulated NSR pollutant that is not *GHGs* and also will have a significant net emissions increase of both GHGs and another regulated NSR pollutant.

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.

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| Pollutant   | Maximum Allowable Increase<br>(Micrograms per Cubic<br>Meter) <sup>1</sup> |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Class I   |  |  |  |  |  |  |  |
| Particulate matter:   |  |  |  |  |  |  |  |
| PM <sub>2.5</sub> , annual arithmetic mean                                      | 1  |  |  |  |  |  |  |
| PM <sub>2.5</sub> , 24-hr maximum   | 2  |  |  |  |  |  |  |
| PM <sub>10</sub> , annual arithmetic mean                                       | 4  |  |  |  |  |  |  |
| PM <sub>10</sub> , 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   | П  |  |  |  |  |  |  |
| Particulate matter:   |  |  |  |  |  |  |  |
| PM <sub>2.5</sub> , annual arithmetic mean                                      | 4  |  |  |  |  |  |  |
| PM <sub>2.5</sub> , 24-hr maximum   | 9  |  |  |  |  |  |  |
| PM <sub>10</sub> , annual arithmetic mean                                       | 17   |  |  |  |  |  |  |
| PM <sub>10</sub> , 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   |  |  |  |  |  |  |  |
| Particulate matter:   |  |  |  |  |  |  |  |
| PM <sub>2.5</sub> , annual arithmetic mean                                      | 8  |  |  |  |  |  |  |
| PM <sub>2.5</sub> , 24-hr maximum   | 18   |  |  |  |  |  |  |
| PM <sub>10</sub> , annual arithmetic mean                                       | 34   |  |  |  |  |  |  |
| PM <sub>10</sub> , 24-hr maximum  | 60   |  |  |  |  |  |  |
| Sulfur dioxide:   |  |  |  |  |  |  |  |
| Annual arithmetic mean  | 40   |  |  |  |  |  |  |
| 24-hr maximum   | 182  |  |  |  |  |  |  |
| 3-hr maximum  | 700  |  |  |  |  |  |  |
| Nitrogen dioxide:   |  |  |  |  |  |  |  |
| Annual arithmetic mean  | 50   |  |  |  |  |  |  |
| <sup>1</sup> For any period other than an annual period, the applicable maximum |  |  |  |  |  |  |  |
| allowable increase may be exceeded during one such period per year at           |  |  |  |  |  |  |  |

- 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;

any one location.

- 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 <sup>3</sup>   | 8-hour average                     |  |
|--------------------------|---|------------------------------------|--|
| Nitrogen dioxide         | 14 μg/m <sup>3</sup>  | annual average                     |  |
| Particulate matter       | 10 μg/m³ of PM <sub>10</sub><br>4 μg/m³ of PM <sub>2.5</sub>  | 24-hour average<br>24-hour average |  |
| Sulfur dioxide           | 13 μg/m <sup>3</sup>  | 24-hour average                    |  |
| Ozone                    | No <i>de minimis</i> air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would require the performance of an ambient impact analysis including the gathering of ambient air quality data. |                                    |  |
| Lead                     | $0.1 \ \mu g/m^3$   | 3-month average                    |  |
| Fluorides                | 0.25 μg/m <sup>3</sup>  | 24-hour average                    |  |
| Total reduced sulfur     | 10 μg/m <sup>3</sup>  | 1-hour average                     |  |
| Hydrogen sulfide         | 0.2 μg/m <sup>3</sup>   | 1-hour average                     |  |
| Reduced sulfur compounds | 10 μg/m <sup>3</sup>  | 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 Subparagraph K.1.b 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 Subparagraph K.1.b 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 Subparagraph K.1.b 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

- 1. 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:
- a. any national ambient air quality standard in any air quality control region; or
- b. any applicable maximum allowable increase over the baseline concentration in any area.

## 2. Reserved.

#### 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<sub>10</sub>, 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. 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 makes such determination. Finally, 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, PM<sub>2.5</sub>, PM<sub>10</sub>, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants.

| I  |  |  |
|--|--|--|
| Pollutant                                  | Maximum Allowable Increase<br>(Micrograms per Cubic Meter) |  |
| Particulate matter:                        |  |  |
| PM <sub>2.5</sub> , annual arithmetic mean | 4  |  |
| PM <sub>2.5</sub> , 24-hr maximum          | 9  |  |
| PM <sub>10</sub> , annual arithmetic mean  | 17   |  |
| PM <sub>10</sub> , 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<br>(Micrograms per Cubic Meter) |               |      |  |
|--|---------------|------|--|
| Period of Exposure   | Terrain Areas |      |  |
| reflow of Exposure   | 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 start-up 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 start-up, 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<sub>x</sub> 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 start-ups, 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.

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- 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), LR 36:2556 (November 2010), LR 37:1148 (April 2011), repromulgated LR 37:1389 (May 2011), amended LR 37:1570 (June 2011), repromulgated LR 37:2146 (July 2011), amended by the Office of the Secretary, Legal Division, LR 38:3163 (December 2012), LR 39:1280 (May 2013).

#### §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 criteria or toxic air 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. At least 30 days prior to performing any emission test, notification of testing shall be made to the Office of Environmental Services to afford the department the opportunity to conduct a pretest conference and to have an observer present.
- 4. Within 60 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.
- 5. If there is to be a permanent change made that 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), amended by the Office of the Secretary, Legal Affairs Division, LR 34:1903 (September 2008), LR 37:1146 (April 2011), amended by

the Office of the Secretary, Legal Division, LR 38:2750 (November 2012).

#### §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. A copy of each final permit issued to a major Part 70 source shall be provided to EPA by the permitting authority.
- 4. 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 Paragraph B.2 of this Section and LAC 33:III.531.B.1.c.
- 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), amended by the Office of the Secretary, Legal Division, LR 38:2745 (November 2012).

## §535. Part 70 General Conditions

A. The Part 70 General Conditions listed in the table in this Section (numbered as historically designated in a permit) apply to each *Part 70 source* as defined in LAC 33:III.502 upon issuance of the initial Part 70 permit for the source and shall continue to apply until such time as the Part 70 permit is terminated, rescinded, or replaced in its entirety by a state (minor source) permit issued pursuant to LAC 33:III.501. These Part 70 General Conditions shall supersede any previous versions of such conditions contained in Part 70 permits.

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- A. The term of the permit shall be five years from date of issuance unless otherwise specified. Unless a timely and complete renewal application has been submitted pursuant to LAC 33:III.507, the permit shall expire at the end of the effective duration. Permit expiration terminates the owner's and operator's right to operate the source pursuant to 40 CFR 70.7(c)(ii). 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. Operation may continue under the conditions of the permit during the period of the review of the application for renewal.
- B. The conditions of the permit are severable; and if any provision of the permit or the application of any provision of the permit to any circumstance is held invalid, the application of that provision to other circumstances, and the remainder of the permit, shall not be affected thereby.
- C. The permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

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- E. The permit does not convey any property right of any sort, or an exclusive privilege.
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information.
- G. The permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR 70.6(a)(7).
- H. Upon presentation of such credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to:
- 1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit;
- have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings from continuous monitoring instrumentation, and all reports required by the permit.
- J. Records of required monitoring shall include the following:
- the date, place as defined in the permit, and time of sampling or measurements;
  - 2. the dates analyses were performed;
  - 3. the company or entity that performed the analyses;
  - the analytical techniques or methods used;
  - 5. the results of such analyses; and
- the operating conditions that existed at the time of sampling or measurement.
- The permittee shall submit, at least semiannually, a report of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements. For previously-reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communications or correspondences constituting the prior report, including the date the prior report was submitted. The semiannual report shall be certified by a responsible official and submitted to the Office of Environmental Compliance by March 31 for the preceding period encompassing July through December, and by September 30 for the preceding period encompassing January through June. The semiannual report shall be submitted for each reporting period after the permit has been issued, including during any construction phase and regardless of whether the facility or unit was in operation. The semiannual report may include any semiannual deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R as long as the report clearly indicates this, and all required information is included and clearly delineated in the consolidated report.
- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR 70.5(c)(8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR 70.6(c)(4).
- M. Compliance certifications required by LAC 33:III.507.H.5 shall be submitted to the administrator as well as the permitting authority. For

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previously-reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communications or correspondences constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance by March 31 for the preceding calendar year. The compliance certification shall be submitted for each reporting period after the permit has been issued, including during any construction phase and regardless of whether the facility or unit was in operation.

- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to complying with any emergency or upset provisions in any applicable regulation, notify the permitting authority within two working days of the time when emission limitations were exceeded due to the occurrence of an *upset*, as defined in LAC 33:III.507.J.1. In the event of such an upset, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - 1. an upset occurred and the cause was identified;
  - 2. the permitted facility was being operated properly at the time;
- during the period of the upset, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit; and
- 4. the permittee notified the permitting authority in accordance with LAC 33:I.Chapter 39.
- O. The permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds in accordance with Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired in accordance with the federal acid rain program (40 CFR Parts 72-78), provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.
- P. Any permit issued in accordance with 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR 70.7(f) or LAC 33:III.529.
- Q. The permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the criteria in LAC 33:III.523.A.1.a-f are met.
- R. The permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance. All such reports shall be certified by a *responsible official* as defined in LAC 33:III.502.A.
- A written report shall be submitted within seven days of any emission in excess of permit requirements by an amount greater than the reportable quantity established for that pollutant in LAC 33.I.Chapter 39.
- 2. A written report shall be submitted for any emission in excess of permit emission limitations, regardless of the amount, where such emission occurs over a period of seven days or longer. The report shall be submitted no later than 14 days from the initial occurrence of the release event.
- 3. A written report shall be submitted semiannually to address all permit deviations not included in Paragraph 1 or 2 of Part 70 General Condition R. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The semiannual deviation reports may be consolidated with the semiannual reports required by Part 70 General Condition K as long as the report clearly indicates this, and all required information is included and clearly delineated in the consolidated report. For previously-reported permit deviations (not reported in accordance with Paragraph 1 or 2 of Part 70 General Condition R), in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communications or correspondences constituting the prior report, including the date the prior report was submitted. The semiannual report shall be submitted by March 31, for the preceding period encompassing July through December, and by September 30, for the preceding period encompassing January through June.
  - 4. Any written report submitted in advance of the time frames

#### 40 CFR Part 70 General Conditions

specified in Paragraphs 1-3 of Part 70 General Condition R, in accordance with an applicable regulation, may serve to meet the reporting requirements of this Condition provided the report is certified in accordance with 40 CFR 70.5(d) and contains all information relevant to the permit deviation. Reporting under this Condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

- S. The permittee shall continue to comply with applicable requirements on a timely basis, and shall meet on a timely basis applicable requirements that become effective during the permit term.
- T. The permittee shall comply with the standards for recycling and emissions reduction in 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
- 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the practices required in 40 CFR 82.156.
- 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment in 40 CFR 82.158.
- 3. Persons maintaining, servicing, repairing, or disposing of appliances must be certified by an approved technician certification program in accordance with 40 CFR 82.161.
- 4. Persons disposing of small appliances and MVACs, and MVAC-like appliances as defined in 40 CFR 82.152, must comply with recordkeeping requirements in 40 CFR 82.166.
- Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements in 40 CFR 82.156.
- 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances in accordance with 40 CFR 82.166.
- U. If the permittee performs a service on motor vehicles that involves an ozone-depleting substance refrigerant (or a regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle whose final assembly has not been completed. The term "MVAC" as used in Subpart B does not include an air-tight sealed refrigeration system used for refrigerated cargo, or a system used on passenger buses that uses HCFC-22 refrigerant.
- V. Data Availability for Continuous Monitoring, or Monitoring to Collect Data at Specific Intervals. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the permit or an applicable federal or state regulation, the minimum degree of data availability shall be at least 90 percent (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This Condition does not apply to leak detection and repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).
- W. Associated with each Specific Requirement in the permit shall be a citation of a federal or state regulation upon which the authority to include that Specific Requirement is based. In the event of a discrepancy between an applicable federal or state regulation and the corresponding permit Specific Requirement, the federal or state regulation shall prevail. If an applicable federal or state regulation is modified during the term of this permit such that it conflicts with the corresponding permit Specific Requirement, the modified regulation shall prevail, and the permittee shall comply with the modified regulation by any compliance dates established in the modified regulation. This Condition shall not be construed as a "permit shield" as described in 40 CFR 70.6(f) and LAC 33:III.507.I.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011, 2023, 2024, and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 35:658 (April 2009).

#### §537. Louisiana General Conditions

A. The Louisiana general conditions listed in the table in this Section (numbered as historically designated in a permit) apply to each source that requires an air permit according to LAC 33:III.501 upon issuance of the initial air permit for the source and shall continue to apply until such time as the permit is terminated or rescinded. These Louisiana general conditions shall supersede any previous versions of such conditions contained in air permits.

#### Table 1. Louisiana Air Emission Permit General Conditions

- I. Permits are issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantee that the design scheme presented will be capable of limiting the emissions to the type and quantities stated. Failure to install, properly operate, and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g., during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of the permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Environmental Quality Act (the EQA, R.S. 30:2001 et seq.) and the Louisiana air quality regulations. Violation of any of the terms and conditions of the permit constitutes a violation of the EQA.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP and Other Pollutants, and Specific Requirements sections of the permit establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements of the permit.
- IV. A permit issued in advance of commencement of construction shall become invalid, for the sources not constructed, if:
- A. construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two years (18 months for PSD permits) after issuance of the permit; or
- B. construction is discontinued for a period of two years (18 months for PSD permits) or more.

The permitting authority may extend this time 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. However, each phase must commence construction within two years (18 months for PSD permits) of its projected and approved commencement date.

#### V. Reserved.

- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, of construction completion, within ten calendar days from the date that construction is complete, and provide the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.
- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in Louisiana General Condition III shall be conducted in accordance with the methods described in the Specific Requirements of the permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Services.
- VIII. The emission testing described in Louisiana General Condition VII, or

#### Table 1. Louisiana Air Emission Permit General Conditions

established in the Specific Requirements of the permit, shall be conducted within 60 days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Services shall be notified at least 30 days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Office of Environmental Services within 60 days after the completion of testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities as are necessary for proper determination of the emission limits.

- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance any significant difference in operating emission rates as compared to those limitations specified in Louisiana General Condition III. This report shall also include, but not be limited to, malfunctions and upsets. A request for permit modification shall be submitted, if necessary, as required in Louisiana General Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of the permit for a minimum of at least five years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in the permit, the permittee shall provide the Office of Environmental Compliance with a written report as specified below.
- A. A written report shall be submitted within seven days of any emission in excess of permit requirements by an amount greater than the reportable quantity established for that pollutant in LAC 33.I.Chapter 39.
- B. A written report shall be submitted for any emission in excess of permit emission limitations, regardless of the amount, where such emission occurs over a period of seven days or longer. The report shall be submitted no later than 14 days from the initial occurrence of the release event.
- C. A written report shall be submitted semiannually to address all emission limitation exceedances not included in Paragraph A or B of Louisiana General Condition XI. The semiannual report shall be submitted by March 31 for the preceding period encompassing July through December, and by September 30 for the preceding period encompassing January through June.
- D. Each report submitted in accordance with this Condition shall contain the following information:
  - 1. a description of noncomplying emissions;
  - 2. the cause of noncompliance;
- the anticipated time the noncompliance is expected to continue or, if it has been corrected, the duration of the period of noncompliance;
- the steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
- 5. the steps taken by the permittee to prevent recurrences of the noncomplying emissions.
- E. Any written report submitted in advance of the time frames specified in Paragraphs A-C of Louisiana General Condition XI, in accordance with an applicable regulation, may serve to meet the reporting requirements of this Condition provided all information specified in Paragraph D of Louisiana General Condition XI is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R set forth in LAC 33:III.535.A shall serve to meet the requirements of this Condition provided all specified information is included. Reporting under this Condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.
- XII. The permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:
- A. enter upon the permittee's premises where regulated facilities are located, where regulated activities are conducted, or where records required under the permit are kept;
- B. have access to and copy any records that are required to be kept under the terms and conditions of the permit, the Louisiana Environmental Quality Act, or the federal Clean Air Act;
  - C. inspect any facilities, equipment (including inspections of

#### **Table 1. Louisiana Air Emission Permit General Conditions**

monitoring methods and operation and maintenance inspections), or operations regulated under the permit; and

- D. sample or monitor, for the purpose of assuring compliance with the permit or as otherwise authorized by the Clean Air Act or regulations adopted thereunder, any substances or parameters at any location.
- XIII. If samples are taken under Louisiana General Condition XII, the officer or employee obtaining such samples shall give the owner, operator, or agent in charge a receipt describing the samples obtained. If requested to do so prior to leaving the premises, the officer or employee shall give a portion of each sample equal in volume or weight to the portion retained to the owner, operator, or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator, or agent in charge.
- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Clean Air Act or the regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this Condition shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

#### XV. Reserved.

- XVI. In the event of any change in ownership of the source described in the permit, the permittee and the succeeding owner shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19.
- XVII. Very small emissions to the air, resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility to, and approved by, the Office of Environmental Services are considered authorized discharges. Approved activities are noted in the Louisiana General Condition XVII Activities List of the permit. To be approved as an authorized discharge, such very small releases must:
  - 1. generally be less than 5 TPY of criteria and toxic air pollutants;
  - 2. be less than the minimum emission rate (MER);
  - 3. be regularly scheduled (e.g., daily, weekly, monthly, etc.); or
- be necessary prior to plant start-up or after shutdown (line or compressor pressuring/depressuring, for example).

This Condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting requirements in LAC 33:I.Chapter 39.

- XVIII. Provisions of the permit may be appealed to the secretary in writing pursuant to R.S. 30:2024(A) and LAC 33:I.Chapter 4 within 30 days from notice of the permit action.
- XIX. If any Part 70 General Condition conflicts with any Louisiana General Condition, then the Part 70 General Condition controls. If any Part 70 General Condition duplicates any Louisiana General Condition, then the Part 70 and Louisiana provisions shall be enforced as one Condition.
- XX. Associated with each Specific Requirement in the permit shall be a citation of a federal or state regulation upon which the authority to include that Specific Requirement is based. In the event of a discrepancy between an applicable federal or state regulation and the corresponding permit Specific Requirement, the federal or state regulation shall prevail. If an applicable federal or state regulation is modified during the term of this permit such that it conflicts with the corresponding permit Specific Requirement, the modified regulation shall prevail, and the permittee shall comply with the modified regulation by any compliance dates established in the modified regulation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011, 2023, 2024, and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs

Division, LR 35:660 (April 2009), amended LR 37:1146 (April 2011), amended by the Office of the Secretary, Legal Division, LR 38:2750, 2769 (November 2012).

## §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 (ERC) 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.

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), amended by the Office of the Secretary, Legal Division, LR 38:2767 (November 2012).

#### §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 nonattainment areas may submit ERC applications for purposes of banking. Sources

located in EPA-designated attainment areas may not participate in the emissions banking program. Any stationary point source at an affected facility is eligible to participate.

B. Notwithstanding Subsection A of this Section, sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge may participate in the emissions banking program for purposes of securing offsets where required by LAC 33:III.504.M.

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), amended by the Office of the Secretary, Legal Division, LR 38:2767 (November 2012).

#### §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, and 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 a criteria pollutant 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.

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.

*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.

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 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), LR 34:1890 (September 2008), LR 37:3221 (November 2011), amended by the Office of the Secretary, Legal Division, LR 38:2767 (November 2012).

## §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.
  - 1. Reserved.
- 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. Baseline emissions shall be the lower of actual emissions or adjusted allowable emissions determined in accordance with Paragraph C.3 of this Section.
- 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.

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), amended by the Office of the Secretary, Legal Division, LR 38:2767 (November 2012).

## §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.

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 designated as nonattainment by the EPA after January 1, 2012, applications for banking ERCs in such parish must be submitted by March 31 of the year following the effective date of the EPA designation.
- 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), amended by the Office of the Secretary, Legal Division, LR 38:2767 (November 2012).

### §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. 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;
- show the quantity of the ERC and type of pollutant;
  - 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), amended by the Office of the Secretary, Legal Division, LR 38:2767 (November 2012).

### 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.

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<sub>10</sub>, PM<sub>2.5</sub>, Sulfur Dioxide, Carbon Monoxide, Atmospheric Oxidants, Nitrogen Oxides, and Lead

A. PM<sub>10</sub>, PM<sub>2.5</sub>, 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 <sup>3</sup>                        | (Maximum 24-hour<br>concentration not to be<br>exceeded more than once<br>per year)   |  |
| D) (   | $15.0  \mu g/m^3$                            | (Annual arithmetic mean)  |  |
| PM <sub>2.5</sub>                              | 35 μg/m <sup>3</sup>                         | 24-hour   |  |
|  | 80 μg/m <sup>3</sup>                         | or 0.03 ppm (Annual arithmetic mean)  |  |
| Sulfur Dioxide<br>(SO <sub>2</sub> )           | 365 μg/m <sup>3</sup>                        | or 0.14 ppm (Maximum<br>24-hour concentration not<br>to be exceeded more than<br>once per year)   |  |
| Carbon Monoxide                                | 10,000 μg/m³                                 | or 9 ppm (Maximum 8-<br>hour concentration not to<br>be exceeded more than<br>once per year)  |  |
| (CO)   | 40,000 μg/m³                                 | or 35 ppm (Maximum 1-<br>hour concentration not to<br>be exceeded more than<br>once per year)   |  |
| Ozone  | 0.08 ppm daily<br>maximum 8-<br>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 <sub>2</sub> )            | 100 μg/m <sup>3</sup>                        | (0.05 ppm) (Annual arithmetic mean)   |  |
| Lead   | 1.5 μg/m <sup>3</sup>                        | (Maximum arithmetic<br>mean averaged over a<br>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 <sup>3</sup>                        | (Maximum 24-hour<br>concentration not to be<br>exceeded more than once<br>per year)   |  |
| Sulfur Dioxide (SO <sub>2</sub> )                 | 1,300 μg/m <sup>3</sup>                      | (Maximum 3-hour<br>concentration not to be<br>exceeded more than once<br>per year)  |  |
| DM  | $15.0  \mu g/m^3$                            | (Annual arithmetic mean)  |  |
| PM <sub>2.5</sub>                                 | $35 \mu g/m^3$                               | 24-hour   |  |
| Carbon Monoxide                                   | 10,000 μg/m³                                 | or 9 ppm (Maximum 8-<br>hour concentration not to<br>be exceeded more than<br>once per year)  |  |
| (CO)  | 40,000 μg/m³                                 | or 35 ppm (Maximum 1-<br>hour concentration not to<br>be exceeded more than<br>once per year)   |  |
| Ozone   | 0.08 ppm daily<br>maximum 8-<br>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<br>(NO <sub>2</sub> )            | 100 μg/m <sup>3</sup>                        | (0.05 ppm) (Annual arithmetic mean)   |  |
| Lead  | 1.5 μg/m <sup>3</sup>                        | (Maximum arithmetic<br>mean averaged over a<br>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<br>Interval | Analytical Method   |
| PM <sub>10</sub>  | 24 hours             | Any method complying<br>with reference method in<br>Title 40, Code of Federal<br>Regulations, Part 50,<br>appendix J. |
| PM <sub>2.5</sub>                                       | 24 hours             | Any method complying<br>with reference method in<br>Title 40, Code of Federal<br>Regulations, Part 50,<br>appendix L. |

| Table 2. Ambient Air—Methods of Contaminant Measurement |                      |  |
|---|----------------------|--|
| Air Contaminant   | Sampling<br>Interval | Analytical Method  |
|   | 24 hours             | Any method complying<br>with reference method in<br>Title 40, Code of Federal<br>Regulations, Part 50,<br>appendix A.  |
| Sulfur Dioxide  | Continuous           | Any method complying<br>with reference or<br>equivalent methods in Title<br>40, Code of Federal<br>Regulations, Part 53,<br>Subpart B.                             |
| Total Oxidants  | Continuous           | Any method complying<br>with reference or<br>equivalent methods in Title<br>40, Code of Federal<br>Regulations, Part 50,<br>appendix D, and Part 53,<br>Subpart B. |
| Carbon Monoxide   | Continuous           | Any method complying<br>with reference or<br>equivalent methods in Title<br>40, Code of Federal<br>Regulations, Part 50,<br>appendix C, and Part 53,<br>Subpart B. |
| Nitrogen Dioxide  | 24 hours             | Any method complying<br>with reference method in<br>Title 40, Code of Federal<br>Regulations, Part 50,<br>appendix F.  |
| Lead  | 24 hours             | Any method complying<br>with reference method in<br>Title 40, Code of Federal<br>Regulations, Part 50,<br>appendix G.  |

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. Except as provided in Subsection B of this Section, 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.

### B. Exemptions.

- 1. The provisions of Subsection A of this Section shall not apply when the controls are installed to comply with a regulation that explicitly limits the required use of the controls to specific circumstances or times.
- 2 The administrative authority may grant a written exemption to the owner or operator of the air pollution control facility.
- a. An exemption may be granted when the air pollution control facility has been installed, but not operated solely to comply with:
- i. a proposed federal or state regulation that has not been adopted and promulgated; or
- ii. a final federal or state regulation that has been vacated and remanded by a court of proper jurisdiction and is no longer effective.
  - b. An exemption shall not authorize:
- i. the noncompliance with any limit, standard, or requirement otherwise provided in a permit or other regulation; or
- ii. a physical change or change in the method of operation of the facility that increases 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 the Secretary, Legal Division, LR 39:1279 (May 2013).

### §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.

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. Nonattainment Areas and Adjoining Parishes List

A. For the purposes of the emissions inventory requirements set forth in LAC 33:III.919, the parishes located in the nonattainment areas as of June 1, 2011, as well as the parishes that adjoin the nonattainment areas, are listed in Tables 1-6 in Subsection B of this Section. Any parish designated by the EPA as a nonattainment area after June 1, 2011, or adjoining a nonattainment area designated by EPA after June 1, 2011, may not be listed in Tables 1-6 in Subsection B of this Section, but a facility located in that parish is nevertheless subject to the requirements of LAC 33:III.919.A.1.a. Any facility located in a parish listed as a nonattainment area in Tables 1-6 in Subsection B of this

Section and is redesignated by EPA as an attainment area after June 1, 2011, or adjoins a nonattainment area redesignated by EPA as an attainment area after June 1, 2011, shall continue to be subject to the requirements of LAC 33:III.919.A.1.a until otherwise directed by the department.

B. The following tables list all of the parishes located in the nonattainment areas as of June 1, 2011, as well as those parishes that adjoin the nonattainment areas.

| Table 1  |                                     |  |
|--|-------------------------------------|--|
| Carbon Monoxide (CO) Nonattainment Areas and Adjoining |                                     |  |
| Parishes   |                                     |  |
| Parish Code  | Nonattainment Parish(es)            |  |
|  | None                                |  |
| Parish Code  | Adjoining Parishes to Nonattainment |  |
| rarish Code  | Areas                               |  |
|  | None                                |  |

| Table 2        |  |  |
|----------------|--|--|
| Lead (Pb) Nona | Lead (Pb) Nonattainment Areas and Adjoining Parishes |  |
| Parish Code    | Nonattainment Parish(es)                             |  |
|                | None   |  |
| Parish Code    | Adjoining Parishes to Nonattainment                  |  |
| r arisii Code  | Areas  |  |
|                | None   |  |

| Table 3   |   |  |
|---|---|--|
| Nitrogen Dioxide (NO <sub>2</sub> ) Nonattainment Areas and Adjoining<br>Parishes |   |  |
| Parish Code   | Nonattainment Parish(es)                  |  |
|   | None                                      |  |
| Parish Code   | Adjoining Parishes to Nonattainment Areas |  |
|   | None                                      |  |

|  | Table 4                                   |  |  |
|--|---|--|--|
| Ozone Nonattainment Areas and Adjoining Parishes |   |  |  |
| Parish Code                                      | Nonattainment Parish(es)                  |  |  |
| 0180   | Ascension                                 |  |  |
| 0840   | East Baton Rouge                          |  |  |
| 1280   | Iberville                                 |  |  |
| 1740   | Livingston                                |  |  |
| 3120   | West Baton Rouge                          |  |  |
| Parish Code                                      | Adjoining Parishes to Nonattainment Areas |  |  |
| 0200   | Assumption                                |  |  |
| 0880   | East Feliciana                            |  |  |
| 1260   | Iberia                                    |  |  |
| 2260   | Pointe Coupee                             |  |  |
| 2540   | Saint Helena                              |  |  |
| 2560   | Saint James                               |  |  |
| 2580   | Saint John the Baptist                    |  |  |
| 2620   | Saint Martin                              |  |  |
| 2840   | Tangipahoa                                |  |  |
| 3160   | West Feliciana                            |  |  |

| Table 5   |   |  |  |
|---|---|--|--|
| Particulate Matter (PM <sub>10</sub> or PM <sub>2.5</sub> ) Nonattainment Areas and |   |  |  |
|   | Adjoining Parishes                        |  |  |
| Parish Code   | Nonattainment Parish(es)                  |  |  |
|   | None                                      |  |  |
| Parish Code   | Adjoining Parishes to Nonattainment Areas |  |  |
|   | None                                      |  |  |

| Table 6  |   |  |
|--|---|--|
| Sulfur Dioxide (SO <sub>2</sub> ) Nonattainment Areas and Adjoining Parishes |   |  |
| Parish Code  | nrish Code Nonattainment Parish(es)       |  |
| None   |   |  |
| Parish Code  | Adjoining Parishes to Nonattainment Areas |  |
|  | None                                      |  |

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), LR 37:3221 (November 2011).

### §919. Emissions Inventory

### A. Applicability

- 1. The provisions of this Section apply to the owner or operator of any facility located in Louisiana that meets any of the following criteria at any time during a reporting year:
- a. the facility is located in a nonattainment area or an adjoining parish as listed in LAC 33:III.918.B, Tables 1-6, and the facility emits, has the *potential to emit*, as defined in LAC 33:III.502.A, or is permitted to emit a pollutant that meets or exceeds any threshold value listed in Tables 1-6, with the corresponding pollutant in the table name, of Paragraph A.2 of this Section;
- b. the facility is located in an attainment parish and the facility emits, has the *potential to emit* as defined in LAC 33:III.502.A, or is permitted to emit a pollutant that meets or exceeds any threshold value listed in Table 7 in Paragraph A.2 of this Section;
- c. the facility is defined as a major stationary source of hazardous air pollutants in section 112(a)(1) of the federal Clean Air Act (CAA), or a *major source* of toxic air pollutants as defined in LAC 33:III.5103;
- d. the facility has a 40 CFR Part 70 (Title V) operating permit regardless of emissions;
- e. the facility has a portable source permit in accordance with LAC 33:III.513, operates at any time during a reporting year in a nonattainment area or an adjoining parish, and meets the applicability criteria of Subparagraph A.1.a of this Section; or
- f. the facility is required by rule or permit to submit an emissions inventory.
- 2. The following tables list emissions threshold values that require the submission of an emissions inventory.

| Table 1   |     |     |  |
|---|-----|-----|--|
| Carbon Monoxide (CO) Nonattainment Area and Adjoining Parishes:<br>Emissions Threshold Values                                 |     |     |  |
| Pollutant Nonattainment Area Threshold Value (tons/year) Adjoining Parishes to Nonattainment Area Threshold Value (tons/year) |     |     |  |
| Ammonia (NH <sub>3</sub> )  | 10  | 10  |  |
| CO  | 10  | 50  |  |
| Lead (Pb)   | 5   | 5   |  |
| $NO_X$  | 100 | 100 |  |
| PM <sub>10</sub> or PM <sub>2.5</sub>   | 100 | 100 |  |
| $SO_2$  | 100 | 100 |  |
| VOC   | 100 | 100 |  |

| Table 2   |     |     |  |
|---|-----|-----|--|
| Lead (Pb) Nonattainment Area and Adjoining Parishes: Emissions<br>Threshold Values  |     |     |  |
| Pollutant Nonattainment Area Threshold Value (tons/year) Adjoining Parishes to Nonattainment Area Threshold Value (tons/year) |     |     |  |
| Ammonia (NH <sub>3</sub> )  | 10  | 10  |  |
| CO  | 100 | 100 |  |
| Lead (Pb)   | 5   | 5   |  |
| $NO_X$  | 100 | 100 |  |
| PM <sub>10</sub> or PM <sub>2.5</sub>   | 100 | 100 |  |
| $SO_2$  | 100 | 100 |  |
| VOC   | 100 | 100 |  |

| Table 3  |   |     |
|--|---|-----|
| Nitrogen Dioxide (NO <sub>2</sub> ) Nonattainment Area and Adjoining Parishes:<br>Emissions Threshold Values |   |     |
| Pollutant  | Pollutant Nonattainment Area Threshold Value (tons/year) Adjoining Parishes to Nonattainment Area Threshold Value (tons/year) |     |
| Ammonia (NH <sub>3</sub> )   | 10  | 10  |
| CO   | 100   | 100 |
| Lead (Pb)  | 5   | 5   |
| $NO_X$   | 10  | 50  |
| PM <sub>10</sub> or PM <sub>2.5</sub>  | 100   | 100 |
| $SO_2$   | 100   | 100 |
| VOC  | 100   | 100 |

|   | Table 4 |     |  |
|---|---------|-----|--|
| Ozone Nonattainment Area and Adjoining Parishes: Emissions<br>Threshold Values  |         |     |  |
| Pollutant Nonattainment Area Threshold Value (tons/year) Adjoining Parishes to Nonattainment Area Threshold Value (tons/year) |         |     |  |
| Ammonia (NH <sub>3</sub> )  | 10      | 10  |  |
| CO  | 100     | 100 |  |
| Lead (Pb)   | 5       | 5   |  |
| $NO_X$  | 25      | 100 |  |
| PM <sub>10</sub> or PM <sub>2.5</sub>   | 100     | 100 |  |
| $SO_2$  | 100     | 100 |  |
| VOC   | 10      | 50  |  |

| Table 5   |     |     |
|---|-----|-----|
| Particulate Matter (PM <sub>10</sub> or PM <sub>2.5</sub> ) Nonattainment Area and Adjoining Parishes: Emissions Threshold Values |     |     |
| Pollutant Nonattainment Area Threshold Value (tons/year) Adjoining Parishes to Nonattainment Area Threshold Value (tons/year)     |     |     |
| Ammonia (NH <sub>3</sub> )  | 10  | 10  |
| CO  | 100 | 100 |
| Lead (Pb)   | 5   | 5   |
| $NO_X$  | 10  | 50  |
| PM <sub>10</sub> or PM <sub>2.5</sub>   | 10  | 50  |
| $SO_2$  | 10  | 50  |
| VOC   | 10  | 50  |

| Table 6 Sulfur Dioxide (SO <sub>2</sub> ) Nonattainment Area and Adjoining Parishes: Emissions Threshold Values |     |     |
|---|-----|-----|
|   |     |     |
| Ammonia (NH <sub>3</sub> )  | 10  | 10  |
| CO  | 100 | 100 |
| Lead (Pb)   | 5   | 5   |
| $NO_X$  | 100 | 100 |
| PM <sub>10</sub> or PM <sub>2.5</sub>   | 100 | 100 |
| $SO_2$  | 10  | 50  |
| VOC   | 100 | 100 |

| Table 7                               |  |
|---------------------------------------|--|
| Attain                                | ment Areas: Emissions Threshold Values |
| Pollutant                             | Threshold Value (tons/year)            |
| Ammonia (NH <sub>3</sub> )            | 10                                     |
| CO                                    | 100                                    |
| Lead (Pb)                             | 5                                      |
| $NO_X$                                | 100                                    |
| PM <sub>10</sub> or PM <sub>2.5</sub> | 100                                    |
| $SO_2$                                | 100                                    |
| VOC                                   | 100                                    |

- 3. The requirements of this Section do not apply to *mobile sources* or *nonpoint sources* as defined in Subsection E of this Section.
- B. The applicability of this Section for contiguous *agency interests* (*AIs*), as defined in Subsection E of this Section, shall be determined by a threshold value that is the greater of:
  - 1. the sum of the actual emissions;
  - 2. the sum of the potentials to emit; or
- 3. the sum of permitted emissions for all contiguous AIs. However, the emissions inventory shall be reported separately for each AI.
- C. The owner or operator of any facility meeting the applicability criteria in Subparagraph A.1.a of this Section and located in any parish listed as a nonattainment area in LAC 33:III.918.B, Tables 1-6, but redesignated by EPA as an attainment area after June 1, 2011, or adjoins a nonattainment area redesignated by EPA as an attainment

area after June 1, 2011, shall continue to be subject to Subparagraph A.1.a of this Section until otherwise directed by the department.

- D. Once a facility meets the applicability criteria of Subparagraph A.1.a, b, c, d, e, f, g, or h of this Section, the owner or operator of the facility shall continue to submit an emissions inventory until otherwise directed by the department.
- 1. If a facility no longer meets any applicability criteria under Paragraph A.1 of this Section for one full calendar year, the owner or operator may request approval from the department in writing to discontinue submission of an emissions inventory. All such requests shall be submitted to the Office of Environmental Services.
- a. An owner or operator who has submitted a request for approval to discontinue submission of an emissions inventory shall continue to submit an emissions inventory unless the owner or operator has received a response of approval from the department.
- b. A request for departmental approval to discontinue submission of an emissions inventory will be considered if one or more of the following conditions have been met for one full calendar year:
- i. the facility's permit has been rescinded and the most current emissions inventory shows the emissions to be below the applicable reporting thresholds in Paragraph A.2 of this Section;
- ii. the facility has been permitted to emit pollutants below the reporting thresholds in Paragraph A.2 of this Section and the most current emissions inventory shows the emissions to be below the reporting thresholds;
- iii. the facility's potential to emit has been below the applicable reporting thresholds in Paragraph A.2 of this Section and the most current emissions inventory shows the emissions to be below the reporting thresholds;
- iv. the facility has not been a major stationary source of hazardous air pollutants in accordance with section 112(a)(1) of the federal Clean Air Act (CAA) or a major source of toxic air pollutants in accordance with LAC 33:III.Chapter 51;
- v. the facility does not have a 40 CFR Part 70 (Title V) operating permit;
- vi. the owner or operator of the facility is not required by rule or permit to submit an emissions inventory; or
- vii. the facility operates in a nonattainment area or an adjoining parish and does not have a portable source permit as required by LAC 33:III.513.
- 2. No facility classes or categories are exempted from emissions inventory reporting.
- E. Definitions. For the purposes of this Section, the terms below will have the meaning given herein.

Actual Emissions—a calculation, measurement, or estimate, in accordance with Subsection G of this Section, of the amount of a pollutant actually emitted during a calendar year or other period of time.

Agency Interest (AI)—any entity that is being regulated or is of interest to the department. Conceptually, an agency interest can be a site, facility, mobile source, area source, a person, or an organization.

Attainment Area—an area of the state that is not listed as a nonattainment area by the U.S. Environmental Protection Agency.

*Certified*—the status of an emissions inventory once the department has received both the emissions inventory and the certification statement required by this Section.

Contiguous Facilities—facilities under common control separated by 0.25 miles or less.

*Control Efficiency*—the percentage by which a control system or technique reduces the emissions from a source.

*Control System*—a combination of one or more capture system(s) and control device(s) working in concert to reduce discharges of pollutants to the ambient air.

*Emissions Factor*—the ratio relating emissions of a specific pollutant to an activity or material throughput level.

Facility—all emissions sources from stationary point sources, as defined in LAC 33:III.605, under common control on contiguous property.

[NOTE: A facility can be one or more AIs, and each AI must comply individually with Subsection C of this Section.]

Flash Gas Emissions—emissions from depressurization of crude oil or condensate when it is transferred from a higher pressure to a lower pressure tank, reservoir, or other type of container.

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

*Mobile Source*—a motor vehicle, nonroad engine, or nonroad vehicle where:

- a. a *motor vehicle* is any self-propelled vehicle used to carry people or property on a street or highway;
- b. a *nonroad engine* is an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, and that is not affected by sections 111 or 202 of the CAA; and
- c. a *nonroad vehicle* is a vehicle that is run by a nonroad engine and is not a motor vehicle or a vehicle used solely for competition.

National Ambient Air Quality Standard (NAAQS)—a standard established in accordance with section 109 of the CAA, including but not limited to, standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone,

particulate matter ( $PM_{2.5}$  and  $PM_{10}$ ), and sulfur dioxide ( $SO_2$ ).

Nonattainment Area—an area (parish or group of parishes) that has been declared by the administrative authority to be not in compliance with a federal national ambient air quality standard and that is listed in the Federal Register as a nonattainment area.

Nonpoint Sources (previously known as area sources)—collectively represent individual sources that have not been inventoried as specific point or mobile sources. These individual sources treated collectively as nonpoint sources are typically too small, numerous, or difficult to inventory using the methods for the other classes of sources.

*Ozone Season*—except as provided in LAC 33:III.2202, the period from May 1 to September 30, inclusively, of each year.

*Process*—an operation or function by a source that produces emissions, characterized by a Source Classification Code (SCC).

*Release Point*—the point where emissions from one or more processes are released into the atmosphere.

*Reporting Period*—the time frame during the reporting year for which emissions are being reported.

*Reporting Year*—the year for which an emissions inventory is being submitted.

*Routine Operations*—operations, not including any start-up/shutdown emissions, that are authorized and/or permitted by the department.

*Source*—the point at which the emissions are generated, typically a piece of, or a closely related set of, equipment.

#### F. Requirements

- 1. Data for emissions inventory and the certification statements shall be collected annually. The owner or operator of each facility that meets the applicability criteria of Paragraph A.1 of this Section shall submit both an emissions inventory and a certification statement required by Subparagraph F.1.c of this Section, separately for each AI, for all air pollutants for which a NAAQS has been issued and for all NAAQS precursor pollutants in a format specified by the department.
- a. Both the emissions inventory and the certification statement required by Subparagraph F.1.c of this Section shall include actual emissions in tons per year of ammonia (NH $_3$ ), carbon monoxide (CO), lead (Pb), nitrogen oxides (NO $_X$ ), particulate matter of less than 10 microns (PM $_{10}$ ), particulate matter of less than 2.5 microns (PM $_{2.5}$ ), sulfur dioxide (SO $_2$ ), and volatile organic compounds (VOC).
- i. In addition to the requirements of Subsection C of this Section, the owner or operator of any facility located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, St. Charles, St. James, St. John the Baptist, or West Baton Rouge is required to include actual emissions in tons per year of ethylene and propylene in both the

emissions inventory and the certification statement required by Subparagraph F.1.c of this Section.

Supporting Information. In order to meet federal emissions inventory requirements and regulations, support modeling analyses, permit projection of future control strategies, allow the measurement of progress in reducing emissions, facilitate preparation of state implementation plans, provide data for setting baselines for future planning, and for answering public requests for information, the emissions inventory shall include, but is not limited to, the required information listed in the following table. The emissions inventory shall also include all data required by the reporting system and applicable to the facility. The information provided does 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 provisions of LAC 33:III.Chapter 5 that require a permit request to initiate or increase emissions; nor does it qualify as a notice of excess emissions.

| Supporting Information for Emissions Inventory |   |                 |
|--|---|-----------------|
| Data Element                                   | Description   | Status          |
| I. Inventory Infor being submitted.            | mation — Information describin  | g the inventory |
| Reporting Year                                 | The calendar year for which emissions estimates are calculated                                  | Required        |
| Inventory Type                                 | The type of pollutants for which the inventory will contain                                     | Required        |
| Reporting Period<br>Start Date                 | The first day of the reporting period   | Required        |
| Reporting Period<br>End Date                   | The last day of the reporting period  | Required        |
|  | nation — Information describing   |                 |
| to one AI Number                               | ntory is being submitted. A facili  | ty corresponds  |
| Facility ID (AI                                | Unique ID assigned by the   | Required        |
| Number)  | department to each facility   | rioquired       |
| Facility Name                                  | Facility name of the AI   | Required        |
| Owner  | Name of person(s) or  | Required        |
|  | entity(ies) that own(s) the   | •               |
|  | facility  |                 |
| Owner Address                                  | Mailing address of owner(s) of the facility   | Required        |
| Owner City                                     | City of mailing address of owner(s) of the facility   | Required        |
| Owner State                                    | State of mailing address of<br>the owner(s) of the facility                                     | Required        |
| Owner Zip                                      | Zip code of mailing address<br>of the owner(s) of the facility                                  | Required        |
| Owner Phone                                    | Phone number of the owner(s) of the facility  | Required        |
| Operator                                       | Name of person(s) or<br>entity(ies) that operate(s) the<br>facility, if different from<br>owner | Optional        |
| Facility                                       | Description of business   | Required        |
| Description                                    | conducted at facility   |                 |
| Facility Status                                | Operating status of the facility during the reporting period                                    | Required        |
| Address  | Address of facility's physical location   | Required        |

| Supporting                          | Supporting Information for Emissions Inventory   |   |  |
|-------------------------------------|--|---|--|
| Data Element                        | Description  | Status  |  |
| City                                | City of facility's physical location   | Required  |  |
| Parish                              | Parish of facility's physical location   | Required  |  |
| State                               | State of facility's physical location  | Required  |  |
| Zip Code                            | Zip code of facility's physical location   | Required  |  |
| Longitude<br>(decimal degrees)      | Longitude of facility front gate   | Optional  |  |
| Latitude (decimal degrees)          | Latitude of facility front gate  | Optional  |  |
| UTM Easting (meters)                | UTM easting of facility front<br>gate (Universal Transverse<br>Mercator easting is the<br>distance east from 60 central<br>meridians of 6-degree-wide<br>zones starting at longitude<br>180 degrees) | Required  |  |
| UTM Northing<br>(meters)            | UTM northing of facility<br>front gate (Universal<br>Transverse Mercator northing<br>is the distance north from the<br>equator)  | Required  |  |
| UTM Zone                            | Universal Transverse Mercator zone of facility front gate [15 or 16]   | Required  |  |
| Datum                               | Code that represents the reference datum used to determine the location coordinates  | Required  |  |
| Primary SIC Code                    | Standard Industrial<br>Classification (SIC) code for<br>the entire facility  | Required  |  |
| Primary NAICS<br>Code               | North American Industrial<br>Classification System<br>(NAICS) code for the entire<br>facility  | Required  |  |
| ORIS Code                           | Four digit number assigned<br>by the Energy Information<br>Agency (EIA) at the U.S.<br>Department of Energy to<br>power plants owned by<br>utilities   | Optional  |  |
| Comments                            | Miscellaneous information  | Optional  |  |
|                                     | nation — Information describing  | g the contact   |  |
| person(s) for each for Contact Type | Emissions inventory (EI) facility contact person, EI consultant, EI billing party, or other  | Required —<br>Both EI<br>billing party<br>and EI facility<br>contact are<br>required. |  |
| Name                                | First and last name of contact person  | Required  |  |
| Title                               | Contact person's title   | Required  |  |
| Company                             | Name of company that<br>employs the contact person, if<br>any  | Required  |  |
| Address                             | Contact person's mailing address   | Required  |  |
| City                                | Contact person's city  | Required  |  |
| State                               | Contact person's state   | Required  |  |
| Zip Code                            | Contact person's zip code  | Required  |  |
| Email                               | Email address of contact person  | Required  |  |
| Phone                               | Phone number of contact person   | Required  |  |

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| Supporting Information for Emissions Inventory |  |                        |
|--|--|------------------------|
| Data Element                                   | Description  | Status                 |
|  | ation — Information describing                             |                        |
| related set of, equip                          |  | oi, or a closely       |
| Source ID                                      | Unique identification                                      | Required               |
|  | assigned to the source by the facility and reported        |                        |
|  | consistently over time                                     |                        |
| NEDS ID  | The National Emissions Data                                | Optional               |
|  | System (NEDS) point identification for the source          |                        |
|  | from the department's legacy                               |                        |
| C 11   | Emissions Inventory System                                 | D:4                    |
| Subject Item ID                                | Subject item identification assigned by the department to  | Required               |
|  | the source, if available                                   |                        |
| Source Description                             | Description of source                                      | Required               |
| Source Type                                    | The type of equipment or unit                              | Required               |
|  | that generates the emissions.<br>Examples include heaters, |                        |
|  | boilers, flares, storage tanks,                            |                        |
|  | cooling towers, fugitive                                   |                        |
| Permit Number                                  | emissions, and spills.  The number under which the         | Required,              |
| Fermit Number                                  | source is permitted by the                                 | where                  |
|  | department.  | applicable             |
| EIQ Number                                     | Emission Inventory<br>Questionnaire (EIQ) number           | Required,<br>where     |
|  | from the permit application                                | applicable             |
| Status   | Operating status of the source                             | Required               |
|  | during the reporting period                                | . 1.0                  |
| Permanent<br>Shutdown Date                     | Date source was permanently taken out of service/no longer | Required, if status is |
| Silutuowii Date                                | operating  | "permanently           |
|  |  | shutdown"              |
| SIC Code                                       | Standard Industrial<br>Classification (SIC) code for       | Required               |
|  | the source   |                        |
| NAICS Code                                     | North American Industry                                    | Optional               |
|  | Classification System (NAICS) code for the source          |                        |
| Comments                                       | Miscellaneous information                                  | Optional               |
| Maximum Design                                 | Maximum design heat input                                  | Optional               |
| Rate (MM                                       |  | T                      |
| BTU/hour) Firing Type                          | Describes the burner type for                              | Ontional               |
| Firing Type                                    | boilers: front, opposed,                                   | Optional               |
|  | tangential, internal, or other                             |                        |
| Serial Number                                  | Serial number of equipment,                                | Optional               |
| Construction Date                              | if available  Date source was constructed,                 | Optional               |
|  | not put into operation                                     | -                      |
| Initial Start-up                               | Date source actually started                               | Optional               |
| Date<br>Maximum                                | operating For electrical generators                        | Optional               |
| Nameplate                                      | powered by combustion                                      | Орионы                 |
| Capacity                                       | unit(s), the maximum                                       |                        |
| (megawatts)                                    | electrical generating output in<br>megawatts (MW) that the |                        |
|  | generator is capable of                                    |                        |
|  | producing on a steady-state                                |                        |
|  | basis and during continuous operation                      |                        |
| Engine Rating                                  | Power rating in horsepower                                 | Optional               |
| (horsepower)                                   | (HP) for engines ation — Information describing            | •                      |

V. Process Information — Information describing the operation or function by a source that produces emissions, characterized by a Source Classification Code (SCC). Process information is not required for source types that are "Fugitive Emission", "GV XVII Emissions", and "Insignificant Activities."

| Supporting Information for Emissions Inventory |  |  |
|--|--|--|
| Data Element                                   | Description  | Status   |
| Process ID                                     | Unique identification for the process assigned by the facility and reported consistently over time   | Required   |
| Source ID                                      | Facility-assigned source identification that applies to this process record  | Required   |
| Process<br>Description                         | Description of the emission process  | Required   |
| Status   | Operating status of the process during the reporting period  | Optional   |
| Permanent<br>Shutdown Date                     | Date process was<br>permanently taken out of<br>service/no longer operating  | Required, if<br>Status is<br>"permanently<br>shutdown"           |
| Confidentiality                                | Flag indicating whether or not<br>a declaration of<br>confidentiality has been<br>requested and granted by the<br>secretary per LAC<br>33:I.Chapter 5, covering the<br>process information | Optional   |
| SCC  | Source Classification Code (SCC) — a ten-digit EPA-developed code used to associate air pollution estimates with unique, identifiable industrial processes                                 | Required   |
| Material Name                                  | Name of primary material<br>used or produced by this<br>process (the material on<br>which the emissions<br>calculations are based)   | Required   |
| Average Annual<br>Throughput                   | Average annual throughput of material for the process  | Required   |
| Annual<br>Throughput Units                     | Unit of measure for average annual throughput  | Required   |
| Average Ozone<br>Season<br>Throughput          | Average daily throughput of material for the process during the ozone season   | Required for<br>facilities in<br>ozone<br>nonattainment<br>areas |
| Ozone Season<br>Throughput Units               | Unit of measure for average ozone season throughput  | Required for<br>facilities in<br>ozone<br>nonattainment<br>areas |
| Annual Average<br>Ash Content                  | For solid fuels, the concentration of ash produced by the fuel, expressed as a percentage of total fuel weight averaged over the reporting period for the process                          | Required   |
| Ozone Season<br>Average Ash<br>Content         | For solid fuels, the concentration of ash produced by the fuel, expressed as a percentage of total fuel weight averaged over the emissions inventory ozone season for the process          | Optional   |
| Annual Average<br>Sulfur Content               | The concentration of sulfur in<br>the fuel, expressed as a<br>percentage of fuel weight<br>averaged over the reporting<br>period for the process   | Required   |
| Ozone Season<br>Average Sulfur<br>Content      | The concentration of sulfur in<br>the fuel, expressed as a<br>percentage of fuel weight  | Optional   |

| Data Element   Average   Average   Average   Heat Content Units  | Supporting Information for Emissions Inventory |   |               |
|--|--|---|---------------|
| Annual Average Heat Content  Annual Average Heat Content  Ozone Season  Content Units  Ozone Season  Ozone Season  Ozone Season  Average Heat  Content  Ozone Season  Ozone Season  Ozone Season  Average Heat  Content  Ozone Season  Ozone  Ozone Season  Ozone  Oz | Data Element                                   | •   | Status        |
| Total annual heat input for combustion units   |  |   |               |
| Annual Average Heat Content  Annual Average Heat Content Units  Ozone Season  Average Heat Content  Ozone Season  Content  Ozone Season  Average Heat  Content  Ozone Season  Average Heat  Content  Ozone Season  Average Heat  Content Units  Ozone Season  Average Heat  Content Units  Ozone Season  Average Heat  Content Units  Spring Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Fall Throughput  Fall Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Fall Throughput  Fall Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the fall season, September through November  Winter Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the winter season, January, February, and December of the same calendar year  Average Hours per Day per Week per week for which the process is in operation  Total Weeks  The actual number of hours per day for which the process is in operation  Total Weeks  The actual number of weeks per year for which the process is in operation  Total Weeks  The actual number of weeks per year for which the process is in operation  Total Weeks  The actual number of weeks per year for which the process is in operation  Total Weeks  The actual number of weeks per year for which the process is in operation  Facility-assigned process identification to which the emissions factor describes the calculation for a pollutant emitted by a specific process. The emissions scalculation is of the form E = A * EF, where E is the emissions factor to calculate emissions.  Faculty-assigned process identification to which the emission factor applies  Faculty-assign |  |   |               |
| Annual Average Heat Content Units   Average heat content   | Annual Average                                 |   | Required      |
| Required for facilities in ozone Season   Total heat input for combustion units during ozone season   Ozone season   Ozone season   Ozone season   Required for facilities in ozone season   Ozone Season   Required for facilities in ozone season average heat content   Average Heat   Ozone season average heat content   Ozone facilities in ozone nonattainment areas   Required for facilities in ozone facilities in ozone nonattainment areas   Required for facilities in ozone facilities in ozone nonattainment areas   Required for facilities in ozone facilities in ozone nonattainment areas   Required for facilities in ozone facilities in ozone nonattainment areas   Required for facilities in ozone facilities facilities in ozone facilities in ozone facilities facilit   |  |   |               |
| Ozone Season Average Heat Content  Ozone Season Average Heat Content  Ozone Season Average Heat Content Units  Spring Throughput Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Seasonal operating percentage of total annual throughput that occurs during the summer season, June through August  Fall Throughput  Seasonal operating percentage of total annual throughput that occurs during the fall season, September through November  Winter Throughput  Seasonal operating percentage of total annual throughput that occurs during the winter season, January, February, and December of the same calendar year  Average Hours per Day  Average Hours per Day  Average Days per Week  Phacetual number of hours per day for which the process is in operation  Total Weeks  The actual number of days per week for which the process is in operation  Total Weeks  The actual number of days per week for which the process is in operation  VI. Emission Factor — Information describing a ratio relating emissions of a specific pollutant to an activity or material throughput level. The emissions factor describes the calculation for a pollutant emitted by a specific process. The emissions factor is required when using an emissions factor to calculate emissions.  Process ID  Facility-assigned process in emissions factor to calculate emission factor applies  Pollutant  Pollutant for which the emission factor to the emission factor numeric value for the specified pollutant  The numerator unit for the emission factor fue, the unit of the emission factor lie, the unit of the emission salculated by   | Annual Average                                 |   | Required      |
| Average Heat Content  Content  Content  Content  Content  Connesses on  Average Heat Content Units  Content Uni |  | 8   | 5 1 10        |
| Content  Ozone Season Average Heat Content Units  Spring Throughput Seasonal operating percentage—the percentage of total annual throughput that occurs during the summer season, June through August Fall Throughput  Fall Throughput  Winter Throughput  Winter Throughput  Average Hours per Day  Average Days per Week  Total Weeks  Testing The Seasonal operation percentage of total annual throughput that occurs during the summer season, June through August  Required  Percentage—the percentage of total annual throughput that occurs during the fall season, September through November  Winter Throughput  Seasonal operating percentage—the percentage of total annual throughput that occurs during the winter season, January, February, and December of the same calendar year  Average Hours per Day  The actual number of hours per day for which the process is in operation  Total Weeks  The actual number of days per week for which the process is in operation  Total Weeks  The actual number of weeks per year for which the process is in operation  VI. Emission Factor  Information describing a ratio relating emissions of a specific pollutant to an activity or material throughput level. The emission factor describes the calculation for a pollutant emitted by a specific process. The emissions, A is the material or activity rate, and EF is the emission factor to calculate emissions.  Process ID  Facility-assigned process Required  Emission Factor  Emission factor applies  Pollutant  The numerator unit for the emission factor publies  Emission Factor  Emission factor numeric value for the specified pollutant  The emission salculated by   |  |   |               |
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| identification to which the emission factor applies  Pollutant Pollutant for which the emission factor applies  Emission Factor Emission factor numeric value for the specified pollutant  Emissions Units The numerator unit for the emission factor (i.e., the unit of the emissions calculated by   |  |   | Required      |
| emission factor applies  Pollutant Pollutant for which the emission factor applies  Emission Factor Emission factor numeric value for the specified pollutant  Emissions Units The numerator unit for the emission factor (i.e., the unit of the emissions calculated by   | 1100000 115                                    |   | required      |
| emission factor applies  Emission Factor  Emission factor numeric value for the specified pollutant  Emissions Units  The numerator unit for the emission factor (i.e., the unit of the emissions calculated by  |  |   |               |
| Emission Factor Emission factor numeric value for the specified pollutant  Emissions Units The numerator unit for the emission factor (i.e., the unit of the emissions calculated by   | Pollutant                                      |   | Required      |
| value for the specified pollutant  Emissions Units  The numerator unit for the emission factor (i.e., the unit of the emissions calculated by  | Emission Easter                                |   | Paguinad      |
| Emissions Units  The numerator unit for the emission factor (i.e., the unit of the emissions calculated by   | Ellission Factor                               |   | Kequirea      |
| Emissions Units  The numerator unit for the emission factor (i.e., the unit of the emissions calculated by   |  |   |               |
| emission factor (i.e., the unit of the emissions calculated by   | Emissions Units                                |   | Required      |
| · · · · · · · · · · · · · · · · · · ·  |  | * * *                                       |               |
|  |  | of the emissions calculated by the factor). |               |

| Supporting Information for Emissions Inventory |   |                 |
|--|---|-----------------|
| Data Element                                   | Description   | Status          |
| Material or                                    | Material name for emission  | Required        |
| Activity Material or                           | factor The denominator unit for the                                     | Required        |
| Activity Rate                                  | emission factor (i.e., the unit   | Required        |
|  | for the material throughput).   |                 |
| Emission Factor<br>Source                      | Source of the emission factor (stack test, AP-42, etc.)                 | Required        |
| VII. Control System                            | n Information — Information d   |                 |
|  | ol measures are applied at or to<br>e amount of a pollutant released    |                 |
|  | e amount of a pollutant released<br>formation describes the control     |                 |
| chain (series of one                           | or more control devices) that is  | used to control |
|  | rom a source. The control system<br>ntrol efficiency is used to calcula |                 |
| Control System ID                              | Unique identification   | Required        |
|  | assigned to the control system  |                 |
|  | by the facility and reported consistently over time                     |                 |
| Subject Item ID                                | Subject item identification   | Required        |
| -  | assigned by the department to   |                 |
|  | the control equipment, if available                                     |                 |
| Control System                                 | Description of the control  | Required        |
| Description                                    | equipment chain   | 1               |
| Status   | Operating status of the release   | Optional        |
|  | point during the reporting period                                       |                 |
| Primary Device                                 | Type of primary control   | Required        |
| Type   | device (e.g., flare, scrubber,  |                 |
|  | condenser, and vapor recovery unit)                                     |                 |
| Secondary Device                               | Secondary control device in   | Required,       |
| Type   | series, not intended for  | where           |
|  | backup or alternate control devices. Required if the                    | applicable      |
|  | control system has more than  |                 |
| TITTE OF A LEGGGG                              | one control device in series.   |                 |
|  | ency — Information describing<br>ystem or technique reduces the         |                 |
| a source. The contro                           | ol efficiency is required when co                                       |                 |
| is used to calculate of Control System ID      | emissions. Unique identification  | Required        |
| Control System ID                              | assigned to the control system  | Required        |
|  | by the facility and reported  |                 |
| Pollutant                                      | consistently over time Pollutant for which the                          | Required        |
| Foliutalit                                     | control efficiency applies  | Required        |
| Primary Device                                 | Emission reduction efficiency   | Optional        |
| Efficiency                                     | of the primary control device   |                 |
| Secondary Device                               | (percent) Emission reduction efficiency                                 | Optional        |
| Efficiency                                     | of the secondary control  | optional        |
|  | device (percent)  |                 |
| Total Efficiency                               | Net emission reduction efficiency of all emissions                      | Required        |
|  | collection devices (percent)  |                 |
|  | nformation — Information desc   |                 |
| where emissions fro atmosphere.                | m one or more processes are rel   | eased into the  |
| Release Point ID                               | Unique identification   | Required        |
|  | assigned to the release point by the facility and reported              |                 |
|  | consistently over time  |                 |
| Subject Item ID                                | Subject item identification   | Required        |
|  | assigned by the department to   |                 |
| Release Point                                  | the release point, if available Description of emissions                | Required        |
| Description                                    | release point   |                 |
| Release Point Type                             | Release point type (e.g.,   | Required        |
|  | vertical stack, horizontal  |                 |

| Supporting Information for Emissions Inventory |   |   |  |
|--|---|---|--|
| Data Element                                   | Description   | Status  |  |
|  | stack, gooseneck stack, and area)   |   |  |
| Status   | Operating status of the release point during the reporting period   | Optional  |  |
| Permanent<br>Shutdown Date                     | Date release point was<br>permanently taken out of<br>service/no longer operating   | Required, if<br>Status is<br>"permanently                   |  |
| Height (feet)                                  | Physical height of release point above the surrounding terrain  | shutdown" Required  |  |
| Diameter (feet)                                | Diameter of the release point   | Required  |  |
| Width (feet)                                   | Width of area for area release point types. This is the shorter dimension of the rectangular area over which the emissions occur.   | Required for<br>fugitive and<br>area release<br>point types |  |
| Length (feet)                                  | Length of area for area release point types. This is the longer dimension of the rectangular area over which the emissions occur.   | Required for<br>fugitive and<br>area release<br>point types |  |
| Orientation<br>(degrees)                       | Orientation (bearing) of long axis of area release point types for fugitive or area sources, measured in degrees of clockwise rotation from true north. For stack or vent release point types, the orientation of the release point from vertical | Required  |  |
| Flow Rate (feet^3/second)                      | Exit gas flow rate (actual cubic feet per second)   | Required  |  |
| Velocity<br>(feet/second)                      | Exit gas velocity   | Required  |  |
| Temperature<br>(degrees<br>Fahrenheit)         | Exit gas temperature at release point (if unknown, ambient temperature of 78 degrees Fahrenheit)  | Required  |  |
| Moisture Content (%)                           | Moisture content of exit gas stream, designated as a  | Optional  |  |
| Longitude (decimal degrees)                    | Longitude of release point  | Optional  |  |
| Latitude (decimal degrees)                     | Latitude of release point   | Optional  |  |
| UTM Easting (meters)                           | Universal Transverse Mercator easting of release point  | Required  |  |
| UTM Northing (meters)                          | Universal Transverse Mercator northing of release point   | Required  |  |
| UTM Zone                                       | Universal Transverse Mercator zone of release point [15 or 16]  | Required  |  |
| Datum  | Code that represents the reference datum used to determine the location coordinates   | Required  |  |
| Accuracy (meters)                              | Measure of accuracy of the<br>release point coordinates (if<br>using GPS reading, accuracy<br>of GPS device)  | Required  |  |
| Horizontal<br>Collection Method                | Method used to measure or<br>estimate the release point<br>coordinates (e.g., USGS quad,<br>satellite photo, GPS, address<br>geocoding, or other)   | Required  |  |

| Supporting Information for Emissions Inventory   |  |          |  |  |
|--|--|----------|--|--|
| Data Element   | Description  | Status   |  |  |
| X. Portable Source Location — Information describing the specific location or locations at which a portable source released emissions over the reporting period. This is applicable to facilities operated and permitted under LAC 33:III.513. |  |          |  |  |
| Location ID  | Unique identification<br>assigned by facility to the<br>location and reported<br>consistently over time, if any  | Required |  |  |
| Release Point ID   | Facility-assigned release<br>point identification for which<br>this is a supplemental<br>location, if any  | Required |  |  |
| Start Date   | Date the release point was moved to this location  | Required |  |  |
| End Date   | Date the release point was moved from this location  | Required |  |  |
| Parish   | Parish containing this location  | Required |  |  |
| Longitude (decimal degrees)  | Longitude of release point at this location  | Optional |  |  |
| Latitude (decimal degrees)   | Latitude of release point at this location   | Optional |  |  |
| UTM Easting (meters)   | Universal Transverse<br>Mercator easting of release<br>point at this location  | Required |  |  |
| UTM Northing (meters)  | Universal Transverse Mercator northing of release point at this location   | Required |  |  |
| UTM Zone   | Universal Transverse<br>Mercator zone of release<br>point [15 or 16] at this<br>location   | Required |  |  |
| Datum  | Code that represents the reference datum used to determine the location coordinates  | Required |  |  |
| Accuracy (meters)  | Measure of accuracy of the<br>location's release point<br>coordinates (if using GPS<br>reading, accuracy of GPS<br>device)                                   | Required |  |  |
| Horizontal<br>Collection Method  | Method used to measure or<br>estimate the location's release<br>point coordinates (e.g., USGS<br>quad, satellite photo, GPS,<br>address geocoding, or other) | Required |  |  |
|  | ord — Information describing the tion of process (source and oper  |          |  |  |
| Source ID  | Facility-assigned source identification for this emission record   | Required |  |  |
| Process ID   | Facility-assigned process identification for this emission record  | Required |  |  |
| Control System ID  | Facility-assigned control<br>system identification for this<br>emission record   | Optional |  |  |
| Release Point ID   | Facility-assigned release point identification for this emission record  | Required |  |  |
| Location ID  | Facility-assigned location identification if this is a portable source operating at a location other than the location on the release point record           | Optional |  |  |
| Emission Type  | Routine, start-up/shutdown,<br>upset/malfunction/other,<br>variance [NOTE: Separate<br>emission records must be  | Required |  |  |

| Supporting Information for Emissions Inventory |  |  |
|--|--|--|
| Data Element                                   | Description  | Status   |
|  | submitted showing the total<br>and ozone season emissions<br>for each applicable category.]  |  |
| Pollutant                                      | Pollutant emitted  | Required   |
| Total Emissions                                | Total emissions of specified pollutant for the reporting period  | Required   |
| Emissions Units                                | Unit of measure for total<br>emissions (tons or pounds)  | Required   |
| Estimation Method                              | The method used to calculate or estimate emissions (AP-42, mass balance, etc.)   | Required   |
| Ozone Season<br>Emissions<br>(pound/day)       | Ozone season average daily<br>emissions of specified<br>pollutant  | Required for<br>facilities in<br>ozone<br>nonattainment<br>areas |
| Ozone Season<br>Estimation Method              | A code indicating the method<br>used to calculate or estimate<br>emissions (AP-42, mass<br>balance, etc.)                          | Required for<br>facilities in<br>ozone<br>nonattainment<br>areas |
| Number of Start-<br>ups                        | Number of start-up events for<br>which this record applies<br>(only for emissions records of<br>permitted start-<br>ups/shutdowns) | Optional   |
| Number of<br>Shutdowns                         | Number of shutdown events<br>for which this record applies<br>(only for emissions records of<br>permitted start-<br>ups/shutdowns) | Optional   |

- iii. Ozone Nonattainment Area Requirement. In addition to the requirements of Subsection C of this Section, the owner or operator of any facility located in an ozone nonattainment area that meets the applicability criteria of Subparagraph A.1.a of this Section shall submit an emissions inventory that includes:
- (a). ozone season average daily emissions (in pounds/day) of CO,  $NO_X$ , VOC, ethylene, and propylene;
  - (b). average ozone season throughput;
- (c). ozone season average heat content (in MMBtu/ozone season); and
- (d). ozone season estimation method for emissions of CO,  $NO_X$ , VOC, ethylene, and propylene.
- b. Actual emissions shall be reported for all sources of emissions at a facility, including but not limited to, emissions from routine operations, General Condition XVII emissions (as described in LAC 33:III.537), fugitive emissions, flash gas emissions, emissions from insignificant sources (as described in LAC 33:III.501.B.5, Insignificant Activities List, A Based on Size or Emission Rate, and D Exemptions Based on Emissions Levels), emissions occurring during maintenance, start-ups, shutdowns, upsets, and downtime, and emissions in excess of permit emission limitations, regardless of the amount.
- c. Certification Statement. A certification statement, required by section 182(a)(3)(B) of the federal Clean Air

Act, shall be signed by a *responsible official*, as defined in LAC 33:III.502.A, for the facility or facilities and shall be submitted for 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.

- d. Both the emissions inventory and the certification statement required by Subparagraph F.1.c of this Section shall be submitted to the Office of Environmental Services by April 30 of each year (for the reporting period of the previous calendar year that coincides with period of ownership or operatorship), unless otherwise directed by the department. Any subsequent revisions shall be accompanied by a certification statement.
- i. The owner or operator of any facility located in a parish designated by EPA as a nonattainment area or within a nonattainment area after June 1, 2011, and that meets the applicability criteria in Subparagraph A.1.a of this Section, shall submit both an emissions inventory and the certification statement required by Subparagraph F.1.c of this Section to the Office of Environmental Services by April 30 of the year following the first full calendar year of the nonattainment designation by EPA, unless otherwise directed by the department.
- ii. The owner or operator of any facility located in a parish that adjoins a parish designated by EPA as a nonattainment area or within a nonattainment area after June 1, 2011, and that meets the applicability criteria in Subparagraph A.1.a of this Section, shall submit both an emissions inventory and the certification statement required by Subparagraph F.1.c of this Section to the Office of Environmental Services by April 30 of the year following the first full calendar year of the nonattainment designation by EPA, unless otherwise directed by the department.
- iii. The owner or operator of any facility that has a portable source permit in accordance with LAC 33:III.513 and meets the applicability criteria in Paragraph A.1 of this Section shall submit both an emissions inventory and the certification statement required by Subparagraph F.1.c of this Section for the entire period of ownership or operatorship during the reporting year.
- 2. The reporting period of both the emissions inventory and the certification statement required by Subparagraph F.1.c of this Section, shall coincide with the period of ownership or operatorship during the reporting year. When there is a change of ownership of any facility to which this Section applies, submitted in accordance with LAC 33:III.517.G, at any time during a reporting year, each owner shall submit both an emissions inventory and certification statement required by Subparagraph F.1.c of this Section, with a start and/or end date that coincides with the date of transfer of ownership or operatorship.
- 3. Special Inventories. Upon request by the administrative authority, the owner or operator of any facility subject to LAC Title 33 shall file additional

emissions data with the department. The request shall specify a reasonable time for response that shall not be less than 60 days from receipt of the request.

- 4. The department will post a notice on the department's website (www.deq.louisiana.gov) advising of any planned changes in required data elements or reporting format, so that entities subject to reporting requirements under this Section will be able to make the necessary adjustments.
- G. 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 EPA's Compilation of Air Pollution Emission Factors (AP-42), calculations published in engineering journals, and/or EPA or department-approved estimation methodologies.
- H. 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.
- I. Fees. The annual emissions inventory will be used to assess the criteria pollutant annual fee in accordance with 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), LR 37:3222 (November 2011).

#### §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:

- $H_{\rm g}=$  good engineering practice stack height, measured from the ground-level elevation of the base of the stack;
- $H=\mbox{height}$  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<sub>t</sub>) of the feature, not to exceed 2 miles if such feature achieves a height (H<sub>t</sub>) 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. Except as specified in LAC 33:III.1105, the emission of smoke generated by the burning of fuel or combustion of waste material in a combustion unit, 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, except that such emissions may have an average 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), amended by the Office of the Secretary, Legal Affairs Division, LR 37:1143 (April 2011).

## §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).

### §1106. Test Methods and Procedures

- A. Opacity shall be determined using method 9 of 40 CFR Part 60, appendix A.
- B. As an alternative to the method set forth in Subsection A of this Section, an owner or operator may elect to use a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).

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 37:1143 (April 2011).

### §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.
- B. The opacity standards set forth in LAC 33:III.1101 do not apply to the following:
- 1. combustion units when combusting only natural gas, carbon monoxide, hydrogen, and/or other gaseous fuels with a carbon to hydrogen molecular ratio of less than 0.34 (e.g.,  $CH_4$  equals 0.25,  $H_2$  and CO equal zero). For mixtures of gaseous fuels, the molecular ratio shall be computed based on the volume percent (at standard conditions) of

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carbon monoxide, hydrogen, and each organic compound in the fuel gas stream;

- 2. combustion units subject to a federal standard promulgated pursuant to section 111 or 112 of the Clean Air Act that limits average opacity to less than or equal to 20 percent, except for one six-minute period or less per hour;
  - 3. recovery furnaces subject to LAC 33:III.2301.D.4;
- 4. biomedical waste incinerators subject to LAC 33:III.2511.E.2.f;
- 5. refuse incinerators subject to LAC 33:III.2521.F.8.e; and
  - 6. crematories subject to LAC 33:III.2531.F.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 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), LR 37:1144 (April 2011).

### §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 Chapter 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), amended by the Office of the Secretary, Legal Affairs Division, LR 37:1144 (April 2011).

### 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              |  |
| 2,000,000  | 1,000.00 | 77.6              |  |
| 6,000,000  | 3,000.00 | 92.7              |  |
| .,,  | .1 1     | 11 6              |  |

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:

 $E=\mbox{rate}$  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<sub>2</sub>, 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 75-03 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<sub>2</sub>;
  - 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), amended LR 35:1234 (July 2009).

#### §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.

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.

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 75-03;
- 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), amended LR 35:1234 (July 2009).

### **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.

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<sub>2</sub>), ozone, particulate matter (PM<sub>10</sub>), and sulfur dioxide (SO<sub>2</sub>).

*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 <sub>x</sub> )                            |           |
| 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 <sub>2</sub> or NO <sub>2</sub>                          |           |
| 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 <sub>x</sub> ), SO <sub>2</sub> or NO <sub>2</sub> |           |
| All Maintenance Areas  | 100       |
| Ozone (VOCs)   |           |
| Maintenance areas inside an ozone                            | 50        |
| transport region   |           |
| Maintenance areas outside an ozone                           | 100       |
| transport region   |           |
| Carbon Monoxide  |           |
| All maintenance areas  | 100       |

| Criteria Pollutants   | Tons/Year |
|-----------------------|-----------|
| $PM_{10}$             |           |
| 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 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 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:
- 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 Services 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), amended by the Office of the Secretary, Legal Division, LR 38:2751 (November 2012).

# §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, 2008, is hereby incorporated by reference with the exclusion of Sections 105, 122(a)(4)(ii), and 125(c).

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), LR 35:462 (March 2009).

# §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 amendments that 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(a), 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 transportation plans 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 7.43. 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), LR 35:462 (March 2009).

#### §1435. Commitments for Regional Emissions Analysis

A. In accordance with 40 CFR 93.122(a)(4)(ii), prior to making a conformity determination on the transportation plan or TIP, the MPO, where one exists, or the MPO's designee, shall not include emissions reduction credits from any control measures that are not included in the transportation plan or TIP, and that do not require a regulatory action in the regional emissions analysis used in the conformity analysis unless the MPO, where one exists, or the MPO's designee, or the FHWA/FTA obtains written commitments, as defined in 40 CFR 93.101, from the appropriate entities to implement those control measures. The written commitments to implement those control measures must be fulfilled by the appropriate entities.

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 35:462 (March 2009).

# §1437. Commitments for Project-Level Mitigation and Control Measures

A. In accordance with 40 CFR 93.125(c), prior to making a project-level conformity determination for a transportation project, the FHWA/FTA must obtain from the project sponsor and/or operator written commitments, as defined in 40 CFR 93.101, to implement any project-level mitigation or control measures in the construction or operation of the project identified as conditions for NEPA process completion. The written commitments to implement those project-level mitigation or control measures must be fulfilled by the appropriate entities. Prior to making a conformity determination of the transportation plan or TIP, the MPO, where one exists, or the MPO's designee, shall ensure that any project-level mitigation or control measures are included in the project design concept and scope, and are appropriately identified in the regional emissions analysis used in the conformity analysis. Written commitments must be obtained before such mitigation or control measures are used in a project-level hot-spot conformity analysis for a project-level determination.

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 35:462 (March 2009).

# 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<sub>2</sub>/ton of 100 percent H<sub>2</sub>SO<sub>4</sub> (2 kilograms/metric ton) and 0.15 pounds of sulfuric acid mist/ton of 100 percent H<sub>2</sub>SO<sub>4</sub> (.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<sub>2</sub> limitation is exceeded is not greater than the number of one-hour periods during which the SO<sub>2</sub> limitation is exceeded.

| h   |  |  |  |
|---|--|--|--|
| Table 4   |  |  |  |
| <b>Emissions—Methods of Contaminant Measurement</b> |  |  |  |
| Emission  | Analytical Method                                  |  |  |
|   | 1. Methods 1, 2, 3, 4, 5 (40 CFR Part 60, appendix |  |  |
| Particulate   | 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.      |  |  |
|   | 1. Seidman, Analytical Chemistry Volume 30, page   |  |  |
| Sulfur Oxides                                       | 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,              |  |  |

| Table 4        |  |  |
|----------------|--|--|
| Emission       | s—Methods of Contaminant Measurement  Analytical Method                      |  |
| Ellission      | v  |  |
|                | 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.                                |  |
| 0 11 6         | 1. Test Methods 1, 2, 3, 4, and 7E (40 CFR Part 60,                          |  |
| Oxides of      | appendix A, as incorporated by reference at LAC                              |  |
| Nitrogen       | 33:III.3003), or §60.8 of 40 CFR Part 60 as                                  |  |
|                | incorporated by reference at LAC 33:III.3003.                                |  |
|                | 1. Method 9 (40 CFR Part 60, appendix A, as                                  |  |
| Visible        | incorporated by reference at LAC 33:III.3003).                               |  |
| Emissions      | 2. Method 22 (40 CFR Part 60, appendix A, as                                 |  |
|                | incorporated by reference at LAC 33:III.3003).                               |  |
|                | 1. Methods 1, 2, 3, 13A and 13B (40 CFR Part 60,                             |  |
| Total Fluoride | appendix A, as incorporated by reference at LAC                              |  |
|                | 33:III.3003).  |  |
|                | 1. Method 16 (40 CFR Part 60, appendix A or §60.8                            |  |
| Total Reduced  | of 40 CFR Part 60 as incorporated by reference at                            |  |
| Sulfur (TRS)   | LAC 33:III.3003).  |  |
|                | 2. Coulometric titration by method specified in                              |  |
|                | NCASI Atmospheric Quality Improvement  |  |
|                | Technical Bulletin Number 91 (January 1978).                                 |  |
|                | 1. Test methods 1, 2, 3, 4, 6, and 8 (40 CFR Part 60,                        |  |
| Sulfuric Acid  | appendix A or §60.8 of 40 CFR Part 60 as                                     |  |
| Mist           | 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

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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<sub>2</sub>SO<sub>4</sub> 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 sulfurcontaining 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.919. 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), LR 37:3229 (November 2011).

# 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 Quality 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 Quality 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 Quality 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  $1.0 \text{ in}^2$  per foot of tank diameter  $(6.5 \text{ cm}^2 \text{ per } 0.3\text{m})$ ;
- 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  $10.0 \text{ in}^2$  per foot of tank diameter  $(65 \text{ cm}^2 \text{ per } 0.3\text{m})$ ;
- 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 m³) 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 Services 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;

- 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; and
- 7. with regard to the submerged fill pipe provisions of Subsections A and B of this Section, tanks, drums, or other containers used for the storage of corrosive materials, including but not limited to spent sulfuric acid and hazardous waste, at the Baton Rouge facility of Rhodia, Inc.

#### 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.

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#### §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.

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### §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

- 1. Compliance with Subsection B of this Section shall be determined by applying the following test methods, as appropriate:
- 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

determining gaseous organic compounds emissions by gas chromatography;

- c. Test Method 25 (40 CFR Part 60, appendix A, as incorporated by reference in LAC 33:III.3003) for determining total gaseous non-methane organic emissions as carbon:
- d. Test Method 25A or 25B (40 CFR Part 60, appendix A, as incorporated by reference in LAC 33:III.3003) for determining total gaseous organic concentration using flame ionization or nondispersive infrared analysis; and
- e. flaring devices, which shall be designed and operated according to 40 CFR 60.18.
- 2. At least 30 days prior to performing any emission test, notification of testing shall be made to the Office of Environmental Services to afford the department the opportunity to conduct a pretest conference and to have an observer present.
- 3. Within 60 days of test completion, a copy of the test results shall be submitted to the Office of Environmental Services for review and approval.
- 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.

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# §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.

$$M_{ei} = 10^{-6} KV_{es}C_{e}$$

where:

 $M_{\rm ei} = mass \ of \ total \ organic \ compounds \ emitted \ during \ testing \ interval \ i, \ mg$ 

 $V_{es} = \text{volume of air-vapor mixture exhausted, } m^3, \text{ at standard conditions}$ 

 $\ensuremath{C_{\text{e}}} = \text{total}$  organic compounds concentration (as measured) at the exhaust vent, ppmv

K = density of calibration gas, mg/m<sup>3</sup>, at standard conditions

 $= 1.83 \times 10^6$ , for propane

 $= 2.41 \times 10^6$  for butane

s = standard conditions, 20°C and 760 mm Hg

g. The total organic compounds mass emissions shall be calculated as follows.

$$E = \sum_{i=1}^{n} M_{ei}$$

where:

 $E=\mbox{mass}$  of total organic compounds emitted per volume of crude oil, gasoline and volatile organic compounds loaded, mg/liter

 $\ensuremath{M_{\rm ei}} = \ensuremath{\text{mass}}$  of total organic compounds emitted during testing interval i, mg

 $L=\mbox{total}$  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).
- 6. At least 30 days prior to performing any emission test, notification of testing shall be made to the Office of Environmental Services to afford the department the opportunity to conduct a pretest conference and to have an observer present.

#### F. Reporting and Recordkeeping

- 1. The results of any testing done in accordance with Subsection E of this Section shall be reported to the Office of Environmental Services within 60 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.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 14:704 (October 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:959 (November 1990), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:20 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2452 (November 2000), LR 30:745 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2439 (October 2005), LR 33:2085 (October 2007), LR 34:1903 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2751 (November 2012).

#### §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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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 16:117 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:361 (April 1991), LR 18:1121 (October 1992), LR 22:1212 (December 1996).

#### §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\*.

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, 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

A. 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 B-H 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.

- B. 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 K.1 of this Section, or if emissions are reduced to 50 ppm by volume, whichever is less stringent.
- C. 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 K.1 of this Section, or if emissions are reduced to 20 ppm by volume, whichever is less stringent.
- D. 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 C 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).
- E. 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 C 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).
- F. 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.
- G. Control Requirements for Halogenated Hydrocarbons. The halogenated hydrocarbons shall be combusted or controlled by other methods specified in Subsection H of this Section that achieve a removal efficiency of 95 percent or greater, as determined in accordance with Paragraph K.1 of this Section. If combusted, the halogenated products of combustion shall be reduced to an emission level acceptable to the administrative authority.

H. 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 K.1 of this Section or it achieves a degree of control not practically or safely achieved by other means.

### I. Exemptions

- 1. All waste gas streams containing VOCs, except those subject to Subsections D, E, and F 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 D, E, and F 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 D, E, and F 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.
- J. Test Methods. Compliance with Subsections B-H 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.
- K. 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 Paragraph K.2 of this Section.
- 2. The owner/operator of any facility subject to this Section 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.

- L. Recordkeeping. The owner or operator of any facility subject to this Section 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 J and K 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 Paragraph K.2 of this Section to demonstrate the proper functioning of applicable control equipment to design specifications; and
- 4. records to demonstrate that the criteria are being met for any exemption claimed.
- M. 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.919. Emergency conditions shall be reported in accordance with LAC 33:I.Chapter 39.
- N. 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), amended by the Office of the Secretary, Legal Affairs Division, LR 37:3230 (November 2011).

#### §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  $110^{\circ}F$ ;
- 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  $120^\circ$  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.

| Evennt Compounds   |  |  |
|--|--|--|
| 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  |  |  |
| 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane   |  |  |
| (HFE-7300)   |  |  |
| 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)   |  |  |
| dimethyl carbonate   |  |  |
| 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 <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub> or HFE-7200) |  |  |
| ethylfluoride (HFC-161)  |  |  |
| 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C <sub>3</sub> F <sub>7</sub> OCH <sub>3</sub> , HFE–7000)               |  |  |
| 1,1,2,3,3,3-heptafluoropropane (HFC 227ea)   |  |  |
| 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane   |  |  |
| ((CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OCH <sub>3</sub> )  |  |  |
| 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane  |  |  |
| ((CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OC <sub>2</sub> H <sub>5</sub> )                                    |  |  |
| 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 <sub>3</sub> )  |  |  |
| 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub> or HFE-                  |  |  |
| 7100)  |  |  |
| 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 2 4 C (TIEC 245 )  |  |  |

|   | Exempt Compounds   |
|---|--|
| 1,1,2,3,3                                 | 3-pentafluoropropane (HFC-245ea)   |
| perchlor                                  | oethylene (tetrachloroethylene)  |
|   | ontaining perfluorocarbons with no unsaturations and with onds only to carbon and fluorine |
| propylen                                  | ne carbonate   |
| 1,1,1,2-t                                 | etrafluoroethane (HFC-134a)  |
| 1,1,2,2-tetrafluoroethane (HFC-134)       |  |
| 1,1,1-trichloroethane (methyl chloroform) |  |
| trichlorofluoromethane (CFC-11)           |  |
| 1,1,2-trio                                | chloro-1,2,2-trifluoroethane (CFC-113)   |
| 1,1,1-tri1                                | fluoro-2,2-dichloroethane (HCFC-123)   |
| 1,1,1-tri1                                | fluoroethane (HFC-143a)  |
| trifluoromethane (HFC-23)                 |  |
| trans-1,                                  | 3,3,3-tetrafluoropropene (HFO-1234ze)  |

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 20:289 (March 1994), LR 21:681 (July 1995), LR 21:1330 (December 1995), repromulgated LR 22:14 (January 1996), amended LR 22:703 (August 1996), LR 23:1661 (December 1997), LR 24:22 (January 1998), LR 25:258 (February 1999), amended by the Office of Environmental Assessment, LR 31:1062 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 35:924 (May 2009), amended by the Office of the Secretary, Legal Division, LR 38:2742 (November 2012).

#### §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 Section is applicable to each process unit at petroleum refineries, natural gas processing plants, synthetic organic chemical manufacturing industry (SOCMI) facilities, methyl tertiary butyl ether (MTBE) manufacturing facilities, and polymer manufacturing facilities that contains any of the following components that operate in volatile organic compound (VOC) service for 300 hours or more during the calendar year:

1,1,2,2,3-pentafluoropropane (HFC-245ca)

- 1. pumps;
- 2. compressors;
- 3. pressure relief devices;
- 4. open-ended valves or lines;
- process drains;
- 6. valves;
- 7. agitators;
- 8. instrumentation systems; and
- 9. connectors.
- B. Definitions. Terms used in this Section are defined in LAC 33:III.111.A of these regulations with the exception of those terms specifically defined in this Section as follows.

Alternative Work Practice (AWP)—the use of optical imaging to detect leaks as described in 40 CFR 60.18(g), (h) and (i).

Connector—flanged, screwed, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. Joined fittings welded completely around the circumference of the interface are not considered connectors.

*Difficult-to-Monitor*—equipment that cannot be monitored without elevating the monitoring personnel more than two meters above a support surface.

Double Block and Bleed System—two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

*Equipment*—each pump, compressor, pressure relief device, open-ended valve or line, process drain, valve, agitator, instrumentation system, and connector in VOC service. For the purpose of these regulations *equipment* shall be synonymous with component.

Force Majeure—an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are:

- a. acts of nature;
- b. acts of war or terrorism; or
- c. equipment failure or safety hazard beyond the control of the affected facility.

*In Gas/Vapor Service*—equipment that contains a VOC in a gas or vapor state at operating conditions.

*In Heavy Liquid Service*—equipment that is not in gas/vapor service or in light liquid service.

#### In Light Liquid Service—

a. equipment containing a fluid that meets all of the following conditions:

- i. the vapor pressure of one or more of the organic compounds is greater than 0.3 kPa (0.0435 psi) at 20°C (68°F). (Standard reference texts or ASTM D2879-83, 96, or 97 shall be used to determine the vapor pressure);
- ii. the total concentration of the pure organic compounds having a vapor pressure greater than 0.3 kPa at 20°C is equal to or greater than 20 percent by weight; and
  - iii. the fluid is a liquid at operating conditions;
- b. as an alternative to Subparagraph a of this Paragraph, an owner or operator of petroleum refineries, natural gas processing plants, and polymer manufacturing facilities has the option to use ASTM method D86-78, 82, 90, 95, or 96. The equipment is in *light liquid service* if the evaporated fluid weight is greater than 10 percent at 150°C (302°F).

*In Liquid Service*—equipment that is not in gas/vapor service.

*In Vacuum Service*—equipment operating at an internal pressure that is at least 20 inches of water (38 millimeters of mercury) below ambient pressure.

#### In VOC Service—

- a. for petroleum refineries, SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities:
- i. a piece of equipment that contains or contacts a process fluid that is at least 10 percent VOC by weight;
  - b. for natural gas processing plants:
- i. a piece of equipment that contains or contacts a process fluid that is at least 1.0 percent VOC by weight.

*Inspect*—examine the component for visible, audible, or olfactory evidence of a leak.

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 inches or smaller and connectors nominally 0.75 inches or smaller in diameter are considered part of instrumentation systems for the purposes of this Section. Valves greater than nominally 0.75 inches associated with instrumentation systems are not considered part of instrumentation systems are not considered part of instrumentation systems and shall be monitored individually as a valve or connector.

*Monitor(ed)*—determination of VOC concentration at equipment components in accordance with method 21 (see 40 CFR 60, appendix A-7), or the *alternative work practice* as provided in this Section.

Open-Ended Valve or Line—any valve, except pressure relief valves, having one side of the valve seat in contact

with process fluid and one side open to the atmosphere, either directly or through open piping.

Optical Gas Imaging Instrument—an instrument that makes emissions visible that may otherwise be invisible to the naked eye.

*Process Drain*—any opening (including a covered or controlled opening) that receives or conveys wastewater into a wastewater system.

*Process Unit*—a facility, or any part thereof, 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. The following are not considered process unit shutdowns:

- a. 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;
- b. 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;
- c. the use of spare equipment and technically feasible bypassing or isolating of equipment without stopping production; and
  - d. the idling of a process unit due to force majeure.

*Repair*—adjust or otherwise alter equipment in order to eliminate a leak.

*Unsafe-to-Monitor*—equipment that cannot be monitored without exposing monitoring personnel to immediate danger.

#### C. Fugitive Emission Control Requirements

#### 1. Leak Limitations

- a. No *component* listed in Paragraph A.1-9 of this Section shall be allowed to emit VOC:
- i. exceeding an instrument reading of 10,000 parts per million (ppm), as determined by method 21 (40 CFR 60, appendix A, as incorporated by reference in LAC 33:III.3003);
- ii. which can be imaged when following the *alternative work practice (AWP)* as defined in Subsection B of this Section; or
- iii. where visible, audible, or olfactory evidence indicates the presence of a leak.

#### 2. Open-Ended Valves or Lines

- a. Each open-ended valve or line shall be equipped with a second valve, blind flange, plug, or cap. These sealing devices may only be removed when the line is in use, (i.e., 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.
- b. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with Subparagraph C.2.a of this Section at all other times.
- c. Open-ended valves or lines in emergency system(s) (e.g., pressure relief devices) which are designed to open automatically in the event of a process upset are exempt from the requirements of Subparagraph C.2.a of this Section.
- d. Open-ended valves or lines containing asphalt, materials that would autocatalytically polymerize or would present an explosion, serious over pressure, or other safety hazard if sealed or equipped with a double block and bleed system are exempt from the requirements of Subparagraph C.2.a of this Section.

#### 3. Leak Repair

- a. The owner or operator shall make every reasonable effort to repair a leaking component, as described in Subparagraph C.1.a or Subparagraph D.3.b of this Section, within 15 calendar days of detection. A repair is considered successful if it meets any of the following conditions:
- i. a component is *monitored* as defined in Subsection B of this Section (or remonitored) to verify that the instrument reading is below the applicable leak definition in Subparagraph C.1.a of this Section;
- ii. a component that has been identified as leaking using the AWP, either meets Clause C.3.a.i of this Section, or the emissions are no longer visible using the AWP; or
- iii. a component in liquid service that has been identified as leaking by visual, audible, or olfactory means, including, use of the soap bubble test for natural gas processing plants, either meets Clause C.3.a.i of this Section, or when visual, audible, or olfactory indications of the leak have been eliminated.
- b. Equipment that cannot be repaired shall be placed on a delay-of-repair list, unless it can be isolated or bypassed to eliminate the leak. Equipment on the delay-of-repair list shall be repaired by the end of the next scheduled process unit shutdown. The *administrative authority* as defined in LAC 33:III.111.A reserves the right to take enforcement action pursuant to R.S. 30:2025, should it be determined that the total percentage of components on the delay-of-repair list is excessive or is causing damage to the public health or environment.
- c. Equipment placed on the delay-of-repair list in accordance with Subparagraph C.3.b of this Section may be

removed from the list if it meets any of the following conditions:

- i. the equipment is monitored or imaged, and for two consecutive monthly periods, either the instrument readings are below the leak limitation specified in Subparagraph C.1.a of this Section or there are no visible emissions using an optical gas imaging instrument pursuant to the AWP; or
- ii. the owner or operator has undertaken additional or extraordinary efforts to repair the leaking equipment, and subsequent monitoring or imaging demonstrates that either the instrument readings are below the leak limitation in Subparagraph C.1.a of this Section, or there are no visible emissions using an optical gas imaging instrument pursuant to the AWP. Extraordinary efforts are nonroutine repair methods (e.g., sealant injection, clamp installation) or utilization of a closed-vent system to capture and control the leak by at least 90 percent.
- (a). Note: The decision to monitor equipment on the delay-of-repair list or undertake extraordinary efforts to repair equipment shall be made solely at the owner or operator's discretion.
- D. Monitoring and Inspection Requirements. Monitoring of components by method 21 and inspections shall be conducted according to this Subsection. After initially complying with this Subsection by use of method 21, the owner or operator may elect to comply with the appropriate alternate monitoring schedule(s) in Subsection E of this Section. In lieu of method 21 monitoring, optical imaging may be conducted in accordance with the AWP. If the owner or operator elects to use the AWP, the requirements for instrument specifications, instruments checks, monitoring frequency, leak survey procedures, recordkeeping, and reporting shall be followed as described in 40 CFR 60.18 (g), (h), and (i). The alternate monitoring schedule(s) in Subsection E of this Section are not applicable when using the AWP.
- 1. Petroleum refineries, SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities shall perform the following:
- a. monitor the following components one time per calendar year (annually):
  - i. pumps in light liquid service at refineries;
  - ii. valves in light liquid service at refineries; and
  - iii. process drains;
- b. monitor the following components four times per year (quarterly):
  - i. compressor seals;
  - ii. valves in gas/vapor service;
  - iii. pressure relief valves in gas/vapor service;
- iv. valves in light liquid service at SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities; and

- v. pumps in light liquid service at SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities;
- c. inspect pump seals visually 52 times a year (weekly);
- d. inspect instrumentation systems weekly by visual, audible, or olfactory means. As an alternative to weekly sensory inspections, monitor individual valves of an instrumentation system in accordance with Clauses D.1.a.ii, D.1.b.ii, or D.1.b.iv of this Section, as applicable;
- e. records of visual, audible, or olfactory inspections of connectors and instrumentation systems are not required unless a leak is detected.
- 2. Natural gas processing plants shall perform the following:
- a. inspect pump seals and compressor seals visually 52 times a year (weekly);
- b. monitor the following components four times a year (quarterly):
  - i. pumps in light liquid service;
  - ii. compressor seals;
- iii. valves in light liquid service and valves in gas/vapor service; and
  - iv. pressure relief valves in gas/vapor service;
- c. inspect instrumentation systems 52 times a year (weekly) by visual, audible, or olfactory means. As an alternative to weekly sensory inspections, monitor individual valves of an instrumentation system in accordance with Clause D.2.b.iii of this Section;
- d. records of visual, audible, or olfactory inspections of instrumentation systems are not required unless a leak is detected.
- 3. Facilities listed in Paragraphs D.1 and 2 of this Section shall perform the following:
- a. monitor any pressure relief valve in gas/vapor service within five calendar days s after it has vented to the atmosphere. Difficult-to-monitor pressure relief valves shall be monitored within 15 calendar days and unsafe-to-monitor pressure relief valves shall be monitored as soon as possible, when conditions would allow the component to be safely monitored;
- b. within five calendar days, any component listed in Paragraphs A.1-9 of this Section identified as leaking by visual, audible, or olfactory means shall be:
- i. repaired in accordance with Clause C.3.a.iii of this Section;
- ii. monitored (using either method 21 or the AWP); or
- iii. designated as a leak (pursuant to method 21 or the AWP);

- c. difficult-to-monitor components shall be monitored within 15 calendar days and unsafe-to-monitor components shall be monitored as soon as possible, when conditions allow the component to be safely monitored. Visual, audible, or olfactory leaks designated as a leak or confirmed to be in excess of the applicable leak limitation in Subparagraph C.1.a of this Section by method 21 monitoring, shall be repaired according to Subparagraph C.3.a of this Section;
- d. difficult-to-monitor valves shall be monitored once per calendar year (annually);
- e. unsafe-to-monitor equipment shall be monitored as soon as possible when conditions allow the component to be monitored safely (e.g., during a shutdown);
- f. 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 Clause D.1.a.ii, D.1.b.ii, D.1.b.iv, or D.2.b.iii 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 by method 21; and
- iii. is monitored for compliance with Clause D.3.e.ii of this Section initially upon designation and once per calendar year thereafter;
- g. equipment that begins operation after the initial start-up date for the process unit shall be monitored for the first time by the end of the monitoring period in which the process unit start-up is completed, or 45 calendar days after the start-up period is completed, whichever is later. Equipment that replaces leaking equipment shall continue on the monitoring schedule for the equipment that it replaced;
- h. monitoring to verify repairs that were made during a process unit shutdown shall occur by the end of the monitoring period in which the process unit start-up is completed, or 45 calendar days after the start-up period is completed, whichever is later.
- 4. Exemptions. Monitoring and inspections are not required on the following:
  - a. check valves;
- b. pressure relief devices, pump seals or packing, and compressor seals or packing where leaks are vented to a process or fuel gas system, or equipped with a closed-vent system capable of transporting leakage to a control device;
- c. pressure relief devices equipped with a rupture disc, or other similar leak-tight pressure relief component, upstream of the pressure relief device; provided that after each pressure release, the rupture disc, or other similar leak-tight component is replaced as soon as practicable; but not later than 15 calendar days;
  - d. equipment in vacuum service;

- e. equipment at natural gas processing plants with less than 40 million standard cubic feet per day rated capacity that do not fractionate natural gas liquids;
- f. components contacting only organic compounds exempted in LAC 33:III.2117 or mixtures of same with water;
- g. pumps and compressors that are sealless or have a double mechanical seal;
- h. pumps designed with no external shaft penetrating the pump housing;
- i. research and development pilot facilities and small facilities with less than 100 valves in gas/vapor or liquid service;
  - j. insulated or buried equipment;
- k. components that have been placed on a delay-of-repair list are exempt from further monitoring until a repair has been attempted, except that an owner or operator may monitor components on the delay-of-repair list in accordance with Subparagraph C.3.c of this Section in order to remove equipment from the delay-of-repair list; and
- 1. process drains that are components of individual drain systems subject to 40 CFR 60 Subpart QQQ, 40 CFR 61 Subpart FF, or 40 CFR 63 Subparts G or YY.
- 5. Alternate Monitoring Program. Any facility that already has in place a fugitive emission monitoring program which controls emissions 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\** as defined in LAC 33:III.111.A. A facility which has consolidated into an overall more stringent program in accordance with the Louisiana Consolidated Fugitive Emissions Program (i.e., with a source notice and agreement or a Title V permit) is exempted from the requirement of submitting a description of the program to the administrative authority\*. (The Louisiana Fugitive Emission Program consolidation guidelines are contained in LAC 33:III.2199, Appendix B).

# 6. Force Majeure

- a. If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the administrative authority, in writing, as soon as practical following the date the owner or operator first knew, or through due diligence should have known that the event may cause or has caused a delay in monitoring beyond the regulatory deadline. The notification shall occur before the monitoring deadline unless the initial force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
- b. The owner or operator shall provide to the administrative authority a written description of the force majeure event and a rationale for attributing the delay in monitoring beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to

minimize the delay; and identify a date by which the owner or operator proposes to conduct the monitoring. The monitoring shall be conducted as soon as practicable after the force majeure occurs.

- c. The decision to grant an extension to the monitoring deadline is solely within the discretion of the administrative authority. The administrative authority shall notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practical.
- d. Until an extension of the monitoring deadline has been approved by the administrative authority under Subparagraph D.6.c of this Section, the owner or operator of the affected facility remains subject to the requirements of this Section.
- E. Alternate Monitoring Frequency. The monitoring schedule in Paragraph D.1 or 2 of this Section may be modified as follows.
- 1. Alternate Standards for Valves and Pumps 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 alternate work practices specified in Subparagraph E.1.b or c of this Section. However, the administrative authority shall be notified in writing before one of the alternate work practices is implemented.
- b. After two consecutive quarterly leak detection periods with the total percent of leaking and delay-of-repair components (Equation 1 of this Section) equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for valves in gas/vapor service, valves in light liquid service, and/or pumps in light liquid service.
- c. After five consecutive quarterly leak detection periods with the total percent of leaking and delay-of-repair components (Equation 1 of this Section) equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for valves in gas/vapor service, valves in light liquid service, and/or pumps in light liquid service.
- d. If the total percent of leaking and delay-of-repair components (Equation 1 of this Section) increases to greater than 2.0 after implementing one of the alternate work practices in Subparagraph E.1.b or c of this Section, the owner or operator shall comply with the requirements as described in Paragraph D.1 or 2 of this Section, but subsequently may elect to use this Subsection when the requirements are met.
- 2. Alternate Standards for Valves and Pumps Subject to Subparagraph D.1.b or D.2.b—Increased Monitoring Frequency. If the total percent of leaking and delay-of-repair components (Equation 1 of this Section) is greater than 2.0, then an increase in the frequency of monitoring may be required by the administrative authority.

3. The total percent of leaking and delay-of-repair components for which alternate control techniques are allowed by this Subsection shall be determined for each process unit using Equation 1. (Equation 1 shall be calculated separately for each component type.)

Equation 1

$$% C_{T1} = [C_L + C_{TU}] / [C_T + C_{TU}] * 100\%$$

where:

 $\label{eq:components} \% C_{T1} = total \ percent \ of \ leaking \ components \ including \ delay-of-repair \ components$ 

 $C_{\rm L}$  = number of components found leaking by method 21 during the monitoring period, not including components remonitored to verify repair or components on the delay-of-repair list at the end of the previous monitoring period

 $C_{\text{TU}} = \text{number of components on the delay-of-repair list at the} \\$  end of the previous monitoring period

 $\ensuremath{C_T} = number$  of components monitored by method 21 during the monitoring period, not including components remonitored to verify repair or components on the delay-of-repair list at the end of the previous monitoring period

#### F. Recordkeeping

- 1. When a component remains leaking after every reasonable attempt at repair within the 15-calendar day period provided by Subparagraph C.3.a of this Section has been exhausted, a weatherproof and readily visible tag bearing an identification number and the date the leak was located shall be affixed to the leaking component. After the leak has been repaired, the tag may be 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 type of 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 the component was rechecked after maintenance, and the results (i.e., instrument reading; visual, audible, or olfactory results; soap bubble test results; AWP video);

- h. a record of the monitor calibration or AWP daily instrument check;
  - i. a delay-of-repair list;
  - j. a bypassed or isolated component list; and
- k. a record of all monitoring, imaging, and inspection results.
- 3. The owner or operator shall retain the survey log for two years after the latest date specified in Paragraph F.2 of this Section and make the log available to the administrative authority upon request.
- 4. The optional use of the AWP shall require storing video and other records of the daily instrument check and inspections as required in 40 CFR 60.18.
- G. Reporting Requirements. The owner or operator of the affected facility shall submit a report semiannually to the Office of Environmental Services for each calendar quarter during the reporting period. The reports are due by the last day of the month (i.e., January 31 and July 31) following the monitoring period or by an alternate date approved by the administrative authority. The reports shall include the following information for each quarter of the reporting period:
- 1. the number of each component type for which monitoring is required by Subsection D or E of this Section versus the number monitored and the total percent of leaking and delay-of-repair components (See Equation 1 of this Section) for each component type for which alternate control techniques are allowed by Subsection 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 process unit where the leaking component is located and the date of last unit shutdown;
  - b. the type 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, if the component is on the delay-of-repair list;
  - e. the date the leak was located;
  - f. the monitoring or inspection results;
  - g. the date maintenance was performed;
- h. the date the leak is expected to be repaired if the component is on the delay-of-repair list; and
  - i. the reason repairs failed or were postponed;
- 3. a signed statement attesting to the fact that all requirements of this Section have been met.

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), amended by the Office of the Secretary, Legal Division, LR 38:2752 (November 2012), LR 39:2239 (August 2013).

### §2122. Fugitive Emission Control for Ozone Nonattainment Areas and Specified Parishes

# A. Applicability

- 1. This Section is applicable to each process unit at petroleum refineries, natural gas processing plants, synthetic organic chemical manufacturing industry (SOCMI) facilities, methyl tertiary butyl ether (MTBE) manufacturing facilities, and polymer manufacturing facilities that contains any of the following components that operate in volatile organic compound (VOC) service for 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. The requirements of this Section shall be applicable to sources located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge effective January 1, 1996.
- 3. The requirements of this Section shall be applicable to sources located in the parish of Calcasieu effective January 1, 2003.
- 4. 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.
- 5. Facilities listed 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), as incorporated by reference in LAC 33:III.3003, or national emission standards for hazardous air pollutants, 40 CFR 61.240-247 (subpart V), as incorporated by reference in LAC 33:III.5116, may become exempt from this Section by:
- a. submitting a written notice to the *administrative* authority\* as defined in LAC 33:III.111.A 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), as incorporated by reference in LAC 33:III.3003, or 40 CFR 61.240-247 (subpart V), as incorporated by reference in LAC 33:III.5116, will be administered to obtain the exemption;

- b. applying 40 CFR 60.480-489 (subpart VV), 60.590-593 (subpart GGG), 60.630-636 (subpart KKK), as incorporated by reference in LAC 33:III.3003, or 40 CFR 61.240-247 (subpart V), as incorporated by reference in LAC 33:III.5116, 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), as incorporated by reference in LAC 33:III.3003, or 40 CFR 61.240-247 (subpart V), as incorporated by reference in LAC 33:III.5116;
- c. including connectors as components monitored and repaired using the restrictions in 40 CFR 60.480-489 (subpart VV), 60.590-593 (subpart GGG), 60.630-636 (subpart KKK), as incorporated by reference in LAC 33:III.3003, or 40 CFR 61.240-247 (subpart V), as incorporated by reference in LAC 33:III.5116, which apply to valves; and
- d. increasing the monitoring frequency of valves only when the valves monitored and repaired using the restrictions in 40 CFR 60.480-489 (subpart VV), 60.590-593 (subpart GGG), 60.630-636 (subpart KKK), as incorporated by reference in LAC 33:III.3003, or 40 CFR 61.240-247 (subpart V), as incorporated by reference in LAC 33:III.5116, which apply to valves, equal or exceed 2 percent of the valves leaking 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.

Alternative Work Practice (AWP)—the use of optical imaging to detect leaks as described in 40 CFR 60.18(g), (h) and (i).

Connector—flanged, screwed, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. Joined fittings welded completely around the circumference of the interface are not considered connectors.

*Difficult-to-Monitor*—equipment that cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

Double Block and Bleed System—two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

*Equipment*—each pump, compressor, pressure relief device, open-ended valve or line, process drain, valve, agitator, instrumentation system, and connector that is in VOC service. For the purpose of these regulations *equipment* shall be synonymous with component.

Force Majeure—an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the

affected facility that prevents the owner or operator from complying with the regulatory requirement within the specified time frame despite the affected facility's best efforts to fulfill the obligation. Examples of such events are:

- a. acts of nature;
- b. acts of war or terrorism; or
- c. equipment failure or safety hazard beyond the control of the affected facility.

Good Performance Level—Repealed.

Heavy Liquid Service—Repealed.

Inaccessible Valve—Repealed.

*In Gas/Vapor Service*—equipment that contains a VOC in a gas or vapor state at operating conditions.

*In Heavy Liquid Service*—equipment that is not in gas/vapor service or light liquid service.

#### In Light Liquid Service—

- a. equipment containing a fluid that meets all of the following conditions:
- i. the vapor pressure of one or more of the organic compounds is greater than 0.3 kPa (0.0435 psi) at 20°C (68°F). (Standard reference texts or ASTM D2879-83, 96, or 97 shall be used to determine the vapor pressure.);
- ii. the total concentration of the pure organic compounds having a vapor pressure greater than 0.3 kPa at 20°C is equal to or greater than 20 percent by weight; and
  - iii. the fluid is a liquid at operating conditions.
- b. In the alternative to Subparagraph a of this Paragraph, an owner or operator of petroleum refineries, natural gas processing plants, and polymer manufacturing facilities has the option to use ASTM method D86-78, 82, 90, 95, or 96. The equipment is in light liquid service if the evaporated fluid weight is greater than 10 percent at  $150^{\circ}$ C ( $302^{\circ}$ F).

*In Liquid Service*—equipment that is not in gas/vapor service.

*In Vacuum Service*—equipment operating at an internal pressure that is at least 20 inches of water (38 millimeters of mercury) below ambient pressure.

In VOC Service—for petroleum refineries, SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities; a piece of equipment that contains or contacts a process fluid that is at least 10 percent VOC by weight. For natural gas processing plants, a piece of equipment that contains or contacts a process fluid that is at least 1.0 percent VOC by weight.

*Inspect*—examine the component for visible, audible, or olfactory evidence of a leak.

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 inches and smaller and connectors nominally 0.75 inches and smaller in diameter are considered instrumentation systems for the purposes of this Section. Valves greater than nominally 0.5 inches and connectors greater than nominally 0.75 inches associated with instrumentation systems are not considered part of instrumentation systems and shall be monitored individually as a valve or connector.

Light Liquid—Repealed.

Light Liquid Service—Repealed.

Liquid Service—Repealed.

*Monitor(ed)*—determination of VOC concentration at equipment components in accordance with method 21 (see 40 CFR 60, appendix A-7), or the *alternative work practice* as provided in this Section.

*Open-Ended Valve or Line*—any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Optical Gas Imaging Instrument—an instrument that makes emissions visible that may otherwise be invisible to the naked eye.

*Process Drain*—any opening (including a covered or controlled opening) that receives or conveys wastewater into a wastewater system.

*Process Unit*—a facility, or any part thereof, 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. The following are not considered process unit shutdowns:

- a. 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;
- b. 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;
- c. the use of spare equipment and technically feasible bypassing or isolating of equipment without stopping production; and
  - d. the idling of a process unit due to force majeure.

*Repair*—adjust or otherwise alter equipment in order to eliminate a leak.

Unrepairable Component—Repealed.

*Unsafe-to-Monitor*—equipment that cannot be monitored without exposing monitoring personnel to immediate danger.

#### C. Fugitive Emission Control Requirements

#### 1. Leak Limitations

- a. No component listed in Subparagraphs A.1.a.-i of this Section in petroleum refineries, SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities shall be allowed to emit VOC:
- i. exceeding an instrument reading of 1,000 parts per million (ppm) for valves, connectors, instrumentation systems, pressure relief devices, and process drains; 5,000 ppm for pumps and compressors; or 10,000 ppm for agitators, as determined by method 21 (40 CFR 60, appendix A, as incorporated by reference in LAC 33:III.3003);
- ii. which can be imaged when following the *alternative work practice (AWP)* as defined in Subsection B of this Section; or
- iii. where visible, audible, or olfactory evidence indicates the presence of a leak.
- b. No component listed in Subparagraphs A.1.a-i of this Section in natural gas processing plants shall be allowed to emit VOCs exceeding an instrument reading of 2,500 ppm for valves, connectors, instrumentation systems, pressure relief devices, and process drains; 5,000 ppm for pumps and compressors 10,000 ppm for agitators, as determined by method 21 (40 CFR 60, appendix A, as incorporated by reference in LAC 33:III.3003), or which can be imaged when following the AWP described in 40 CFR 60.18.

#### 2. Open-Ended Valves or Lines

- a. Each open-ended valve or line shall be equipped 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, (i.e., 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.
- b. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but it shall comply with Subparagraph C.2.a of this Section at all other times.
- c. Open-ended valves or lines in emergency system(s) (i.e., pressure relief devices) that are designed to open automatically in the event of a process upset, are exempt from the requirements of Subsection C.2.a of this Section.
- d. Open-ended valves or lines containing asphalt, materials that would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if sealed or equipped with a double block and bleed

system, are exempt from the requirements of Subparagraph C.2.a of this Section.

#### 3. Leak Repair

- a. The owner or operator shall make every reasonable effort to repair a leaking component, as described in Paragraph C.1 or Subparagraph D.3.b of this Section, within 15 calendar days of detection. A repair is considered successful if it meets any of the following conditions:
- i. a component is monitored (or remonitored) to verify that the instrument reading is below the applicable leak definition in Paragraph C.1 of this Section;
- ii. a component that has been identified as leaking using the AWP, either meets Clause C.3.a.i of this Section, or the emissions are no longer visible using the AWP; or
- iii. a component in liquid service that has been identified as leaking by visual, audible, or olfactory means, including, use of the soap bubble test for natural gas processing plants, either meets Clause C.3.a.i of this Section, or when visual, audible, or olfactory indications of the leak have been eliminated.
- b. Equipment that cannot be repaired shall be placed on a delay-of-repair list, unless it can be isolated or bypassed to eliminate the leak. Repair of equipment on the delay-of-repair list shall occur by the end of the next scheduled process unit shutdown. The *administrative authority* as defined in LAC 33:III.111.A reserves the right to take enforcement action pursuant to R.S. 30:2025, should it be determined that the total percentage of components on the delay-of-repair list is excessive or is causing damage to public health or the environment.
- c. Equipment placed on the delay-of-repair list in accordance with Subparagraph C.3.b of this Section may be removed from the list if it meets any of the following conditions:
- i. the equipment is monitored or imaged, and for two consecutive monthly periods, either the instrument readings are below the leak limitation specified in Paragraph C.1 of this Section or there are no visible emissions using an optical gas imaging instrument pursuant to the AWP; or
- ii. the owner or operator has undertaken additional or\_extraordinary efforts to repair the leaking equipment, and subsequent monitoring or imaging demonstrates that either the instrument readings are below the leak limitation in Paragraph C.1 of this Section, or there are no visible emissions using an optical gas imaging instrument pursuant\_to the AWP. Extraordinary efforts are non-routine repair methods (e.g., sealant injection, clamp installation) or utilization of a closed-vent system to capture and control the leak by at least 90 percent.
  - (a). The decision to monitor equipment on the delay-of-repair list or undertake extraordinary efforts to repair equipment shall be made solely at the owner or operator's discretion.]
- D. Monitoring and Inspection Requirements. Monitoring of components by method 21 and inspections shall be conducted according to this Subsection. After initially

- complying with this Subsection, the owner or operator may elect to comply with the appropriate alternate monitoring schedule(s) in Subsection E of this Section. In lieu of method 21 monitoring, optical imaging may be conducted in accordance with the AWP. If the owner or operator elects to use the AWP, the requirements for instrument specifications, instruments checks, monitoring frequency, leak survey procedures, recordkeeping, and reporting shall be followed as described in 40 CFR 60.18 (g), (h), and (i). The alternate monitoring schedule(s) in Subsection E of this Section are not applicable when using the AWP.
- 1. Petroleum refineries, SOCMI facilities, MTBE manufacturing facilities, and polymer manufacturing facilities shall perform the following:
- a. monitor process drains one time per calendar year (annually).
- b. monitor the following components four times per year (quarterly):
  - i. compressor seals;
  - ii. pressure relief valves in gas/vapor service;
- iii. valves in light liquid service and valves in gas/vapor service; and
  - iv. pumps in light liquid service;
- c. inspect pump seals visually 52 times a year (weekly);
- d. inspect or 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, or olfactory means.
- ii. monitor flanged connectors in light liquid and gas/vapor service four times per year (quarterly) 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 unit have been monitored;
- e. inspect instrumentation systems weekly by visual, audible, or olfactory means. As an alternative to weekly sensory inspections, monitor individual valves and flanged connectors of an instrumentation system in accordance with Clauses D.1.b.iii and D.1.d.ii of this Section, respectively;
- f. records of visual, audible, or olfactory inspections of connectors and instrumentation systems are not required unless a leak is detected.
- 2. Natural gas processing plants shall perform the following:

- a. inspect pump seals and compressor seals visually52 times a year (weekly);
- b. monitor the following components four times a year (quarterly):
  - i. pumps in light liquid service;
  - ii. compressor seals;
  - iii. pressure relief valves in gas/vapor service; and
- iv. valves in light liquid service and valves in gas/vapor service;
- c. inspect instrumentation systems 52 times a year (weekly) by visual, audible, or olfactory means. As an alternative to weekly sensory inspections, monitor individual valves of an instrumentation system in accordance with Clause D.2.b.iv of this Section;
- d. records of visual, audible, or olfactory inspections of instrumentation systems are not required unless a leak is detected.
- 3. Facilities listed in Paragraphs D.1 and 2 of this Section:
- a. monitor any pressure relief valve in gas/vapor service within five calendar days after it has vented to the atmosphere. Difficult-to-monitor pressure relief valves shall be monitored within 15 calendar days and unsafe-to-monitor pressure relief valves shall be monitored as soon as possible, when conditions allow the component to be safely monitored;
- b. within five calendar days, any component listed in Subparagraphs A.1.a-i of this Section identified as leaking by visual, audible, or olfactory means shall be:
- i. repaired in accordance with Clause C.3.a.iii of this Section;
- ii. monitored using either method 21 or the AWP;or
- iii. designated as a leak pursuant to method 21 or the AWP;
- c. difficult-to-monitor components shall be monitored within 15 calendar days and unsafe-to-monitor components shall be monitored as soon as possible, when conditions allow the component to be safely monitored. Visual, audible, or olfactory leaks either designated as a leak, or, confirmed to be in excess of the applicable leak limitation in Paragraph C.1 of this Section by method 21 monitoring, shall be repaired according to Subparagraph C.3.a of this Section;
- d. difficult-to-monitor valves shall be monitored once per calendar year;
- e. unsafe-to-monitor equipment shall be monitored as soon as possible when conditions allow the component to be monitored safely (e.g., during a shutdown);
- f. 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 Clause D.1.b.iii or D.2.b.iv 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 by method 21; and
- iii. is monitored for compliance with Clause D.3.e.ii of this Section initially upon designation and once per calendar year thereafter;
- g. equipment that begins operation after the initial startup date for the process unit shall be monitored for the first time by the end of the monitoring period in which the process unit startup is completed, or 45 calendar days after the startup period is completed, whichever is later. Equipment that replaces leaking equipment shall continue with the monitoring schedule for the equipment that it replaced;
- h. monitoring to verify repairs that were made during a process unit shutdown shall occur by the end of the monitoring period in which the process unit startup is completed, or 45 calendar days after the startup period is completed, whichever is later.
- 4. Exemptions and inspections are not required on the following:
- a. pressure relief devices, pump seals or packing, and compressor seals or packing where leaks are vented to a process or fuel gas system, or equipped with a closed-vent system capable of capturing and transporting leakage to a control device;
- b. pressure relief devices equipped with a rupture disc, or other similar leak-tight pressure relief component, upstream of the pressure relief device; provided that after each pressure release, the rupture disc, or other similar leak-tight component is replaced as soon as practicable; but not later than 15 calendar days;
  - c. equipment in vacuum service;
- d. equipment at natural gas processing plants with less than 40 million standard cubic feet per day rated capacity that do not fractionate natural gas liquids;
- e. components contacting only organic compounds exempted under LAC 33:III.2117 or mixtures of same with water;
- f. pumps and compressors that are sealless or have a double mechanical seal;
- g. pumps designed with no external shaft penetrating the pump housing;
- h. research and development pilot facilities and small facilities with less than 100 valves in gas/vapor or liquid service;
  - i. insulated or buried equipment;

j. components that have been placed on a delay-ofrepair list are exempt from further monitoring until a repair has been attempted, except that an owner or operator may monitor components on the delay-of-repair list in accordance with Clause C.3.c.i of this Section in order to attempt to remove equipment from the delay-of-repair list;

#### k. check valves;

- 1. process drains that are components of individual drain systems subject to 40 CFR 60, subpart QQQ, 40 CFR 61, subpart FF, or 40 CFR 63, subparts G or YY; and
- m. process drains at facilities subject to LAC 33:III.2153.
- 5. Alternate Monitoring Program. Any facility that already has in place a fugitive emission monitoring program which controls emissions 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. A facility which has consolidated into an overall more stringent program in accordance with the Louisiana Consolidated Fugitive Emissions Program (i.e., with a source notice and agreement or a title V permit) is exempted from having to submit a description of the program to the administrative authority\*. (The Louisiana fugitive emission program consolidation guidelines are contained in LAC 33:III.2199, Appendix B.)

#### 6. Force Majeure

- a. If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the administrative authority, in writing, as soon as practical following the date the owner or operator first knew, or through due diligence should have known that the event may cause or has caused a delay in monitoring beyond the regulatory deadline. The notification shall occur before the monitoring deadline unless the initial force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
- b. The owner or operator shall provide to the administrative authority a written description of the force majeure event and a rationale for attributing the delay in monitoring beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the monitoring. The monitoring shall be conducted as soon as practicable after the force majeure occurs.
- c. The decision to grant an extension to the monitoring deadline is solely within the discretion of the administrative authority. The administrative authority shall notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practical.
- d. Until an extension of the monitoring deadline has been approved by the administrative authority under

Subparagraph D.6.c of this Section, the owner or operator of the affected facility remains subject to the requirements of this Section.

- E. Alternate Monitoring Frequency. The monitoring schedule in Paragraph D.1 or 2 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 alternate work practices specified in Subparagraph E.1.b, c, or e of this Section. However, the administrative authority shall be notified in writing before one of the alternate work practices is implemented.
- 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 valves in gas/vapor and/or 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 valves in gas/vapor and/or light liquid service.
- d. If, after implementing one of the alternate work practices in Subparagraph E.1.b or c of this Section, the percent of leaking valves (Equation 1) increases to greater than 2.0, or the total percent of leaking and delay-of-repair valves (Equation 2) increases to greater than 4.0, the owner or operator shall comply with the requirements in Paragraph D.1 or 2 of this Section, but subsequently may elect to use this Subsection when the requirements are met.
- e. Existing equipment that has been monitored under LAC 33:III.2121 for fugitives at the leak definition of 10,000 ppm can initially elect to use this alternate standard if the unit has data documented with the administrative authority 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 ppm for the required time periods as specified in Subparagraph E.1.b or c of this Section.
- 2. Alternate Standards for Valves Subject to Subparagraph D.1.b or D.2.b of this Section—Increased Monitoring Frequency. If the percent of leaking valves (Equation 1) is greater than 2.0, or the total percent of leaking and delay-of-repair 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.ii of This Section—Skip Period Leak Detection and Repair
- a. An owner or operator may elect to comply with the alternate work practice specified in Subparagraph E.3.b of this Section. However, the administrative authority shall

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be notified in writing before the alternate work practice is implemented.

- 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 flanged connectors in gas/vapor and/or light liquid service.
- c. If, after implementing the AWP in Subparagraph E.3.b of this Section, the percent of leaking flanged connectors (Equation 1) increases to greater than 1.0, or the total percent of leaking and delay-of-repair flanged connectors (Equation 2) increases to greater than 2.0, the owner or operator shall comply with the requirements as described in Clause D.1.d.ii of this Section, but subsequently may elect to use this Subsection when the requirements are met.
- 4. Alternate Standards for Flanged Connectors Subject to Clause D.1.d.ii of this Section—Increased Monitoring Frequency. If the percent of leaking flanged connectors (Equation 1) is greater than 1.0, or the total percent of leaking and delay-of-repair 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. The percent of leaking components for which alternate control techniques are allowed by this Subsection shall be determined for each process unit using Equation 1 below. (Equation 1 shall be calculated separately for each component type.)

Equation 1

$$\%C_1 = [C_L]/[C_T] * 100\%$$

where:

 $%C_1$  = percent of leaking components;

 $C_L$  = number of components found leaking by method 21 during the monitoring period, not including components remonitored to verify repair or components on the delay-of-repair list at the end of the previous monitoring period; and

 $C_T$  = number of components monitored by method 21 during the monitoring period, not including components remonitored to verify repair or components on the delay-of-repair list at the end of the previous monitoring period.

6. The total percent of leaking and delay-of-repair components for which alternate control techniques are allowed by this Subsection shall be determined for each process unit using Equation 2. (Equation 2 shall be calculated separately for each component type.)

Equation 2

$$\% \ C_{T2} \ = \ [C_L + C_{TU}]/[C_T + C_{TU}] * \ 100\%$$

where:

 $\label{eq:components} \% C_{T2} = total \mbox{ percent of leaking components including delay-of-repair list components;}$ 

 $C_L$  = number of components found leaking by method 21 during the monitoring period, not including components remonitored to verify repair or components on the delay-of-repair list at the end of the previous monitoring period;

 $C_{\text{TU}} = \text{number of components on the delay-of-repair list at the} \\$  end of the previous monitoring period; and

 $C_T$  = number of components monitored by method 21 during the monitoring period, not including components remonitored to verify repair or components on the delay-of-repair list at the end of the previous monitoring period.

- 7. 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 alternate work practices. The batch product-process equipment shall be tested with a gas using the procedure specified in Subparagraph E.7.a of this Section or with a liquid using the procedure specified in Subparagraph E.7.b of this Section.
- a. The following procedure 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, or section of the train, shall be pressurized with a gas to the operating pressure of the equipment. The equipment shall be tested at a pressure lower than the lowest pressure setting of any relief device.

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 Equation 3.

Equation 3

$$\frac{P}{t} = \frac{\left(P_{f} - P_{i}\right)}{\left(t_{f} - t_{i}\right)}$$

where:

P/t = change in pressure, psi/hr;

 $P_f$  = final pressure, psi;

 $P_{\mathrm{i}} = initial \ pressure, \ psi;$  and

 $t_f$  -  $t_i$  = elapsed time, hours.

- iv. The pressure shall be measured using a pressure measurement device (e.g., gauge, manometer, or equivalent) that has a precision of  $\pm 2.5$  millimeters ( $\pm 0.05$  psi) of mercury over the range of measured test pressures and is capable of measuring pressures up to the lowest pressure setting of any relief device.
- v. A leak is detected if the rate of change in pressure (Equation 3) is greater than 6.9 kPa (1 psi) per hour or if there is visible, audible, or olfactory evidence of a leak.
- b. The following procedure 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 not less than 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.
- c. 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.
- d. 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 no later than 30 calendar days after the equipment is placed in VOC service.

#### F. Recordkeeping

- 1. When a component remains leaking after every reasonable attempt at repair within the 15-calendar day period provided by Subparagraph C.3.a of this Section has been exhausted, a weatherproof and readily visible tag bearing an identification number and the date the leak was located shall be affixed to the leaking component. After the leak has been repaired the tag may be removed.
- 2. A survey log shall be maintained by the owner or operator and shall include the following:
- a. the name of the process unit where the leaking component is located;
  - b. the type 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, and the results (i.e., instrument reading; visual,

audible, or olfactory results; soap bubble test results; AWP video):

- h. a record of the monitor calibration or AWP daily instrument check;
  - i. a delay-of-repair list;
  - j. a bypassed or isolated component list; and
- k. a record of all monitoring, imaging, and inspection results.
- 3. The owner or operator shall retain the survey log for two years after the latest date specified in Paragraph F.2 of this Section and make the log available to the administrative authority upon request.
- 4. The optional use of the AWP shall require storing video and other records of the daily instrument check and inspections as required in 40 CFR 60.18.
- G. Reporting Requirements. The owner or operator of the affected facility shall submit a report semiannually to the Office of Environmental Services containing the information listed in Paragraphs G.1-5 of this Section for each calendar quarter during the reporting period, except for affected facilities that elect to meet the requirements of the alternate standard for batch processes in Paragraph E.5 of this Section, for which the report shall include the information listed in Paragraphs G.6-9 of this Section. The reports are due by the last day of the month (January and July) following the monitoring period or by an alternate date approved by the administrative authority. The reports shall include the following information for each quarter of the reporting period:
- 1. the number of each component type for which monitoring is required by Subsection D or E of this Section versus the number monitored;
- 2. the percent of leaking components (Equation 1) for each component type and the number of leaks detected by visual, audible, or olfactory means for each component type;
- 3. the total percent of leaking and delay-of-repair components (Equation 2) for each component type;
- 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 process unit where the leaking component is located and the date of last unit shutdown;
  - b. the type of leaking component;
  - c. the stream identification at the leak;
- d. the identification number from the tag required by Paragraph F.1 of this Section, if the component is on the delay-of-repair list;
  - e. the date the leak was located;
  - f. the monitoring or inspection results;
  - g. the date maintenance was performed;

- h. the date the leak is expected to be repaired if the component is on the delay-of-repair list; and
  - i. the reason repairs failed or were postponed;
- 5. a signed statement attesting to the fact that all requirements of this Section have been met;
  - 6. the batch process equipment train identification;
  - 7. the number of pressure tests conducted;
- 8. the number of pressure tests that the equipment train failed; and
- 9. a signed statement attesting to the fact that all requirements of this Section have been met.

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), amended by the Office of the Secretary, Legal Division, LR 38:2752 (November 2012), LR 39:2243 (August 2013).

## **Subchapter B. Surface Coatings**

#### §2123. Organic Solvents

- A. Except as provided in Subsections B and C of this Section, any emissions source using organic solvents having an emission of volatile organic compounds resulting from the application of surface coatings equal to or more than 15 pounds (6.8 kilograms) per day, or an equivalent level of 2.7 tons per 12-month rolling period, shall control emissions of volatile organic compounds through the use of low solvent coatings, as provided in Subsection C of this Section, or, 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 Subsection D of this Section);
- 2. carbon adsorption, with a control efficiency of at least 90 percent, 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 Section that source shall be subject and shall remain subject to the requirements of this Subsection regardless of future emission rates.
- B. Soldering operations, painting and coating operations not listed in Subsection C of this Section, and dry cleaning

- operations using organic solvents that are not considered photochemically reactive shall be considered for exemption from the requirements of this Section.
- 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.

| Table 1. Surface Coating Industries  |   |   |  |  |
|--|---|---|--|--|
|  | Daily Weighted Average VOC Emission Limitation                                |   |  |  |
| Affected Facility  | Lbs. per Gal. of<br>Coating as applied<br>(minus water and<br>exempt solvent) | Kgs. per Liter of<br>Coating as<br>applied (minus<br>water and exempt<br>solvent) |  |  |
| Large Appliance Coating Inc.   | lustry  |   |  |  |
| General, One Component   | 2.3   | 0.275   |  |  |
| General, Multi-Component<br>(Baked/Air Dried)  | 2.3 / 2.8   | 0.275 / 0.340   |  |  |
| Extreme High Gloss   | 2.8   | 0.340   |  |  |
| Extreme Performance  | 2.8   | 0.340   |  |  |
| Heat Resistant   | 2.8   | 0.340   |  |  |
| Metallic   | 2.8   | 0.340   |  |  |
| Pretreatment Coatings  | 2.8   | 0.340   |  |  |
| Solar Absorbent  | 2.8   | 0.340   |  |  |
| 2. Surface Coating of Cans   |   |   |  |  |
| Sheet Basecoat (Exterior<br>and Interior) and Over-<br>Varnish: Two-Piece Can<br>Exterior (Basecoat and<br>Over-Varnish) | 2.8   | 0.34  |  |  |
| Two and Three-Piece Can<br>Interior Body Spray, Two-<br>Piece Can Exterior End<br>(Spray or Roll Coat)                   | 4.2   | 0.51  |  |  |
| Three-Piece Can Side-Seam<br>Spray   | 5.5   | 0.66  |  |  |
| End Sealing Compound   | 3.7   | 0.44  |  |  |

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| Table 1. Surface Coating Industries               |   |   |  |
|---|---|---|--|
|   | Daily Weighted Average<br>VOC Emission Limitation                             |   |  |
| Affected Facility                                 | Lbs. per Gal. of<br>Coating as applied<br>(minus water and<br>exempt solvent) | Kgs. per Liter of<br>Coating as<br>applied (minus<br>water and exempt<br>solvent) |  |
| 3. Surface Coating of Coils                       |   |   |  |
| Prime and Topcoat or Single<br>Coat Operation     | 2.6   | 0.31  |  |
| 4. Surface Coating of Fabrics                     |   |   |  |
| Fabric Facility                                   | 2.9   | 0.35  |  |
| Vinyl Coating Line (Except<br>Plasticol Coatings) | 3.8   | 0.45  |  |
| 5. Surface Coating–Magnet Wire Coating            |   |   |  |
| Coating Line                                      | 1.7   | 0.20  |  |
| 6. Surface Coating of Metal Fu                    | rniture   |   |  |
| General, One Component (Baked/Air Dried)          | 2.3 / 2.3   | 0.275 / 0.275   |  |
| General, Multi-Component<br>(Baked/Air Dried)     | 2.3 / 2.8   | 0.275 / 0.340   |  |
| Extreme High Gloss<br>(Baked/Air Dried)           | 3.0 / 2.8   | 0.360 / 0.340   |  |
| Extreme Performance                               | 3.0   | 0.360   |  |
| Heat Resistant                                    | 3.0   | 0.360   |  |
| Metallic  | 3.0   | 0.360   |  |
| Pretreatment Coatings                             | 3.0   | 0.360   |  |
| Solar Absorbent                                   | 3.0   | 0.360   |  |

| Table 1. Surface Coating Industries   |  |                               |  |                                |
|---|--|-------------------------------|--|--------------------------------|
|   | Daily Weighted Average<br>VOC Emission Limitation                    |                               |  |                                |
| Affected<br>Facility  | Lbs. per Gal. of Coating as applied (minus water and exempt solvent) | Lbs. per<br>Gal. of<br>Solids | Kgs. per<br>Liter of<br>Coating as<br>applied<br>(minus<br>water and<br>exempt<br>solvent) | Kgs. per<br>Liter of<br>Solids |
| 7. Surface Coating  | g of Miscellan   | eous Metal Parts              | and Products   |                                |
| General, One<br>Component or<br>Multi-<br>Component<br>(Baked/Air<br>Dried) | 2.3 / 2.8  | 3.35 / 4.52                   | 0.28 / 0.34  | 0.40 / 0.54                    |
| Camouflage  | 3.5  | 6.67                          | 0.42   | 0.80                           |
| Electric<br>Insulating<br>Varnish   | 3.5  | 6.67                          | 0.42   | 0.80                           |
| Etching Filler  | 3.5  | 6.67                          | 0.42   | 0.80                           |
| Extreme High<br>Gloss<br>(Baked/Air<br>Dried)                               | 3.0 / 3.5  | 5.06 / 6.67                   | 0.36 / 0.42  | 0.61 / 0.80                    |
| Extreme<br>Performance<br>(Baked/Air<br>Dried)                              | 3.0 / 3.5  | 5.06 / 6.67                   | 0.36 / 0.42  | 0.61 / 0.80                    |
| Heat Resistant<br>(Baked/Air<br>Dried)                                      | 3.0 / 3.5  | 5.06 / 6.67                   | 0.36 / 0.42  | 0.61 / 0.80                    |
| High<br>Performance<br>Architectural  | 3.5  | 6.67                          | 0.42   | 0.80                           |
| High<br>Temperature   | 3.5  | 6.67                          | 0.42   | 0.80                           |

| Table 1. Surface Coating Industries  |   |                               |  |                                |
|--|---|-------------------------------|--|--------------------------------|
|  | Daily Weighted Average                                      |                               |  |                                |
|  | VOC Emission Limitation  Lbs per Lbs per Kgs per            |                               |  |                                |
| Affected<br>Facility   | Lbs. per Gal. of Coating as applied (minus water and exempt | Lbs. per<br>Gal. of<br>Solids | Kgs. per<br>Liter of<br>Coating as<br>applied<br>(minus<br>water and<br>exempt<br>solvent) | Kgs. per<br>Liter of<br>Solids |
| Metallic   | solvent) 3.5  | 6.67                          | 0.42   | 0.80                           |
| Military<br>Specification<br>(Baked/Air<br>Dried)                                | 2.3 / 2.8   | 3.35 / 4.52                   | 0.28 / 0.34  | 0.40 / 0.54                    |
| Mold Seal  | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Pan Baking   | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Prefabricated Architectural, One Component or Multi- Component (Baked/Air Dried) | 2.3 / 3.5   | 3.35 / 6.67                   | 0.28 / 0.42  | 0.40 / 0.80                    |
| Pretreatment   | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Coatings Repair and Touch Up (Baked/Air Dried)                                   | 3.0 / 3.5   | Does not apply                | 0.36 / 0.42  | Does not apply                 |
| Silicone<br>Release  | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Solar<br>Absorbent<br>(Baked/Air<br>Dried)                                       | 3.0 / 3.5   | 5.06 / 6.67                   | 0.36 / 0.42  | 0.61 / 0.80                    |
| Vacuum<br>Metalizing   | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Drum Coating,<br>New, Exterior   | 2.8   | 4.52                          | 0.34   | 0.54                           |
| Drum Coating,<br>New, Interior   | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Drum Coating,<br>Reconditioned,<br>Exterior                                      | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Drum Coating,<br>Reconditioned,<br>Interior                                      | 4.2   | 9.78                          | 0.50   | 1.17                           |
| Powder   | 0.4   | Does not                      | 0.05   | Does not                       |
| Coating  |   | apply                         |  | apply                          |
| 8. Surface Coating<br>General, One   |   |                               |  |                                |
| Component  | 2.3   | 3.35                          | 0.28   | 0.40                           |
| General, Multi-<br>Component   | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Electric Dissipating Coatings and Shock-Free Coatings                            | 6.7   | 74.7                          | 0.80   | 8.96                           |
| Extreme  | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Performance  | (2-pack coatings)   | (2-pack coatings)             | (2-pack<br>coatings)   | (2-pack coatings)              |
| Metallic   | 3.5   | 6.67                          | 0.42   | 0.80                           |
| Military<br>Specification  | 2.8 (1  | 4.52 (1                       | 0.24 (1masts)  | 0.54                           |
| Specification  | pack)<br>3.5 (2   | pack)<br>6.67 (2              | 0.34 (1pack)<br>0.42 (2pack)   | (1pack)<br>0.80                |
|  | pack)   | pack)                         | 5.12 (2pack)   | (2pack)                        |
| Mold Seal  | 6.3   | 43.7                          | 0.76   | 5.24                           |

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| Table 1. Surface Coating Industries                          |   |                       |  |                    |
|--|---|-----------------------|--|--------------------|
| Daily Weighted Average VOC Emission Limitation               |   |                       |  |                    |
|  | Lbs. per  | VOC Emiss<br>Lbs. per | ion Limitation                                       | Kgs. per           |
| Affected   | Gal. of<br>Coating<br>as                                | Gal. of<br>Solids     | Kgs. per<br>Liter of<br>Coating as                   | Liter of<br>Solids |
| Facility   | applied<br>(minus<br>water<br>and<br>exempt<br>solvent) |                       | applied<br>(minus<br>water and<br>exempt<br>solvent) |                    |
| Multi-Colored  | ,   | 25.2                  | 0.60   | 3.04               |
| Coatings   | 5.7   | 25.3                  | 0.68   | 3.04               |
| Optical<br>Coatings  | 6.7   | 74.7                  | 0.80   | 8.96               |
| Vacuum<br>Metalizing   | 6.7   | 74.7                  | 0.80   | 8.96               |
| 9. Surface Coating   | of Automotiv  | ve/Transportation     | n Plastic Parts                                      |                    |
| a. High Bake Coat  | ings-Interior   | and Exterior Par      | ts   |                    |
| Flexible Primer  | 4.5   | 11.58                 | 0.54   | 1.39               |
| Non-Flexible<br>Primer                                       | 3.5   | 6.67                  | 0.42   | 0.80               |
| Base Coat  | 4.3   | 10.34                 | 0.52   | 1.24               |
| Clear Coat   | 4.0   | 8.76                  | 0.48   | 1.05               |
| Non-Base   |   |                       |  |                    |
| Coat/Clear<br>Coat   | 4.3   | 10.34                 | 0.52   | 1.24               |
| b. Low Bake/Air I  | Oried Coating   | s_Exterior Parts      |  |                    |
| Primer   | 4.8   | 13.80                 | 0.58   | 1.66               |
| Base Coat  | 5.0   | 15.59                 | 0.60   | 1.87               |
| Clear Coat   | 4.5   | 11.58                 | 0.54   | 1.39               |
| Non-Base<br>Coat/Clear<br>Coat                               | 5.0   | 15.59                 | 0.60   | 1.87               |
| c. Low Bake/Air Dried Coatings— Interior Parts               | 5.0   | 15.59                 | 0.60   | 1.87               |
| d. Touch Up<br>and Repair<br>Coatings                        | 5.2   | 17.72                 | 0.62   | 2.13               |
| For red, yellow, ar<br>the limit is determ<br>Table by 1.15. |   |                       |  |                    |
| 10. Surface Coatin   |   |                       |  |                    |
| Primer   | 2.9   | 4.80                  | 0.35   | 0.57               |
| Topcoat Touture Cost   | 2.9   | 4.80<br>4.80          | 0.35   | 0.57               |
| Texture Coat<br>Fog Coat                                     | 2.9   | 3.14                  | 0.35<br>0.26   | 0.57<br>0.38       |
| Touch Up and<br>Repair                                       | 2.9   | 4.80                  | 0.35   | 0.57               |
| 11. Surface Coatin   | g of Pleasure   | Craft                 |  |                    |
| Extreme High<br>Gloss Topcoat                                | 4.1   | 9.2                   | 0.49   | 1.10               |
| High Gloss<br>Topcoat  | 3.5   | 6.7                   | 0.42   | 0.80               |
| Pretreatment<br>Wash Primer                                  | 6.5   | 55.6                  | 0.78   | 6.67               |
| Finish Primer/Surfacer                                       | 3.5   | 6.7                   | 0.42   | 0.80               |
| High Build<br>Primer Surfacer                                | 2.8   | 4.6                   | 0.34   | 0.55               |
| Aluminum Substrate Antifoulant                               | 4.7   | 12.8                  | 0.56   | 1.53               |
| Coating Other Substrate Antifoulant Coating                  | 2.8   | 4.4                   | 0.33   | 0.53               |

| Table 1. Surface Coating Industries                              |   |     |   |                                |
|--|---|-----|---|--------------------------------|
| Affected<br>Facility   | Lbs. per<br>Gal. of<br>Coating<br>as<br>applied<br>(minus<br>water<br>and<br>exempt<br>solvent) |     | Kgs. per Liter of Coating as applied (minus water and exempt solvent) | Kgs. per<br>Liter of<br>Solids |
| All Other Pleasure Craft Surface Coatings (for Metal or Plastic) | 3.5   | 6.7 | 0.42  | 0.80                           |

| Table 1. Surface Coating Industries   |   |   |  |
|---|---|---|--|
|   | Daily Weighted Average<br>VOC Emission Limitation                             |   |  |
| Affected<br>Facility  | Lbs. per Gal. of<br>Coating as applied<br>(minus water and<br>exempt solvent) | Kgs. per Liter of Coating<br>as applied (minus water<br>and exempt solvent) |  |
|   | g of Motor Vehicle Materials  |   |  |
| Motor Vehicle<br>Cavity Wax   | 5.4   | 0.65  |  |
| Motor Vehicle<br>Sealer   | 5.4   | 0.65  |  |
| Motor Vehicle<br>Deadener   | 5.4   | 0.65  |  |
| Motor Vehicle<br>Gaskets/Gasket-<br>Sealing<br>Material   | 1.7   | 0.20  |  |
| Motor Vehicle<br>Underbody<br>Coating   | 5.4   | 0.65  |  |
| Motor Vehicle<br>Trunk Interior<br>Coating  | 5.4   | 0.65  |  |
| Motor Vehicle<br>Bedliner   | 1.7   | 0.20  |  |
| Motor Vehicle<br>Lubricating<br>Wax/Compound  | 5.8   | 0.70  |  |
| The limits in Items 7-12 of this Table do not apply to operations covered in Items 1-6 or 13-17 herein, or to aerosol coatings, architectural coatings, or automobile refinish coatings.  13. Factory Surface Coatings of Flat Wood Paneling with VOC Emissions |   |   |  |

| 13. Factory Surface Coatings of Flat Wood Paneling with VOC Emissions |     |      |  |
|---|-----|------|--|
| Greater Than 15 Pounds Per Day Before Controls                        |     |      |  |
| All Inks,   |     |      |  |
| Coatings, and   | 2.1 | 0.25 |  |
| Adhesives   |     |      |  |

14. Surface Coatings for Marine Vessels and Oilfield Tubulars and Ancillary Oilfield Equipment

a. Except as otherwise provided in this Section, a person shall not apply a marine coating with a VOC content in excess of the following limits:

| marine coating wit | 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     | 3.5  | 0.42 |  |  |
| Flat or Semi-      |  |      |  |  |
| Gloss Finish       |  |      |  |  |
| Coatings           |  |      |  |  |
| Two                |  |      |  |  |
| Component          | 3.5  | 0.42 |  |  |
| Coatings           |  |      |  |  |

|                                    | Table 1. Surface Coating                                   | Industries                                     |  |
|------------------------------------|--|--|--|
|                                    | Daily Weighted Average<br>VOC Emission Limitation          |  |  |
| Affected                           | Lbs. per Gal. of Kgs. per Liter of Contin                  |  |  |
| Facility                           | Coating as applied (minus water and                        | as applied (minus water                        |  |
|                                    | exempt solvent)  | and exempt solvent)                            |  |
|                                    | parishes of Ascension, Calcasi                             |  |  |
|                                    | on, Pointe Coupee, and West In Item 14.a of this Table may |  |  |
| marine coatings ar                 | nd coatings on oilfield tubular                            | s and ancillary oilfield                       |  |
| equipment with a 'applied:         | VOC content not in excess of                               | the following limits may be                    |  |
| Heat Resistant                     | 3.5  | 0.42   |  |
| Metallic Heat                      | 4.42   | 0.53   |  |
| Resistant                          | Table 1 Surface Coeting                                    |  |  |
|                                    | Table 1. Surface Coating  Daily Wei                        | ghted Average                                  |  |
|                                    |  | sion Limitation                                |  |
| Affected<br>Facility               | Lbs. per Gal. of<br>Coating as applied                     | Kgs. per Liter of Coating                      |  |
| ·                                  | (minus water and   | as applied (minus water<br>and exempt solvent) |  |
| Underwater                         | exempt solvent)  |  |  |
| Weapon                             | 3.5  | 0.42   |  |
| Elastomeric<br>Adhesives With      |  |  |  |
| 15 Percent by                      | 6.08   | 0.73   |  |
| Weight Natural                     | 0.06   | 0.73   |  |
| or Synthetic<br>Rubber             |  |  |  |
| Solvent-Based                      |  | 0.77   |  |
| Inorganic Zinc<br>Primer           | 5.41   | 0.65   |  |
| Pre-                               |  |  |  |
| Construction and Interior          | 3.5  | 0.42   |  |
| Primer                             |  |  |  |
| Exterior Epoxy                     | 3.5  | 0.42   |  |
| Primer<br>Navigational             |  |  |  |
| Aids                               | 3.5  | 0.42   |  |
| Sealant for<br>Wire-Sprayed        | 5.4  | 0.648  |  |
| Aluminum                           | 3.4  | 0.040  |  |
| Special                            | 4.08   | 0.49   |  |
| Marking<br>Tack Coat               | 7.00   | 0.54   |  |
| (Epoxies)                          | 5.08   | 0.61   |  |
| Low Activation<br>Interior Coating | 4.08   | 0.49   |  |
| Repair and                         |  |  |  |
| Maintenance<br>Thermoplastic       | 5.41   | 0.65   |  |
| Extreme High                       | 4.08   | 0.49   |  |
| Gloss Coating                      | 4.00   | 0.49   |  |
| Antenna<br>Coating                 | 4.42   | 0.53   |  |
| Antifoulant                        | 3.66   | 0.44   |  |
| High Gloss<br>Alkyd                | 3.5  | 0.42   |  |
| Anchor Chain                       |  |  |  |
| Asphalt Varnish                    | 5.2  | 0.62   |  |
| (Fed. Spec. TT-<br>V-51)           |  |  |  |
| Wood Spar                          |  |  |  |
| Varnish (Fed.<br>Spec. TT-V-       | 4.1  | 0.492  |  |
| 119)                               |  |  |  |
| Dull Black<br>Finish Coating       | 3.7  | 0.444  |  |
| (DOD-P-15146)                      | 5.7  | U. <del>111</del>                              |  |

| Table 1. Surface Coating Industries   |   |   |
|---------------------------------------|---|---|
|                                       | •   | ghted Average<br>sion Limitation  |
| Affected<br>Facility                  | Lbs. per Gal. of<br>Coating as applied<br>(minus water and<br>exempt solvent) | Kgs. per Liter of Coating<br>as applied (minus water<br>and exempt solvent) |
| High Temperature (Fed. Spec. TT-P-28) | 5.41  | 0.65  |
| Pre-Treatment<br>Wash Primer          | 6.5   | 0.78  |

| Tank Coating<br>(DOD-P-23236)                  | 3.5 | 0.42  |
|--|-----|-------|
| Potable Water<br>Tank Coating<br>(DOD-P-23236) | 3.7 | 0.444 |
| Flight Deck<br>Markings<br>(DOD-C-<br>24667)   | 4.2 | 0.504 |
| Vinyl Acrylic<br>Top Coat                      | 5.4 | 0.648 |
| Antifoulant<br>Applied to<br>Aluminum<br>Hulls | 4.5 | 0.55  |

| Table 1. Surface Coating Industries       |   |   |  |  |  |
|---|---|---|--|--|--|
| Affected                                  | Daily Weighted Average<br>VOC Emission Limitation                             |   |  |  |  |
| Facility                                  | Kgs. VOC/Kgs. Solids<br>(Lbs. VOC/Lbs. Solids)                                | Kgs. VOC/Kgs. Coating (Lbs. VOC/Lbs. Coating) |  |  |  |
| 15. Surface Coati                         | 15. Surface Coating of Paper, Film, Foil, Pressure-Sensitive Tape, and Labels |   |  |  |  |
| Paper, Film,<br>and Foil                  | 0.40  | 0.08  |  |  |  |
| Pressure-<br>Sensitive Tape<br>and Labels | 0.20  | 0.067   |  |  |  |

| Table 1. Surface Coating Industries   |   |                                       |  |  |
|---|---|---------------------------------------|--|--|
| Affected  | Daily Weighted Average<br>VOC Emission Limitation |                                       |  |  |
| Facility  | Lbs. per Gal. of<br>Deposited<br>Solids           | Kgs. per Liter of<br>Deposited Solids |  |  |
| 16. Surface Coating   | of Assembly Line Automobi                         | les and Light Duty Trucks             |  |  |
| Primer-Surfacer<br>Operations<br>(Including<br>Application<br>Area, Flashoff<br>Area, and Oven) | 12.0  | 1.44                                  |  |  |
| Topcoat Operations (Including Application Area, Flashoff Area and Oven)                         | 12.0  | 1.44                                  |  |  |
| Final Repair Operations (Including Flashoff Area and Oven)                                      | 4.8   | 0.58                                  |  |  |

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| Table 1. Surface Coating Industries                                  |   |   |                                       |                                   |  |
|--|---|---|---------------------------------------|-----------------------------------|--|
| Affected   |   |   |                                       |                                   |  |
| Facility   | Lbs. per Gal. of<br>Deposited<br>Solids                             |   | Kgs. per Liter of<br>Deposited Solids |                                   |  |
| Combined<br>Primer-Surfacer<br>and Topcoat<br>Operations             | 12.0  |   | 1.44                                  |                                   |  |
| Electrodeposition<br>Primer<br>Operations<br>(Including              | When Solids Turnover Ratio is $R_T \ge 0.16$                        | When $0.040 \le R_T < 0.160$  |                                       | When<br>R <sub>T</sub> <<br>0.040 |  |
| Application<br>Area,<br>Spray/Rinse<br>Stations, and<br>Curing Oven) | 0.084<br>kgs./liter (0.7<br>lbs./gal.)<br>coating solids<br>applied | $0.084 \times 350^{0.160-R}_{T}$<br>kgs./liter (0.084 x $350^{0.160-R}_{T} \times 8.34$ lbs./gal.) coating solids applied |                                       | No<br>VOC<br>emission<br>limit    |  |

|                           | Table 1. Surface Coating Industries |                         |  |  |  |  |
|---------------------------|-------------------------------------|-------------------------|--|--|--|--|
|                           |                                     | ghted Average           |  |  |  |  |
|                           | VOC Emission Limitation             |                         |  |  |  |  |
|                           | Lbs. VOC per Gal. of                | Grams VOC per Liter of  |  |  |  |  |
| Affected Facility         | Adhesive or Adhesive                | Adhesive or Adhesive    |  |  |  |  |
|                           | Primer (minus water                 | Primer (minus water and |  |  |  |  |
|                           | and exempt                          | exempt compounds)       |  |  |  |  |
|                           | compounds)                          |                         |  |  |  |  |
|                           | cialty Adhesive Application F       | Processes               |  |  |  |  |
| a. General Adhesive       | Application Process                 |                         |  |  |  |  |
| Reinforced Plastic        | 1.7                                 | 200                     |  |  |  |  |
| Composite                 |                                     |                         |  |  |  |  |
| Flexible Vinyl            | 2.1                                 | 250                     |  |  |  |  |
| Metal                     | 0.3                                 | 30                      |  |  |  |  |
| Porous Material           | 1.0                                 | 120                     |  |  |  |  |
| (Except Wood)             |                                     | -                       |  |  |  |  |
| Rubber                    | 2.1                                 | 250                     |  |  |  |  |
| Wood                      | 0.3                                 | 30                      |  |  |  |  |
| Other Subtrates           | 2.1                                 | 250                     |  |  |  |  |
| b. Specialty Adhesiv      | e Application Processes             |                         |  |  |  |  |
| Ceramic Tile              | 1.1                                 | 130                     |  |  |  |  |
| Installation              | 1.1                                 | 130                     |  |  |  |  |
| Contact Adhesive          | 2.1                                 | 250                     |  |  |  |  |
| Cove Base                 | 1.3                                 | 150                     |  |  |  |  |
| Installation              | 1.3                                 | 130                     |  |  |  |  |
| Floor Covering            |                                     |                         |  |  |  |  |
| Installation              | 1.3                                 | 150                     |  |  |  |  |
| (Indoor)                  |                                     |                         |  |  |  |  |
| Floor Covering            |                                     |                         |  |  |  |  |
| Installation              | 2.1                                 | 250                     |  |  |  |  |
| (Outdoor)                 |                                     |                         |  |  |  |  |
| Floor Covering            |                                     |                         |  |  |  |  |
| Installation              |                                     |                         |  |  |  |  |
| (Perimeter                | 5.5                                 | 660                     |  |  |  |  |
| Bonded Sheet              |                                     |                         |  |  |  |  |
| Vinyl)                    |                                     |                         |  |  |  |  |
| Metal to                  |                                     |                         |  |  |  |  |
| Urethane/Rubber           | 7.1                                 | 850                     |  |  |  |  |
| Molding or                |                                     |                         |  |  |  |  |
| Casting                   |                                     |                         |  |  |  |  |
| Motor Vehicle             | 2.1                                 | 250                     |  |  |  |  |
| Adhesive                  |                                     |                         |  |  |  |  |
| Motor Vehicle             | 6.3                                 | 750                     |  |  |  |  |
| Weather Strip<br>Adhesive | 0.3                                 | 730                     |  |  |  |  |
| Multipurpose              |                                     |                         |  |  |  |  |
| Construction              | 1.7                                 | 200                     |  |  |  |  |
| Plastic Solvent           |                                     |                         |  |  |  |  |
| Welding (ABS)             | 3.3                                 | 400                     |  |  |  |  |
| welding (ADS)             |                                     |                         |  |  |  |  |

| Table 1. Surface Coating Industries                                 |   |   |  |  |  |
|---|---|---|--|--|--|
| Daily Weighted Average<br>VOC Emission Limitation                   |   |   |  |  |  |
| Affected Facility   | Lbs. VOC per Gal. of<br>Adhesive or Adhesive<br>Primer (minus water<br>and exempt<br>compounds) | Grams VOC per Liter of Adhesive or Adhesive Primer (minus water and exempt compounds) |  |  |  |
| Plastic Solvent<br>Welding (Except<br>ABS)                          | 4.2   | 500   |  |  |  |
| Sheet Rubber<br>Lining Installation                                 | 7.1   | 850   |  |  |  |
| Single-Ply-Roof<br>Membrane<br>Installation/Repair<br>(Except EPDM) | 2.1   | 250   |  |  |  |
| Structural Glazing  | 0.8   | 100   |  |  |  |
| Thin Metal<br>Laminating  | 6.5   | 780   |  |  |  |
| Tire Repair   | 0.8   | 100   |  |  |  |
| Waterproof<br>Resorcinol Glue<br>Application                        | 1.4   | 170   |  |  |  |
| c. Adhesive Primer A  | Application Processes   |   |  |  |  |
| Motor Vehicle<br>Glass Bonding<br>Primer                            | 7.5   | 900   |  |  |  |
| Plastic Solvent<br>Welding Adhesive<br>Primer                       | 5.4   | 650   |  |  |  |
| Single-Ply Roof<br>Membrane<br>Adhesive Primer                      | 2.1   | 250   |  |  |  |
| Other Adhesive<br>Primer  | 2.1   | 250   |  |  |  |

| Table 1. Surface Coating Industries         |   |    |  |  |  |
|---|---|----|--|--|--|
| 18. Fiberglass Boat Manufacturing Materials |   |    |  |  |  |
| For this material —                         | ial — And this application method — This weighted average monomer VOC content (weight percent) limit is – |    |  |  |  |
| Production resin                            | Atomized (spray)  | 28 |  |  |  |
| Production resin                            | Nonatomized   | 35 |  |  |  |
| Pigmented gel coat                          | Any method  | 33 |  |  |  |
| Clear gel coat                              | Any method  | 48 |  |  |  |
| Tooling resin                               | Atomized  | 30 |  |  |  |
| Tooling resin                               | Nonatomized   | 39 |  |  |  |
| Tooling gel coat                            | Any method  | 40 |  |  |  |

#### 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 (85 percent for industrial cleaning solvents, and miscellaneous industrial adhesive operations; and 90 percent for factory surface coating of flat wood paneling, surface coating of metal furniture, large appliance coating, surface coating of miscellaneous metal parts and products, surface coating of miscellaneous plastic parts and products, surface coating of automotive/transportation plastic parts, surface coating of business machine plastic parts, surface coating of

pleasure craft, surface coating of paper, film, foil, pressuresensitive tape, and labels, and surface coating of motor vehicle materials). 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 Subsection C of this Section 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", 450/2-77-008), the procedures specified (EPA Volatile "Measurement of Organic Compounds" (EPA-450/2-78-041), a method approved by 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 emission limits established in Table 1, Item 16 of Subsection C of this Section 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 453/R-08-002, September, 2008.
- 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 or 10 tons in any consecutive 12 calendar months are exempt from the provisions of Subsection C of this Section. Any surface coating facility

with VOC emissions of less than or equal to 15 pounds (6.8 kilograms) per day is exempt from the provisions of Table 1, Items 1, 7, and 15 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 Subsection C of this Section 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<sub>s</sub>) shall be determined using the following calculation.

$$V_s = (1 - E_c/D_s)$$
$$E_s = E_c/V_s$$

- $D_s = 7.36 \ pounds \ volatile \ organic \ compound \ per \ gallon \ volatile \ organic \ compound \ (i.e., \ density \ of \ reference \ solvent)$
- $E_c = \mbox{Emission limit found in Subsection C. of this Section, in terms of pounds per gallon of coating (less water and exempt solvents)} \label{eq:energy}$
- $E_{\text{s}} = \text{Emission limit equivalent to } E_{\text{c}}, \, \text{but in terms of pounds per gallon solids as applied}$
- $V_s = Gallon \ solids \ per \ gallon \ coating \ (less \ water \ and \ exempt \ solvents)$
- 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\*.
- 10. Control techniques for use of industrial cleaning solvents include:

- a. covering open containers and used applicators;
- b. minimizing air circulation around cleaning operations;
- c. properly disposing of used solvent and shop towels;
- d. implementing equipment practices that minimize emissions (e.g., keeping arts cleaners covered, maintaining cleaning equipment to repair solvent leaks, etc.); and
- e. employing cleaning material with a VOC content limit of 50 grams VOC per liter (0.42 lb./gal.), or a composite vapor pressure of 8 millimeters of mercury at 20 degrees Celsius.
- 11. Cleaning operations in the course of the following categories are excluded from the requirements of Paragraph D.10 of this Section:
  - a. aerospace coating;
  - b. wood furniture coating;
- c. application of coatings in shipbuilding and ship repair;
  - d. flexible packaging printing;
  - e. lithographic printing;
  - f. letterpress printing;
  - g. flat wood paneling coating;
  - h. large appliance coating;
  - i. metal furniture coating;
  - j. paper, film and foil coating;
  - k. plastic parts coating;
  - 1. miscellaneous metals parts coating;
  - m. fiberglass boat manufacturing;
- n. application of miscellaneous industrial adhesives; and
  - o. auto and light-duty truck assembly coating.
- 12. VOC content and vapor pressure limits applicable in cleaning activities in fiberglass boat manufacturing are as follows:
- a. VOC cleaning solvents for routine application equipment cleaning shall contain no more than 5 percent VOC by weight, or have a composite vapor pressure of no more than 0.50 millimeters of mercury at 20 degrees Celsius.
- b. Non-VOC solvents shall be used to remove cured resin and gel coat from application equipment.
- 13. When applying adhesives, one of the following application methods must be used:
  - a. electrostatic spray;
  - b. HVLP spray;
  - c. flow coat;

- d. roll coat or hand application, including non-spray application methods similar to hand application or mechanically powered caulking gun, brush, or direct hand application;
  - e. dip coat (including electrodeposition);
  - f. airless spray;
  - g. air-assisted airless spray; and
- h. other adhesive application methods capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.
- E. Testing. Compliance with Subsections A, C, and D of this Section 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 this Section. The records shall be maintained for at least two years and shall include, but not be limited to, the following:
- 1. records of any testing done in accordance with Subsection E of this Section;
- 2. records of the installation and maintenance of 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. Mandatory Work Practices for Surface Coating. The owner/operator of any facility performing factory surface coating shall comply with the following mandatory work practices:
- 1. store all VOC coatings, thinners, and cleaning materials in closed containers;
  - 2. minimize spills and clean up spills immediately;
- 3. convey any coatings, thinners, and cleaning material in closed containers or pipes; and
- 4. close mixing vessels containing VOC coatings and other material except when specifically in use.

#### H. Definitions

Air Dried Coating—any coating that is cured at a temperature below  $90^{\circ}$ C  $(194^{\circ}F)$ .

*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  $60^{\circ}$  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 that contains more than 5 grams of metal particles per liter as applied and that 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.

I. 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 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), LR 35:1102 (June 2009), LR 36:1774 (August 2010), repromulgated LR 36:2031 (September 2010), LR 37:1150 (April 2011).

#### 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 (ft²) (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<sup>2</sup> (1 m<sup>2</sup>), 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<sup>2</sup> (15 m<sup>3</sup>/min per m<sup>2</sup>) 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<sup>2</sup> (20 m<sup>3</sup>/min per m<sup>2</sup>) 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<sup>2</sup> (15 m<sup>3</sup>/min per m<sup>2</sup>) 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 ft² (20 m/min per m²) 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<sup>2</sup> (1 m<sup>2</sup>) 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  $21.6~{\rm ft}^2~(2.0~{\rm m}^2)$  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

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- 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. Applicability. This regulation is applicable to each gasoline handling facility in the parishes of 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. Any parish to which this regulation does not apply remains subject to the requirements of 40 CFR 63, Subpart CCCCCC.
- B. Control Requirements. 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 that reduces such emissions by at least 90 percent.
- C. Approved Vapor Balance System. When a vapor balance system is used to comply with the above vapor recovery system control requirement, the balance system will be assumed to meet the specified control requirement if the following conditions are met.
- 1. A vapor-tight return line having an internal crosssectional area at least one-half that of the liquid line is connected before gasoline is 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.
- D. Alternate Vapor Balance Systems. Other vapor balance arrangements may be accepted if proof of the emission level required in Subsection B of this Section 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.
- E. Exemptions. The following are exempt from the requirements of Subsection B of this Section:
- 1. 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;
- 2. any gasoline outlet in the parish of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee or West Baton Rouge whose throughput is less than 120,000 gallons (454,200 liters) per year, or any gasoline outlet in the parish of Beauregard, Bossier, Caddo, Grant, Jefferson, Lafayette, Lafourche, Orleans, St. Bernard, St. Charles, St. James, St. John the Baptist, or 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 parish of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, or West Baton Rouge, or 42,000 gallons for a facility in the parish of Beauregard, Bossier, Caddo, Grant, Jefferson, Lafayette, Lafourche, Orleans, St. Bernard, St. Charles, St. James, St. John the Baptist, or 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;
- 3. 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; and
- 4. tanks having a capacity of less than 550 gallons used exclusively for the fueling of farm implements and having a submerged fill line.

- F. 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.
- G. Recordkeeping. The owner or operator of any operation that is involved with storing gasoline in any stationary container and required to comply with this Section shall maintain records to verify compliance with this Section. The records shall be maintained for at least two years and shall include, but not be limited to, the following:
- 1. the date of delivery of each shipment of gasoline, and the certificate number and date of certification of each delivery vehicle that delivers a shipment. Any owner or operator subject to this Section shall not accept delivery of gasoline from any gasoline tank truck that does not comply with LAC 33:III.2137.A.2;

[NOTE: All gasoline 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.]

- 2. the date and a description 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, the name of the owner or operator of the tank truck, the truck identification number, the date the problem occurred, and the driver's name shall be recorded as part of the description; and
- 3. records of any testing requested by the administrative authority to prove compliance with this Section or any testing done by the owner or operator on a voluntary basis.
- H. 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), amended by the Office of the Secretary, Legal Affairs Division, LR 36:1534 (July 2010).

#### §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 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:

- a. is a refiner; or
- b. controls, is controlled by, or is under common control with, a refiner; or
- c. 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
- d. 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:

a. is owned or operated by a person that employs 100 or fewer individuals;

- b. is a small business concern as defined in the Small Business Act;
  - c. is not a major stationary source;
- d. does not emit 50 tons or more per year of any criteria or toxic air pollutant; and
- e. emits less than 75 tons per year of all criteria or toxic air 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. Exemption. Any segregated motor vehicle fuel dispensing system used exclusively for the fueling and/or refueling of vehicles equipped with onboard refueling vapor recovery equipment (e.g., initial fueling of new vehicles at automobile assembly plants, refueling of rental cars at rental car facilities, and refueling of flexible fuel vehicles at E85 dispensing pumps), located at a facility subject to this regulation, is exempt from the requirements in Paragraphs B.5 and 6 of this Section.

9. 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;
- 1. 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), LR 34:1890 (September 2008), LR 34:2397 (November 2008), LR 37:1147 (April 2011), amended by the Office of the Secretary, Legal Division, LR 38:2752 (November 2012).

#### §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

- 1. Compliance with this Section shall be determined by applying the following test methods, as appropriate:
- a. 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);
- b. 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. 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 Subsection D of this Section:
- 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.

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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 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), amended by the Office of the Secretary, Legal Affairs Division, LR 34:1891 (September 2008).

#### §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:

- 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 this Section shall service only those delivery trucks/transport vessels complying with LAC 33:III.2137.

#### C. Exemptions

- 1. Gasoline distribution facilities that 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 this Section 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 this Section.
- 3. Gasoline bulk terminals that 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 Subsection B of this Section. Bulk terminals servicing exempted and controlled facilities are required to collect vapors from controlled facilities.

#### D. Compliance

- 1. Compliance with this Section shall be determined by applying the following test methods, as appropriate:
- 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. 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); and
- f. additional performance test procedures, or equivalent test methods, approved by the administrative authority\*.
- 2 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 Subsections B and D of this Section;
- 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.

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# §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 Paragraph A.1 of this Section. 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 this Section.
- 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 Paragraph B.1 of this Section. Items that required repair in order to pass the specified requirements must also be recorded during the annual test procedure.

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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 by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:612 (July 1990), LR 22:1212 (December 1996), amended by the Office of the Secretary, Legal Affairs Division, LR 34:1891 (September 2008).

# 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.B, C, and G. Compliance shall be determined and records shall be kept as specified in LAC 33:III.2115.J, K, and L.
- 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.B, C, and G. Compliance shall be determined and records shall be kept as specified in LAC 33:III.2115.J, K, and L.
- 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), amended by the Office of the Secretary, Legal Affairs Division, LR 37:3232 (November 2011).

#### §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.B, C, and G. Compliance shall be determined and records shall be kept as specified in LAC 33:III.2115.J, K, and L.

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), amended by the Office of the Secretary, Legal Affairs Division, LR 37:3232 (November 2011).

## Subchapter H. Graphic Arts

#### §2143. Graphic Arts (Printing) by Rotogravure, Flexographic, Offset Lithographic, Letterpress, and Flexible Package Printing Processes

#### A. Control Requirements

- 1. After June 20, 2010, 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 Subparagraphs A.1.a-d of this Section. This requirement applies to affected machines on which both surface coating and printing operations are performed. Line-by-line compliance with these emission limits or control requirements is required. Any cross-line averaging or bubbling must receive approval from the administrative authority\*. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production.
- a. The solvent fraction of ink, as it is applied to the substrate, less exempt solvent, shall contain 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.
- b. A volatile organic compound adsorption or incineration system shall have at least 95 percent (by weight) control efficiency across the control device, which can be demonstrated to have an overall capture and abatement reduction of at least 85 percent.
- c. The ink as it is applied to the substrate, less water and exempt solvent, shall contain 60 percent by volume or more of nonvolatile material.
- d. Another control method approved by the administrative authority\* may be employed.
- 2. After June 20, 2010, no person shall operate or allow the operation of a flexible package 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 to the applicable control efficiency specified in Subparagraphs A.2.a-d or e of this Section. Once a piece of equipment is subject to the provisions of this Section, it remains so regardless of future variations in production or transfers to different locations.

- a. A press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device (APCD) whose first installation was prior to December 20, 1987, shall have 65 percent control efficiency.
- b. A press that was first installed prior to March 14, 1995, and that is controlled by an add-on APCD whose first installation was on or after December 20, 1987, shall have 70 percent control efficiency.
- c. A press that was first installed on or after March 14, 1995, and that is controlled by an APCD whose first installation was prior to December 20, 1987, shall have 75 percent control efficiency.
- d. A press that was first installed on or after March 14, 1995, and that is controlled by an add-on APCD whose first installation was on or after December 20, 1987, shall have 80 percent control efficiency.
- e. As an alternative to Subparagraph A.2.a, b, c, or d, a facility shall meet the average VOC content limit on a single press of 0.8 kg VOC/kg solids applied or 0.16 kg VOC/kg materials applied.
- 3. After June 20, 2010, no person shall operate or allow the operation of an offset lithographic or letterpress printing facility having a potential to emit 25 TPY or more of VOC in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parish of Calcasieu or 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 Subparagraphs A.3.a-c of this Section. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production. Determination of potential to emit, for the purposes of applicability, shall be made without respect to any VOC control device.
- a. Control for heatset web offset lithographic processes, letterpress dryers, and the volatilization of inks in a letterpress dryer shall be accomplished by:
- i. a control device with at least 90 percent control efficiency for control devices installed prior to June 20, 2009. The installation date does not change if the control device is later used to control a new or different press;
- ii a control device with at least 95 percent control efficiency for control devices installed on or after June 20, 2009; or

- iii a control device that limits the control device outlet concentration to 20 ppmv or less as hexane on a dry basis.
- b. Control for offset lithographic fountain solution emitting more than 15 pounds per day shall be accomplished as follows:
- i. heatset printing—limit the amount of alcohol by weight to 1.6 percent or less as applied;
- ii. sheet-fed printing—limit the amount of alcohol by weight to 5 percent or less as applied. Sheet-fed presses with sheet size of 11 x 17 inches or smaller or any press with a total fountain solution reservoir of less than 1 gallon are exempt;
- iii. coldset printing—limit the amount of alcohol by weight to 5 percent or less as applied.
- c. Another control method approved by the administrative authority\* may be employed.
- 4. Control for cleaning materials for those facilities where actual emissions from lithographic and letterpress printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.
- a. Cleaning materials shall contain a VOC composite with a vapor pressure of less than 10 mm Hg (0.19 psi) at 20°C or contain less than 70 percent VOC by weight.
- b. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.
- c. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.
- 5. Control for cleaning materials for those facilities where actual emissions from flexible package printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.
- a. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.
- b. Cleaning materials shall be conveyed from one location to another in closed containers or pipes.
- 6. Control for cleaning materials for those facilities where actual emissions from printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.
- a. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.
- b. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder

cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

#### B. Exemptions

- 1. For those facilities where actual emissions from packaging rotogravure and publication rotogravure printing operations are greater than 15 pounds per day (before consideration of controls) and where the potential to emit is less than 25 TPY of VOC on a per press basis before controls, only the cleaning materials control requirements in Paragraph A.6 of this Section are applicable.
- 2. The following equipment or processes are exempt from meeting the requirements of Paragraph A.6 of this Section:
- a. heatset web offset lithographic printing operations and heatset web letterpress printing operations with the potential to emit from the dryer, prior to controls, an amount equal to or less than 25 tons VOC (petroleum ink oil) per year, provided that an enforceable limit on potential emissions is obtained to keep an individual heatset press below the 25 TPY potential to emit threshold;
- b. heatset presses used for book printing and presses with a maximum web width of less than or equal to 22 inches; and
- c. operations with emissions from sheet-fed or coldset webinks, sheet-fed or coldset varnishes, waterborne coatings, and radiation cured materials.
- C. Compliance. The owner/operator of any facility subject to this Section 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 this Section. The

records shall be maintained for at least two years and shall include, but not be limited to, the following:

- 1. records of any testing done in accordance with Subsection C of this Section;
- 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.
- F. Operating, Monitoring, and Maintenance Procedures. Operating, monitoring, and maintenance procedures for the facilities and equipment subject to the requirements of this Section shall be incorporated into the housekeeping plan required by LAC 33:III.2113.A.4.

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## **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);
- (10°C) when d. 50°F 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 that meets the requirements of Paragraph A.1 of this Section.
- 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 Subsection F of this Section;
- 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.

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# 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.

$$C_c = C_{TOC} \times \frac{17.9}{20.9 - \% O_{2d}}$$

where:

 $C_{\rm c}=\text{concentration}$  of TOC (minus methane and ethane) corrected to 3 percent  $O_2,$  dry basis, ppm by volume

- $C_{\text{TOC}} = \text{concentration of TOC}$  (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

$$R = \frac{E_i - E_o}{E_i} \times 100$$

methane and ethane) shall be determined using the following equation.

where:

R = emission reduction, percent by weight

 $E_{i} = mass \ rate \ of \ TOC \ (minus \ methane \ and \ ethane) \ entering \ the control \ device, kilogram \ TOC \ per \ hour$ 

 $E_{\mbox{\tiny 0}}=$  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

$$E_o = K_2 \left( \sum_{j=1}^n C_{oj} M_{oj} \right) Q_o$$

computed using the following equations.

$$E_i = K_2 \left( \sum_{j=1}^n C_{ij} \ M_{ij} \right) Q_i$$

where:

 $C_{ij},\ C_{oj}=$  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

 $Q_{\rm i},\,Q_{\rm o}=$  flow rate of gas at the inlet and outlet of the control device, respectively, dry standard cubic meters per minute

 $K_2 = 2.494~x~10^{\text{-}6}$  (liters per minute) (gram-mole per standard cubic meter) is  $20^{\circ} C$ 

iv. The TOC concentration  $(C_{TOC})$  is the sum of the individual components and shall be computed for each run using the following equation.

$$C_{\text{TOC}} = \sum_{i=1}^{n} C_{i}$$

where:

 $C_{\text{TOC}} = \text{concentration of TOC}$  (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

$$E_{TOC} = K_2 \sum_{i=1}^{n} C_j M_j Q_s$$

the following equation.

where:

 $E_{TOC}=\mbox{emission}$  rate of TOC (minus methane and ethane) in the sample, kilograms per hour

 $K_2=$  constant, 2.494 x  $10^{\text{-}6}$  (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  $20^{\circ}\mathrm{C}$ 

 $C_{\rm j}=$  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

 $M_{\rm j}=$  molecular weight of sample component "j", grams per gram-mole

 $Q_{\text{s}}=\text{vent}$  stream flow rate (scm per minute) at a temperature of  $20^{\circ}\text{C},$  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  $20^{\circ}$ C

 $B_{\rm ws}=$  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  $B_{\rm ws}=0.023$  in order to correct 2.3 percent moisture

 $C_{\rm j}=$  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

 $H_{\rm j}=$  net heat of combustion of sample component "j", kilocalories per gram-mole, based on combustion at  $25\,^{\circ}{\rm C}$  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.

$$TRE = \frac{1}{E_{TOC}} \left[ a + b \left( Q_s \right) + c \left( H_T \right) + d \left( E_{TOC} \right) \right]$$

where:

TRE = TRE index value;

 $E_{TOC}=\mbox{hourly emission}$  rate of TOC (minus methane and ethane), kilograms per hour, as calculated in Subparagraph D.5.d of this Section

 $Q_{s}=\mbox{vent}$  stream flow rate standard cubic meters per minute at a standard temperature of  $20^{\circ}\mbox{C}$ 

 $H_T$  = 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<br>Device Basis                      | Values of Coefficient |       |        |       |
|                |  | a                     | b     | с      | 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 |

| Table 1        |                                  |                       |       |        |       |
|----------------|----------------------------------|-----------------------|-------|--------|-------|
| Type of Stream | Control<br>Device Basis          | Values of Coefficient |       |        |       |
|                |                                  | a                     | b     | С      | d     |
| 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  $\pm 0.5^{\circ}$ C, or alternatively  $\pm 1$  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  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$ °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  $\pm 1$  percent of the temperature being monitored expressed in degrees Celsius or  $\pm 0.5^{\circ}\text{C}$ , 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  $\pm 10$  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  $\pm 1$  percent of the temperature being monitored, or  $\pm 0.5\,^{\circ}\text{C}$ , 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  $\pm 1$  percent of the temperature being measured or  $\pm 0.5^{\circ}$ 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.

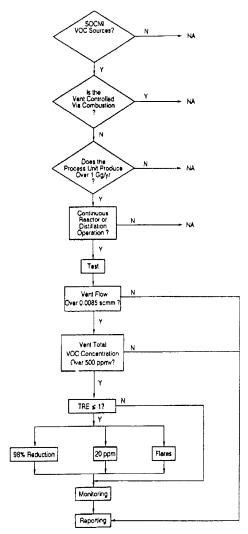
#### F. Reporting/Recordkeeping Requirements

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



April Figure 1. Synthetic organic chemical manufacturing industry reactor/distillation control techniques guideline logic diagram per vent.

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  $\pm 0.5^{\circ}$ 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.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:380 (April 1995), amended LR 22:1212 (December 1996), LR 23:1508, 1510 (November 1997), LR 23:1679 (December 1997), LR 24:1286 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 34:71 (January 2008).

# 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:

Average Flow Rate = 
$$\frac{\sum (Average\ Flow\ Rate\ per\ emission\ event)(annual\ duration\ of\ emission\ event)}{\sum (annual\ duration\ of\ emission\ events)}$$

*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.

Weighted Average Volatility=

[Mass of VOC component i] (mass of VOC component i) (molecularweight of VOC component i)

 $\sum_{i=1}^{n} \left[ \frac{(mass\ of\ VOC\ component\ i)}{(molecular weight of\ VOC\ component\ i)} \right]$ 

#### 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  $\pm 0.5^{\circ}$ C, or alternately  $\pm 1$  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  $\pm 1$  percent of the temperature being monitored expressed in degrees Celsius or  $\pm 0.02$  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  $\pm 1$  percent of the temperature being monitored expressed in degrees Celsius or  $\pm 0.5$ °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  $\pm 10$  percent and a carbon bed temperature monitoring device having an accuracy of  $\pm 1$  percent of the temperature being monitored expressed in degrees Celsius or  $\pm 0.5^{\circ}$ 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  $\pm 1$  percent of the temperature being measured or  $\pm 0.5\,^{\circ}\text{C}.$  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  $\pm 1$  percent of the temperature being measured or  $\pm 0.5\,^{\circ}$ 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.

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### 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, Recordkeeping. and 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.

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### 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 emissions inventory.

*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/m³), 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 vaportight 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<sup>2</sup> per foot (21 cm<sup>2</sup> 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/m³), 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 Compliance 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 Services 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 Services.

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 Services 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 7.5x10<sup>-5</sup> atm-m³/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 start-up 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), LR 37:3232 (November 2011), amended by the Office of the Secretary, Legal Division, LR 38:2752 (November 2012).

# 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

 $\label{eq:Gw} Gw = mass \ of \ VOC \ captured \ and \ delivered \ to \ control \ device \ using \ a \ TTE$ 

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:

$$CE = \frac{(L-F)}{I}$$

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:

$$CE = \frac{G}{G + F_{R}}$$

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:

$$CE = \frac{\left(L - F_{B}\right)}{L}$$

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 Services 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 Services of these changes and a new test may be required.
- C. The source must notify the Office of Environmental Services 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), amended by the Office of the Secretary, Legal Division, LR 38:2753 (November 2012).

#### §2160. Procedures

- A. Except as provided in Subsection C of this Section, the regulations at 40 CFR 51, appendix M, July 1, 2012, 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), LR 34:1391 (July 2008), LR 35:1107 (June 2009), LR 36:2272 (October 2010), LR 37:2990 (October 2011), LR 38:1230 (May 2012), amended by the Office of the Secretary, Legal Division, LR 39:1277 (May 2013).

#### §2199. Appendix A and B

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 <sup>a</sup>  | 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 <sup>c</sup> | Amyl alcohols          |  |

| Table 8                      |                        |  |
|------------------------------|------------------------|--|
| SOCMI Chemicals              |                        |  |
| CAS No <sup>a</sup> Chemical |                        |  |
| 110-58-7                     | Amyl amine             |  |
| 543-59-9                     | Amyl chloride          |  |
| 110-66-7°                    | 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           |  |
| 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        |  |

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| Table 8   |  |  |
|---|--|--|
| SOCMI Chemicals   |  |  |
| CAS No <sup>a</sup>   | Chemical   |  |
| 98-87-3   | Benzyl dichloride                                |  |
| 92-52-4<br>80-05-7  | Biphenyl 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<br>107-88-0   | p-tert-butyl benzoic acid<br>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 Chlorobenzoic acid                 |  |
| 118-91-2, 535-80-8, 74-11-3°<br>2136-81-4, 2136-89-2, 5216- | Chlorobenzotrichloride                           |  |
| 25-1°   | Chiorobenzotrichioride                           |  |
| 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<br>95-49-8   | m-chlorotoluene<br>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                                |  |
| 108-80-5  | Cyanuric acid                                    |  |
| 108-77-0<br>110-82-7  | Cyanuric chloride Cyclohexane                    |  |
| 110-82-7  | Cyclohexanol                                     |  |
| 108-94-1  | Cyclohexanone                                    |  |
| 100-74-1  | Сустопеланоне                                    |  |

| Table 8                                       |  |  |
|---|--|--|
| SOCMI Chemicals  CAS No <sup>a</sup> Chemical |  |  |
| 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,                   | Dichloroaniline                            |  |
| 608-27-5, 608-31-1, 626-43-7,                 |  |  |
| 27134-27-6, 57311-92-9°<br>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<br>75-37-6                            | Diethyl sulfate                            |  |
| 25167-70-8                                    | Difluoroethane Diisobutylene               |  |
| 26761-40-0                                    | Diisodecyl phthalate                       |  |
| 27554-26-3                                    | Diisooctyl phthalate  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 Dinitrotoluene               |  |
| 25321-14-6<br>123-91-1                        | Dioxane                                    |  |
| 646-06-0                                      | Dioxilane                                  |  |
| 122-39-4                                      | Diphenylamine 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°                                     | Ethanolamines                              |  |
| 141-78-6                                      | Ethyl acetate                              |  |
| 141-97-9                                      | Ethyl acetoacetate                         |  |
| 140-88-5<br>75-04-7                           | Ethyl acrylate Ethylamine                  |  |
| 100-41-4                                      | Ethylamine<br>Ethylbenzene                 |  |
| 74-96-4                                       | Ethyl bromide                              |  |
| 9004-57-3                                     | Ethylcellulose                             |  |
| 75-00-3                                       | Ethyl chloride                             |  |
|   | Large chiloride                            |  |

| Table 8              |   |  |
|----------------------|---|--|
| SOCMI Chemicals      |   |  |
| CAS No <sup>a</sup>  | Chemical  |  |
| 105-39-5             | Ethyl chloroacetate   |  |
| 105-56-6<br>74-85-1  | Ethylcyanoacetate   |  |
| 96-49-1              | Ethylene Ethylene carbonate                                       |  |
| 107-07-3             | Ethylene chlorohydrin   |  |
| 107-15-3             | Ethylenediamine  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<br>122-99-6 | Ethylene glycol monomethyl ether acetate                          |  |
| 2807-30-9            | Ethylene glycol monophenyl ether 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 Furfural   |  |
| 98-01-1<br>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<br>74-90-8  | Hexamethylenetetramine 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<br>78-59-1   | Isopentane 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  |  |
| 123-01-3             | Linear alkylbenzene (linear dodecylbenzene)                       |  |
| 110-16-7<br>108-31-6 | Maleic acid Maleic anhydride                                      |  |
| 100-31-0             | ivialete annydride  |  |

| Table 8                      |  |  |
|------------------------------|--|--|
| SOCMI Chemicals              |  |  |
| CAS No <sup>a</sup>          | Chemical                                       |  |
| 6915-15-7                    | Malic acid                                     |  |
| 141-79-7<br>121-47-1         | Mesityl oxide  Metanilic acid                  |  |
| 79-41-4                      | Methacrylic acid                               |  |
| 563-47-3                     | Methalryl chloride                             |  |
| 67-56-1                      | Methanol                                       |  |
| 79-20-9                      | Methyl acetate                                 |  |
| 105-45-3                     | Methyl acetoacetate                            |  |
| 74-89-5                      | Methylamine 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 Nitrobenzoic acid (o, m, and p)   |  |
| 27178-83-2°<br>79-24-3       | Nitrobenzoic acid (o, iii, and p)  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, | Phenolsulfonic acids                           |  |
| 1333-39-7°                   |  |  |
| 91-40-7                      | Phenyl anthranilic acid                        |  |
| ( <sup>b</sup> )             | Phenylenediamine                               |  |
| 75-44-5                      | Phosgene                                       |  |
| 85-44-9                      | Phthalic anhydride                             |  |
| 85-41-6                      | Phthalimide                                    |  |
| 108-99-6                     | b-picoline                                     |  |
| 110-85-0                     | Piperazine                                     |  |
| 9003-29-6, 25036-29-7°       | Polybutenes                                    |  |
| 25322-68-3                   | Polyethylene glycol                            |  |

Section 2199

| CAS No*   Chemical   | Table 8    |                                 |  |
|--|------------|---------------------------------|--|
| 25322.69-4   Polypropylene glycol   123-38-6   Propional dehyde   Propionic acid   17-10-8   Propionic acid   17-10-8   Propylamine   1540-54   Propylamine   1540-54   Propylene   1540-54   Propylene   17-10-8   Propylene   17-10-8   Propylene   17-10-1   Propylene   17-10-1   Propylene   17-10-1   Propylene dichloride   17-10-1   Propylene dichloride   17-10-1   Propylene dichloride   17-10-1   Propylene dichloride   17-10-1   Propylene oxide   110-86-1   Pyridine   106-51-4   Quinone   108-46-3   Resorcinol   27138-57-4   Resorcylic acid   38-37-4   Resorcylic acid   38-32-1   Sodium acetate   38-32-1   Sodium certate   3902-62-3   Sodium chroxacetate   3902-62-3   Sodium c |            | OCMI Chemicals                  |  |
| 123-38-6   |            | - 1 11                          |  |
| Propionic acid   Propionic acid   Propyl alcohol   Propylene   Pr |            |                                 |  |
| 107-10-8   |            |                                 |  |
| 107-10-8   |            | 1                               |  |
| S40-S4-5   Propylence   Propylence   |            |                                 |  |
| 115-07-1   |            |                                 |  |
| Propylene chlorohydrin   Propylene dichloride   Propylene dichlori |            | 1.4                             |  |
| Propylene dichloride   Propylene glycol  |            |                                 |  |
| 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 carboxymethyl cellulose           3926-62-3         Sodium carboxymethyl cellulose           3926-62-3         Sodium chloroacetate           141-53-7         Sodium formate           139-02-6         Sodium formate           110-44-1         Sorbic acid           110-45-5         Styrene           110-15-6         Succinic acid           110-15-73         Sulfanilic acid           126-33-0         Sulfolane           1401-55-4         Tannic acid           100-21-0         Terphthalic acid           19-34-5°         Tetrachlorophthalic anhydride           78-00-2         Tetrachlorophthalic anhydride           78-00-2         Tetrachlylead           117-08-8         Tetrachlylead           110-61-1         Tetramethylendiamine           10-18-9         Tetramethylendiamine           10-18-9         Tetramethylendiamine <th></th> <th></th>  |            |                                 |  |
| 75-56-9  |            |                                 |  |
| 110-86-1   |            |                                 |  |
| 108-51-4   Quinone   Resorcinol   27138-57-4   Resorcylic acid   69-72-7   Salicylic acid   69-72-7   Salicylic acid   69-72-7   Salicylic acid   69-72-7   Sodium acetate   532-32-1   Sodium benzoate   9004-32-4   Sodium carboxymethyl cellulose   3926-62-3   Sodium formate   139-02-6   Sodium penate   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   179-34-5   Tetrachloroethanes   117-08-8   Tetrachloroethanes   117-08-8   Tetrachloroethanes   117-08-8   Tetrachloroethanes   119-64-2   Tetramethyl lead   110-60-1   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Toluene-2,4-diamore   1333-07-9   Toluene-2,4-diamore   1333-07-9   Toluene-Sulfonamide   140-15-69-4   Toluenesulfonamide   140-15-69-4   Trichloroethane   171-18-8   Toluenesulfonamide   171-18-9   T |            |                                 |  |
| 27138-57-4   Resorcylic acid   69-72-7   Salicylic acid   127-09-3   Sodium acetate   532-32-1   Sodium carboxymethyl cellulose   392-662-3   Sodium carboxymethyl cellulose   392-662-3   Sodium carboxymethyl cellulose   141-53-7   Sodium carboxymethyl cellulose   100-42-6   Sodium chloroacetate   110-44-1   Sorbic acid   100-42-5   Styrene   110-15-6   Succinic acid   110-61-2   Succinonitrile   121-57-3   Sulfanilic acid   110-61-2   Succinonitrile   121-57-3   Sulfanilic acid   110-61-2   Succinonitrile   121-57-3   Sulfanilic acid   110-02-10   Terephthalic acid   117-08-8   Tetrachloroethanes   117-08-8   Tetrachloroethanes   117-08-8   Tetrachlorophthalic anhydride   118-64-2   Tetrahydronaphthalene   185-43-8   Tetrahydronaphthalene   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Toluene-2,4-diisocyanate   Misure   1333-07-9   Toluene-3,4-diisocyanate   Misure   1333-07-9   Toluene-sulfonic acids   98-59-9   Toluenesulfonic acids   98-59-9   Toluenesulfonic acids   1,1,2-trichloroethane   1,2,3-trichloroethane   1,2,3-trichloroethane   1,2,3-trichloroethane   1,2,2-trifluoroethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-trichlorofluoromethane   1,2,3-tri | 106-51-4   | Quinone                         |  |
| Salicylic acid   127-09-3   Sodium acetate   Sodium acetate   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   Succinic acid   121-57-3   Sulfanilic acid   121-57-3   Sulfanilic acid   120-21-0   Terephthalic acid   100-21-0   Terephthalic acid   179-34-5°   Tetrachloropthhalic anhydride   Tetramethyl lead   119-64-2   Tetramethyl lead   Tetramethyl lead   110-61-1   Tetramethyl lead   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   1104-15-4°   Toluene-2,4-diisocyanate   26471-62-5   Toluene diisocyanates (mixture)   1333-07-9   Toluenesulfonic acids   98-59-9   Toluenesulfonic acids   98-59-9   Toluenesulfonic holoride   104-15-4°   Toluenesulfonic holoride   11,1,2-trichloroethane   79-00-5   1,1,2-trichloroethane   11,2-trichloroethane   112-27-6   Triethylene glycol dimethyl ether   175-69-4   Trichlorofluoromethane   112-27-6   Triethylene glycol dimethyl ether   175-69-4   Triethylene glycol dimethyl ether   175-69-47   T | 108-46-3   | Resorcinol                      |  |
| 127-09-3   | 27138-57-4 | Resorcylic acid                 |  |
| Sodium benzoate  | 69-72-7    | Salicylic acid                  |  |
| 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   Succinic acid   121-57-3   Sulfanilic acid   126-33-0   Sulfolane   1401-55-4   Tannic acid   100-21-0   Terephthalic acid   179-34-5°   Tetrachloroethanes   117-08-8   Tetrachlorophthalic anhydride   185-43-8   Tetrahydronaphthalic anhydride   185-43-8   Tetrahydronaphthalic anhydride   185-43-8   Tetramethyl lead   110-60-1   Tetramethylenediamine   110-18-9   Tetramethylenediamine   108-88-3   Toluene   2,4-diisocyanate   26471-62-5   Toluene-2,4-diisocyanate   26471-62-5   Toluene-2,4-diisocyanate   104-15-4°   Toluene-2,4-diisocyanate   104-15-4°   Toluenesulfonyl chloride   1333-07-9   Toluenesulfonyl chloride   1333-07-9   Toluenesulfonyl chloride   1333-07-9   Toluenesulfonyl chloride   14,12-trichloroethane   17-55-6   1,1,1-trichloroethane   1,1,2-trichloroethane   1,2,3-trichloroethane   1,2,3-trichloropropane   1,1,2-trichloroethane   1,2,3-trichloropropane   1,1,2-trichloroethane   1,2,3-trichloropropane   1,1,2-trichloroethane   1,2,3-trichloroethane   1,3-trichloroethane   1,3-trichloroet | 127-09-3   | Sodium acetate                  |  |
| 3926-62-3   Sodium chloroacetate   | 532-32-1   | Sodium benzoate                 |  |
| 141-53-7   Sodium formate   139-02-6   Sodium phenate   110-44-1   Sorbic acid   Sorbic acid   110-42-5   Styrene   110-15-6   Succinic acid   110-61-2   Succinonitrile   Succinonitrile   121-57-3   Sulfanilic acid   126-33-0   Sulfolane   1401-55-4   Tannic acid   100-21-0   Terephthalic acid   179-34-5°   Tetrachloroethanes   117-08-8   Tetrachloroethanes   117-08-8   Tetrachlorophthalic anhydride   119-64-2   Tetrahydronapthalene   185-43-8   Tetrahydrophthalic anhydride   110-60-1   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   108-88-3   Toluene   2,4-diimine   26471-62-5   Toluene 2,4-diisocyanate   1333-07-9   Toluene-2,4-diisocyanate   104-15-4°   Toluenesulfonic acids   98-59-9   Toluenesulfonic acids   79-00-5   1,1,2-trichloroethane   79-00-5   1,1,2-trichloroethane   79-01-6   Trichloroethylene   11,2-trichloroethane   11, | 9004-32-4  | Sodium carboxymethyl cellulose  |  |
| 139-02-6   Sodium phenate   110-44-1   Sorbic acid   100-42-5   Styrene   110-15-6   Succinic acid   110-15-6   Succinic acid   110-15-6   Succinic acid   110-15-6   Succinic acid   121-57-3   Sulfanilic acid   126-33-0   Sulfolane   1401-55-4   Tannic acid   100-21-0   Terephthalic acid   79-34-5°   Tetrachloroethanes   117-08-8   Tetrachlorophthalic anhydride   78-00-2   Tetrathyl lead   119-64-2   Tetrahydrophthalic anhydride   75-74-1   Tetramethyl lead   110-60-1   Tetramethyl lead   110-89   Tetramethylenediamine   110-18-9   Tetramethylenediamine   110-18-9   Tetramethylenediamine   108-88-3   Toluene   2,4-disocyanate   333-07-9   Toluene-2,4-disocyanate   1333-07-9   Toluenesulfonamide   104-15-4°   Toluenesulfonic acids   98-59-9   Toluenesulfonic acids   98-59-9   Toluenesulfonic problem   1,1,1-trichloroethane   79-00-5   1,1,2-trichloroethane   1,1,2-trichloroethane   1,1,2-trichloroethane   1,2,3-trichloropopane   1,1,2-trichloroethane   1,2,3-trichloropopane   1,1,2-trichloroethane   1,2,3-trichloropopane   1,1,2-trichloroethane   1,2,3-trichloropopane   1,1,2-trichloroethane   1,2,3-trichloroethane   1,2,3-trichloroethane  | 3926-62-3  | Sodium chloroacetate            |  |
| 110-44-1   | 141-53-7   | Sodium formate                  |  |
| 100-42-5   Styrene   | 139-02-6   | 1                               |  |
| 110-15-6   |            | Sorbic 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°   Tetrachloroethanes     117-08-8   Tetrachlorophthalic anhydride     78-00-2   Tetraethyl lead     119-64-2   Tetrahydronapthalene     85-43-8   Tetrahydronapthalene     85-43-8   Tetramethyl lead     110-60-1   Tetramethylenediamine     110-18-9   Tetramethylenediamine     110-18-9   Tetramethylenediamine     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°   Toluenesulfonyl chloride     26915-12-8   Toluenesulfonyl chloride     26915-12-8   Toluenesulfonyl chloride     79-00-5   1,1,2-trichloroethane     79-01-6   Trichloroethane     79-01-6   Trichloroethane     79-01-6   Trichloroethane     79-01-6   Trichloroethane     79-01-6   Trichloropane     76-13-1   1,1,2-trichloroethane     112-44-8   Triethylamine     112-49-2   Triethylene glycol dimethyl ether     7755-94-7   Triisobutylene     775-50-3   Trimethylamine     108-05-4   Vinyl acetate     75-35-4   Vinyl dene     1330-20-7   Xylenes (mixed)     956-47-6   O-xylene  |            |                                 |  |
| 121-57-3   |            |                                 |  |
| 126-33-0   Sulfolane     1401-55-4   Tannic acid     179-34-5°   Tetrachloroethanes     117-08-8   Tetrachlorophthalic anhydride     78-00-2   Tetrathyl lead     119-64-2   Tetrahydronapthalene     85-43-8   Tetramethyl lead     110-60-1   Tetramethyl lead     110-61   Tetramethylenediamine     110-18-9   Tetramethylenediamine     110-18-9   Tetramethylenediamine     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   Toluenesulfonia acids     98-59-9   Toluenesulfonic acids     98-59-9   Toluenesulfonic acids     98-59-9   Toluenesulfonic acids     87-61-6, 108-70-3, 120-82-1°   Trichloroethane     79-00-5   1,1,2-trichloroethane     79-01-6   Trichloroethylene     75-69-4   Trichloroethylene     75-69-4   Trichloroptopopane     121-44-8   Triethylene     122-7-6   Triethylene     175-50-3   Trimethylamine     112-49-2   Triethylene     775-50-3   Trimethylamine     108-05-4   Vinyl acetate     75-01-4   Vinyl chloride     1330-20-7   Xylenes (mixed)     956-47-6   O-xylene  |            |                                 |  |
| 1401-55-4  |            |                                 |  |
| Terephthalic acid  |            |                                 |  |
| 79-34-5°         Tetrachloroethanes           117-08-8         Tetrachlorophthalic anhydride           78-00-2         Tetraethyl lead           119-64-2         Tetrahydronapthalene           85-43-8         Tetrahydrophthalic anhydride           75-74-1         Tetramethylenediamine           110-60-1         Tetramethylenediamine           110-18-9         Tetramethylenediamine           108-88-3         Toluene           95-80-7         Toluene           584-84-9         Toluene-2,4-diisocyanate           26471-62-5         Toluene diisocyanates (mixture)           1333-07-9         Toluenesulfonic acids           98-59-9         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethane           79-01-6         Trichlorofluoromethane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         Triethylamine           112-27-6         Triethylamine           112-49-2         Triethylamine           112-49-2   |            |                                 |  |
| 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-diasocyanate   26471-62-5   Toluene diisocyanates (mixture)   1333-07-9   Toluenesulfonamide   104-15-4°   Toluenesulfonic acids   98-59-9   Toluenesulfonyl chloride   26915-12-8   Toluidines   87-61-6, 108-70-3, 120-82-1°   Trichlorobenzenes   71-55-6   1,1,1-trichloroethane   79-00-5   1,1,2-trichloroethane   79-01-6   Trichloroethylene   75-69-4   Trichlorofluoromethane   121-44-8   Triethylamine   112-27-6   Triethylamine   112-49-2   Triethylene glycol dimethyl ether   7756-94-7   Triisobutylene   775-03-3   Trimethylamine   108-05-4   Vinyl acetate   75-03-3   Vinyl acetate   75-03-4   Vinyl chloride   25013-15-4   Vinyl toluene   1330-20-7   Xylene   Vxylene   Vxylene   Vxylene   1330-20-7   Xylene   Vxylene   V |            |                                 |  |
| 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°         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         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-trichloro-1,2,2-trifluoroethane           112-44-8         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           775-69-4-7         Triisobutylene           775-60-3         Trimethylamine <td< th=""><th></th><th colspan="2"></th></td<>  |            |                                 |  |
| Tetrahydronapthalene   |            | · · ·                           |  |
| 85-43-8         Tetrahydrophthalic anhydride           75-74-1         Tetramethyl lead           110-60-1         Tetramethylenediamine           110-18-9         Tetramethylenediamine           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         Toluenesulfonic acids           98-59-9         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         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           112-44-8         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           775-69-4-7         Triisobutylene           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-0  |            | ·                               |  |
| 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°         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         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           112-44-8         Triethylamine           112-49-2         Triethylene glycol dimethyl ether           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7  |            | · · ·                           |  |
| 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°         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethane           79-01-6         Trichlorofluoromethane           75-69-4         Trichlorofluoromethane           76-13-1         1,2,3-trichloropropane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         Triethylamine           112-49-2         Triethylene glycol dimethyl ether           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6   |            |                                 |  |
| 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           104-15-4c         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1c         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           112-44-8         Triethylamine           112-49-2         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         0-xylene  |            | 7                               |  |
| 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           104-15-4c         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1c         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           112-44-8         Triethylamine           112-49-2         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         0-xylene  | 110-18-9   | Tetramethylethylenediamine      |  |
| 584-84-9         Toluene-2,4-diisocyanate           26471-62-5         Toluene diisocyanates (mixture)           1333-07-9         Toluenesulfonamide           104-15-4°         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethylene           75-69-4         Trichlorofluoromethane           96-18-4         1,2,3-trichloropropane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         Triethylamine           112-27-6         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           775-6-94-7         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         0-xylene  | 108-88-3   |                                 |  |
| 26471-62-5         Toluene diisocyanates (mixture)           1333-07-9         Toluenesulfonamide           104-15-4°         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethylene           75-69-4         Trichlorofluoromethane           96-18-4         1,2,3-trichloropropane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         Triethylamine           112-27-6         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           775-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         0-xylene  | 95-80-7    | Toluene-2,4-diamine             |  |
| Toluenesulfonamide   | 584-84-9   | Toluene-2,4-diisocyanate        |  |
| 104-15-4°         Toluenesulfonic acids           98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethylene           75-69-4         Trichlorofluoromethane           96-18-4         1,2,3-trichloropropane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         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         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         o-xylene  | 26471-62-5 | Toluene diisocyanates (mixture) |  |
| 98-59-9         Toluenesulfonyl chloride           26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethylene           75-69-4         Trichlorofluoromethane           96-18-4         1,2,3-trichloropropane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         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   |            |                                 |  |
| 26915-12-8         Toluidines           87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethylene           75-69-4         Trichlorofluoromethane           96-18-4         1,2,3-trichloropropane           76-13-1         1,1,2-trichloro-1,2,2-trifluoroethane           112-44-8         Triethylamine           112-27-6         Triethylene glycol           112-49-2         Triethylene glycol dimethyl ether           775-6-94-7         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   |            |                                 |  |
| 87-61-6, 108-70-3, 120-82-1°         Trichlorobenzenes           71-55-6         1,1,1-trichloroethane           79-00-5         1,1,2-trichloroethylene           79-01-6         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           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         0-xylene  |            | ž .                             |  |
| 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           775-6-94-7         Triisobutylene           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         o-xylene   |            |                                 |  |
| 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   |            |                                 |  |
| 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         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         o-xylene  |            |                                 |  |
| 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           75-50-3         Trimethylamine           108-05-4         Vinyl acetate           75-01-4         Vinyl chloride           75-35-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         o-xylene   |            |                                 |  |
| 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  |            | ·                               |  |
| 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   |            |                                 |  |
| 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   |            |                                 |  |
| 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  |            |                                 |  |
| 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  |            | 1 ,                             |  |
| 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   |            |                                 |  |
| 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  |            |                                 |  |
| 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   |            |                                 |  |
| 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  |            | ·                               |  |
| 75-35-4         Vinylidene chloride           25013-15-4         Vinyl toluene           1330-20-7         Xylenes (mixed)           956-47-6         o-xylene   |            | ·                               |  |
| 25013-15-4       Vinyl toluene         1330-20-7       Xylenes (mixed)         956-47-6       o-xylene   |            | ·                               |  |
| 1330-20-7 Xylenes (mixed)<br>956-47-6 o-xylene   |            |                                 |  |
| 956-47-6 o-xylene  |            |                                 |  |
| · ·  |            |                                 |  |
| 100 72 J PAYION  | 106-42-3   | p-xylene                        |  |

| Table 8<br>SOCMI Chemicals |          |  |
|----------------------------|----------|--|
| CAS No <sup>a</sup>        | Chemical |  |
| 1300-71-6                  | Xylenol  |  |
| 1300-73-8                  | Xylidine |  |

- <sup>a</sup> 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.
- <sup>b</sup> No CAS number(s) have been assigned to this chemical, its isomers, or mixtures containing these chemicals.
- <sup>c</sup> 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.

## B. Appendix B, Louisiana Consolidated Fugitive Emissions Program (LCFEP)

Through a memorandum of understanding signed in 1996, the Louisiana Department of Environmental Quality (LDEQ) entered into an agreement with the U.S. Environmental Protection Agency (EPA) Region 6 to administer a program titled the Louisiana Consolidated Fugitive Emissions Program (LCFEP). The agreement established guidelines for the consolidation of multiple leak detection and repair (LDAR) programs at industrial facilities into a single program. At facilities that are subject to multiple LDAR standards, LCFEP provides the option of consulting a prioritized stringency table of programs in order to determine the overall most stringent program applicable to the facility, and then administer that program solely in lieu of implementing all fugitive programs simultaneously.

Under the current agreements between EPA and LDEQ, and between LDEQ and individual facilities, participating industry conducts the most stringent LDAR program and submits a single report, greatly reducing the regulatory burden created by overlapping state and federal LDAR programs.

The governing memorandum of understanding states:

State and EPA Region 6 agree to implement and enforce fugitive emission program requirements in accordance with the Louisiana Fugitive Emission Program Consolidation Guidelines to provide a mechanism for consolidating overlapping state and federal equipment leak programs in agreement with the affected source. EPA Region 6 and the State accept federal and state enforceability of the consolidated program. The State and EPA Region 6 further agree that compliance with a consolidated program in accordance with the Guidelines will be considered compliance with each of the fugitive emission programs being consolidated. Furthermore, it is understood that an affected source's noncompliance with the consolidated program requirements may subject the affected source to enforcement action for one or more of the requirements of fugitive emissions programs being consolidated. This agreement will be implemented only through a Source Notice and Agreement signed by and specific to each affected source. If in the future, a new federal standard is promulgated (i.e., consolidated air rule, MACT, etc.) that could potentially change the established Guidelines, the Guidelines will be revisited and modified as

The Source Notice and Agreement (SNA) is a memorandum submitted by an interested facility which contains a detailed list of programs to be consolidated. Consolidation is done on either a unit-by-unit or a facility-wide basis. The SNA is required to be signed by a facility representative meeting EPA's responsible official designation, defined under 40 CFR 63.2. Once the SNA is signed by the facility and accepted by LDEQ, the agreement is considered to be in effect for compliance purposes. SNAs are accepted or denied based on the correctness of the consolidation table, and the signature of a proper representative.

Facilities operating a consolidated fugitive program must abide by the program's consolidation guidelines. The guidelines consist of a set of rules called the workpractice terms and conditions and the stringency table (Table 9) of this Appendix.

#### Louisiana Fugitive Emission Program Consolidation Guidelines

#### **Workpractice Terms and Conditions**

These terms and conditions are to be used in conjunction with the stringency table (Table 9) of this Appendix. Of the applicable equipment leak programs being consolidated, the program highest in the table hierarchy is to be considered the overall most stringent program under the guidelines. The guidelines may be used only in accordance with a SNA or a Title V permit.

#### Applicability and Exemptions

The consolidated program shall apply to the combined universe of components subject to any of the programs being consolidated.

The consolidation of fugitive programs shall be conducted at a minimum of the process unit level, and may also be on a facility-wide basis.

Consolidation of RCRA programs shall first be approved by LDEQ's Waste Permits Division.

Component types which do not require periodic monitoring under the overall most stringent program, shall be monitored as required by the most stringent requirements of any other program being consolidated and will not be exempted.

The consolidated program shall include any exemptions based on size of component available in any of the programs being consolidated.

The consolidated program cannot be used to replace requirements for area monitoring under the Vinyl Chloride NESHAP.

For any compressor subject to a federal rule requiring a seal system including barrier fluid, sensor, and alarm, periodic monitoring of compressors may not be used in lieu of the seal system requirements, regardless of the overall most stringent program.

#### **Leak Definitions**

Leak definitions are based on the overall most stringent program as determined from Table 9 of this Appendix.

Phase-in periods allowed under federal regulations are not eliminated as long as there is no backsliding of existing monitoring programs.

#### Monitoring Frequency

Monitoring frequency shall be based on the overall most stringent program as determined from Table 9 of this Appendix.

Annual monitoring shall be defined as once every four quarters, regardless of the overall most stringent program. Some allowance may be made in the first year of the consolidation in order to allow for transition from existing monitoring schedules.

#### Calibration

Use of dilution device for calibration, as defined in method 21, is acceptable.

#### **Identification of Components**

All leaking components must be tagged.

If the Benzene NESHAP and a more stringent program are applicable, the overall most stringent program prevails and physical tagging of components is therefore not required. Identification, either by list or location (area or group) of affected components is acceptable.

#### Leak Performance

The determination of leak performance is based on the overall most stringent program as determined from Table 9 of this Appendix.

#### Repair

Repair period requirements are always first attempt within 5 days of detecting the leak and final repair within 15 days of detecting the leak, regardless of the overall most stringent program.

#### Post Repair

Post repair inspection consists of remonitoring once within 3 months after repair of leaks, regardless of the overall most stringent program.

#### Recordkeeping and Reporting

Recordkeeping and reporting information requirements shall be based on the overall most stringent program as determined from Table 9 of this Appendix. Reporting frequency shall be semiannual regardless of the overall most stringent program.

Reports shall include records for any monitoring performed within the semiannual reporting period.

### Louisiana Consolidated Fugitive Emission Program Stringency Table Stringency Table (Table 9)

This stringency table is to be used in conjunction with the workpractice terms and conditions. Consolidation is done between the groups listed. Of the applicable equipment leak programs being consolidated, the program in the highest group in the table hierarchy is to be considered the overall most stringent program under the guidelines. Referencing Subparts shall comply with the referenced program in the manner required by the provisions of the referencing Subpart. The guidelines may be used only in accordance with a SNA or a Title V permit. Programs shall be consolidated on a unit-wide or a facility-wide basis.

#### Table 9 Stringency Table

- 40 CFR 65 Subpart F Consolidated Air Rule
- 40 CFR 63 Subpart H SOCMI HON MACT and Referencing Subparts
  - 40 CFR 63 Subpart EEEE Organic Liquids Distribution (Non-Gasoline) MACT (HON Option)
  - 40 CFR 63 Subpart UUUU Cellulose Products MACT (HON Option)
  - o 40 CFR 63 Subpart W Polymers and Resins II MACT
  - 40 CFR 63 Subpart PPP Polyether Polyols Production MACT
- 40 CFR 63 Subpart UU General MACT for Equipment Leaks Control Level II and Referencing Subparts
  - 40 CFR 63 Subpart YY Generic MACT (Acetal Resins Production, Acrylic and Modacrylic Fibers Production, Cyanide Chemicals Manufacturing, Polycarbonates Production, Ethylene Processes) (UU Option)
  - 40 CFR 63 Subpart OOO Amino/Phenolic Resins Manufacturing MACT
  - 40 CFR 63 Subpart EEEE Organic Liquids Distribution (Non-Gasoline) MACT (Subpart UU Option)
  - 40 CFR 63 Subpart FFFF Miscellaneous Organic Chemical Manufacturing (Subpart UU Option)
  - 40 CFR 63 Subpart UUUU Cellulose Products MACT (Subpart UU Option)
  - 40 CFR 63 Subpart GGGGG Site Remediation MACT (Subpart UU Option)
  - 40 CFR 63 Subpart HHHHH Miscellaneous Coating Manufacturing MACT (Subpart UU Option)
- 40 CFR 63 Subpart U Polymers and Resins I, Elastomer MACT
- 40 CFR 63 Subpart GGG Pharmaceuticals Production MACT
- 40 CFR 63 Subpart MMM Pesticide Active Ingredient Production MACT
- Louisiana MACT Determination for Non-HON Sources w/ Consent Decree Enhancements
- Louisiana MACT Determination for Refineries w/ Consent Decree Enhancements
- 40 CFR 60 Subpart VVa NSPS for Equipment Leaks In SOCMI Facilities
  - 40 CFR 60 Subpart GGGa NSPS for Equipment Leaks in Petroleum Refineries
- Louisiana MACT Determination for Non-HON Sources
- Louisiana MACT Determination for Refineries
- LAC 33:III.2122 Louisiana Fugitive Emission Control for Nonattainment
- 40 CFR 63 Subpart CC Refining MACT Modified HON option
- 40 CFR 61 Subpart F National Emission Standard for Vinyl Chloride
- 40 CFR 61 Subpart V National Emission Standard for Equipment Leaks and Referencing Subparts
  - 40 CFR 61 Subpart J National Emission Standard for Equipment Leaks of Benzene
- 40 CFR 63 Subpart HH Oil and Natural Gas Production MACT

#### Table 9 Stringency Table

- 40 CFR 60 Subpart VV NSPS for Equipment Leaks In SOCMI Facilities
  - 40 CFR 60 Subpart GGG NSPS for Equipment Leaks in Petroleum Refineries
  - 40 CFR 60 Subpart KKK NSPS for Equipment Leaks in Onshore Natural Gas Processing Plants
  - o 40 CFR 63 Subpart CC Refinery MACT NSPS Option
- 40 CFR 63 Subpart TT General MACT for Equipment Leaks Control Level I and Referencing Subparts
  - 40 CFR 63 Subpart EEEE Organic Liquids Distribution (Non-Gasoline) MACT (Subpart TT Option)
  - 40 CFR 63 Subpart FFFF Miscellaneous Organic Chemical Production and Processes MACT (Subpart TT Option)
  - 40 CFR 63 Subpart GGGGG Site Remediation MACT (Subpart TT Option)
  - 40 CFR 63 Subpart HHHHHH Miscellaneous Coating Manufacturing MACT (Subpart TT Option)
  - 40 CFR 63 Subpart YY Generic MACT (Acetal Resins Production, Acrylic and Modacrylic Fibers Production, Cyanide Chemicals Manufacturing, and Polycarbonates Production) (TT Option)
- 40 CFR 264 RCRA Subpart BB (LAC 33:V.1717.Subchapter B)
- 40 CFR 265 RCRA Subpart BB (LAC 33:V.4561.Subchapter R)
- LAC 33:III.2121 Louisiana Fugitive Emission Control
- 40 CFR 63 Subpart III Flexible Polyurethane Foam Production MACT
- 40 CFR 63 Subpart R Gasoline Distribution Terminals MACT and Referencing Subpart
  - 40 CFR 63 Subpart HHHHH Miscellaneous Coating Manufacturing MACT (Subpart R Option)
- 40 CFR 63 Subpart YY Generic MACT (Hydrogen Fluoride Manufacturing)

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), amended by the Office of the Secretary, Legal Division, LR 39:2250 (August 2013).

# Chapter 22. Control of Emissions of Nitrogen Oxides (NO<sub>x</sub>)

#### §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*, as defined in Subsection B of this Section, 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. Exempt sources in a facility shall not be included in the determination of whether it is an affected facility.

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 overcontrolled (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 compressionignited, 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 a maximum rated capacity greater than or equal to 40 MMBtu/hour and an ozone season average heat input less than or equal to 12.5 MMBtu/hour, using a 30-day rolling average; or in the region of influence with a maximum rated capacity greater than or equal to 80 MMBtu/hour and an ozone season average heat input less than or equal to 25 MMBtu/hour, using a 30-day rolling average.

*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*—except as provided in LAC 33:III.2202, the period May 1 to September 30, inclusive, of each year.

*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 daily, of all hourly data for the last 30 days for an affected point source. At the beginning of each ozone season, use one of the following methods to calculate the initial 30-day averages:

- a. calculate and record the average of all hourly readings taken during the first day of the ozone season for day one, then the average of all hourly readings taken during the first and second days for day two, and so on until the first full 30-day average falling entirely within the ozone season is reached;
- b. calculate and record a 30-day rolling average for day one of the ozone season using the hourly readings from that day and the previous 29 calendar days, for the second day of the ozone season using the readings from the first two ozone season days and the preceding 28 calendar days, and so on until the first full 30-day average falling entirely within the current ozone season is reached; or
- c. calculate and record a 30-day rolling average for day one of the ozone season using the hourly readings from that day and the last 29 days of the previous ozone season, for the second day of the ozone season using the readings from the first two current ozone season days and the last 28 days of the previous ozone season, and so on until the first full 30-day average falling entirely within the current ozone season is reached.

*Totalizing Fuel Meter*—a meter or metering system that provides a cumulative measure of fuel consumption.

Trading Allowances—the tons of NO<sub>x</sub> 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<sub>x</sub> 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, as defined in Subsection B of this Section, 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 3 hours per day, using a 30-day rolling average, 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 Subsections H and I of this Section 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 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. 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.

| Category  Electric Power Generating System Boilers: | ors for Sources in the Bate Area Maximum Rated Capacity  >/= 40 to <80 | NO <sub>x</sub> Emission Factor <sup>a</sup> |
|---|--|--|
| Electric Power<br>Generating                        | Capacity  >/= 40 to <80  | NO <sub>x</sub> Emission Factor <sup>a</sup> |
| Generating  |  |  |
|   |  |  |
| Coal-fired  | MMBtu/Hour   | 0.50 pound/MMBtu                             |
|   | >/= 80 MMBtu/Hour  | 0.21 pound/MMBtu                             |
| Number 6 Fuel                                       | >/= 40 to <80<br>MMBtu/Hour  | 0.30 pound/MMBtu                             |
| Oil-fired   | >/= 80 MMBtu/Hour  | 0.18 pound/MMBtu                             |
| All Others  | >/= 40 to <80<br>MMBtu/Hour  | 0.20 pound/MMBtu                             |
| (gaseous or liquid)                                 | >/= 80 MMBtu/Hour  | 0.10 pound/MMBtu                             |
| Industrial Boilers:                                 |  |  |
| All Fuels   | >/= 40 to <80<br>MMBtu/Hour  | 0.20 pound/MMBtu                             |
|   | >/= 80 MMBtu/Hour  | 0.10 pound/MMBtu                             |
| Process<br>Heater/Furnaces:                         |  |  |
| Ammonia   | >/= 40 to <80<br>MMBtu/Hour  | 0.30 pound/MMBtu                             |
| Reformers   | >/= 80 MMBtu/Hour  | 0.23 pound/MMBtu                             |
| All Others  | >/= 40 to <80<br>MMBtu/Hour  | 0.18 pound/MMBtu                             |
|   | >/= 80 MMBtu/Hour  | 0.08 pound/MMBtu                             |
| Stationary Gas<br>Turbines:                         |  |  |
| Peaking Service,                                    | >/= 5 to <10 MW  | 0.37 pound/MMBtu                             |
| Fuel Oil-fired                                      | >/= 10 MW  | 0.30 pound/MMBtu                             |
| Peaking Service,                                    | >/= 5 to <10 MW  | 0.27 pound/MMBtu                             |
| Gas-fired   | >/= 10 MW  | 0.20 pound/MMBtu                             |
| All Others  | >/= 5 to <10 MW  | 0.24 pound/MMBtu <sup>b</sup>                |
| All Others  | >/= 10 MW  | 0.16 pound/MMBtu <sup>c</sup>                |
| Stationary Internal<br>Combustion<br>Engines:       |  |  |
|   | >/= 150 to <320 Hp   | 10 g/Hp-hour                                 |
| Lean-burn   | >/= 320 Hp   | 4 g/Hp-hour                                  |
|   | >/= 150 to <300 Hp   | 2 g/Hp-hour                                  |
| Rich-burn   | >/= 300 Hp   | 2 g/Hp-hour                                  |

<sup>&</sup>lt;sup>a</sup> based on the higher heating value of the fuel

<sup>&</sup>lt;sup>b</sup> equivalent to 65 ppmv (15 percent O<sub>2</sub>, dry basis) with an F factor of 8710 dscf/MMBtu

<sup>&</sup>lt;sup>c</sup> equivalent to 43 ppmv (15 percent O<sub>2</sub>, dry basis) with an F factor of 8710 dscf/MMBtu

| Table D-1B<br>NO <sub>x</sub> Emission Factors for Sources in the Region of Influence |                   |                               |
|---|-------------------|-------------------------------|
| Category Maximum Rated Capacity NO <sub>x</sub> Emission Factor                       |                   |                               |
| Electric Power<br>Generating<br>System Boilers:                                       | Сарасту           |                               |
| Coal-fired  | >/= 80 MMBtu/Hour | 0.21 pound/MMBtu              |
| Number 6 Fuel<br>Oil-fired  | >/= 80 MMBtu/Hour | 0.18 pound/MMBtu              |
| All Others<br>(gaseous or liquid)   | >/= 80 MMBtu/Hour | 0.10 pound/MMBtu              |
| Industrial Boilers:   |                   |                               |
| All Fuels   | >/= 80 MMBtu/Hour | 0.10 pound/MMBtu              |
| Process<br>Heater/Furnaces:   |                   |                               |
| Ammonia<br>Reformers  | >/= 80 MMBtu/Hour | 0.23 pound/MMBtu              |
| All Others  | >/= 80 MMBtu/Hour | 0.08 pound/MMBtu              |
| Stationary Gas<br>Turbines:   |                   |                               |
| Peaking Service,<br>Fuel Oil-fired  | >/= 10 MW         | 0.30 pound/MMBtu              |
| Peaking Service,<br>Gas-fired   | >/= 10 MW         | 0.20 pound/MMBtu              |
| All Others  | >/= 10 MW         | 0.16 pound/MMBtu <sup>b</sup> |
| Stationary Internal<br>Combustion<br>Engines:   |                   |                               |
| Lean-burn   | >/= 1500 Hp       | 4 g/Hp-hour                   |
| Rich-burn   | >/= 300 Hp        | 2 g/Hp-hour                   |

<sup>&</sup>lt;sup>a</sup> all factors are based on the higher heating value of the fuel

- 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) = 
$$0.012X \sum_{i=1}^{N} (R_{li} \times HI_i)$$

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

 $R_{\rm li}=$  the limit for each point source from Subsection D of this Section (pound  $NO_x/MM{\rm Btu})$ 

- 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.

 $<sup>^{\</sup>text{b}}$  equivalent to 43 ppmv (15 percent  $O_2,$  dry basis) with an F factor of 8710 dscf/MMBtu

- 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

If 
$$(Vol.\% H_2 + Vol.\% CO) = or < 50$$
  
Then

fuel multiplier =  $1 + \frac{0.5 \times (Vol.\% H_2 + Vol.\% CO)}{100}$ 

Otherwise

fuel multiplier = 1.25

- 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. If a facility has received approval from the administrative authority for a plan to use Number 6 fuel oil, this is considered prior approval for purposes of this Paragraph.

#### 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.

$$FL = \sum_{i=1}^{N} (R_{li} \times f_i)$$
 Equation E-1

where:

$$f_i = HI_i / \sum_{i=1}^{N} HI_i$$
 Equation E-2

$$\sum_{i=I}^{N} (R_{ai} \times f_i) \leq FL \qquad \text{Equation E-3}$$

where:

 $\begin{array}{ll} f_i = & fraction \ of \ total \ system \ averaging \ capacity \ for \ point \\ & source \ i \end{array}$ 

HI<sub>i</sub>= 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<sub>x</sub>/MMBtu)

R<sub>ii</sub> = the limit for each point source from Subsection D of this Section (pound NO<sub>x</sub>/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 E.1.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<sub>i</sub> 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<sub>x</sub> 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 or that has been permanently shut down in the averaging plan, the old averaging capacity, determined from the average of the two ozone seasons prior to the capacity curtailment or shutdown, or such other twoyear period as the department may approve, 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. For a shut down source, the contribution to the cumulative emission factor shall be zero.
- g.  $NO_x$  reductions from post 1997 modifications to 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  $\mathrm{NO}_x$  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. For the case of a point source exempted by Paragraph C.15 of this Section, if the permit limits were\_established after 1997 and were not required by a state or federal regulation, the source may be included in an averaging plan, with the term  $R_{li}$  taken from Table D-1A or D-1B in Paragraph D.1 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  $\times 10^{-6}$ .
- 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<sub>x</sub> 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<sub>2</sub>), particulate matter (PM<sub>10</sub>), 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  $\mathrm{NO}_x$  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 under Air Quality Assessment/Emission Testing Program. Three minimum 1-hour tests, or three minimum 20-minute tests for turbines, 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<sub>2</sub>;
  - e. Method 7E or 20 for NO<sub>x</sub>;
  - 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
- 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<sub>x</sub>, diluent (O<sub>2</sub> or CO<sub>2</sub>), and CO emissions for each affected point source. As an alternative to using the PEMS to monitor diluent (O2 or CO<sub>2</sub>), 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<sub>x</sub> 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
- 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<sub>x</sub> and CO. In order to continuously demonstrate compliance with the NO<sub>x</sub> limits of Subsection D or E of this Section, the owner or operator shall implement procedures to operate the boiler on or inside the fuel and oxygen lines that define the operating window. 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
- 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<sub>x</sub> and CO. In order to continuously demonstrate compliance with the NO<sub>x</sub> limits of Subsection D or E of this Section, the owner or operator shall implement procedures to operate the process heater/furnace on or inside the fuel and oxygen lines that define the operating window. 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  $\mathrm{NO}_x$  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<sub>2</sub> 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 to show compliance with the emission factors of Subsection D or E of this Section 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, as defined in Subsection B of this Section, 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. If the average Btu-per-ozone season-hour limit is exceeded, the owner or operator of any boiler or process heater/furnace covered under this exemption shall include the noncompliance in the written report that is due in accordance with Paragraph I.2 of this Section. If the average Btu-per-ozone season-hour limit is the exemption shall be exceeded. 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 the facility will meet the applicable emission factor as soon as possible, but no later than 24 months, after exceeding the 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 in accordance with Paragraph C.6 of this Section shall install, calibrate, and maintain a nonresettable, elapsed run-time meter to record the operating time in order to demonstrate compliance during the ozone season. If the average operating hours-per-day limit is exceeded the owner or operator shall include the noncompliance in the written report that is due in accordance with Paragraph I.2 of this Section. If the average operating hours-per-day 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 the facility will 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.
- 13. Elapsed run-time and fuel meters, oxygen, diluents, and CO monitors, and other such instrumentation required by this Section shall be calibrated according to the manufacturer's recommendations, but not less frequently than once per year. Records shall be maintained according to Paragraph I.3 of this Section.
- 14. Any unit with a permit requirement or applicable regulation that requires more stringent testing than this Chapter requires shall comply with the permit requirements or applicable regulation rather than this Chapter.
- 15. Continuous demonstration of compliance with fuel, oxygen concentration, and other parameter limits shall be on a 30-day rolling average basis.
- 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 granted an exemption in accordance with any part of Subsection C of this Section or 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 ozone season to the administrative authority of any noncompliance of the applicable 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. a description of the noncompliance;
  - b. a statement of the cause of the noncompliance;
- c. the anticipated time that the noncompliance is expected to continue or, if it has been corrected, the duration of the period of noncompliance; and
- d. the 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. 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), LR 36:60 (January 2010).

#### §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 175A(d) of the Clean Air Act as amended [42 USC 7511(b)(2)] that the Baton Rouge area has violated the 8-hour ozone National Ambient Air Quality Standard (NAAQS), and that the department must put this contingency plan into effect.
- B. Definition of *Ozone Season*. In the event of notification from EPA in accordance with Subsection A of this Section, the definition of *ozone season* in LAC 33:III.2201.B will be the period April 1 to October 31, inclusive, of each year.
- C. Effective Dates. An owner or operator of a source subject to this Chapter shall comply with this Section as expeditiously as possible, but not later than the first day of the next ozone season 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), amended by the Office of the Secretary, Legal Affairs Division, LR 36:63 (January 2010).

# Chapter 23. Control of Emissions for Specific Industries<sup>1</sup>

<sup>1</sup>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

- a. Emissions of Total Reduced Sulfur (TRS) from existing sources specified below shall not exceed the following limits:
- i. kraft recovery furnaces corrected to 8 percent oxygen by volume:
- (a). new design straight kraft recovery furnaces, 5 parts per million (ppm);
- (b). old design straight kraft recovery furnaces, 20 ppm;
  - (c). cross-recovery furnaces, 25 ppm;
- (d). 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;
  - ii. digester systems, 5 ppm;
  - iii. multiple effect evaporator systems, 5 ppm;
- iv. lime kilns, corrected to 10 percent oxygen by volume, 20 ppm;
  - v. condensate stripper systems, 5 ppm;
- vi. smelt dissolving tanks, 0.016 grams per kilogram black liquor solids fired. Compliance with the particulate emission limits of Subparagraph D.1.b of this Section 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;
- vii. 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;
- viii. the department may establish alternative limits consistent with the purposes of this Section.
- b Compliance. Affected sources shall achieve final compliance with the provisions of this Paragraph as expeditiously as practicable but not more than six years from the effective date of this Subchapter of the regulations.

#### 4. Opacity Limitation

a. 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, 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.
- b. Compliance. Owners or operators shall conduct source tests of recovery furnaces pursuant to the provisions in LAC 33:III.1503.D, 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 Services 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), LR 34:1892 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2753 (November 2012)

### 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 Services. The program shall include regularly scheduled monitoring for emissions of total particulates as well as ambient air sampling for suspended particulates.
  - 1. [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), amended by the Office of the Secretary, Legal Division, LR 38:2754 (November 2012)

# 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.

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- 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*<sub>10</sub>—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-perhour 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. At least 30 days prior to performing any emission test, notification of testing shall be made to the Office of Environmental Services to afford the department the opportunity to conduct a pretest conference and to have an observer present.
- 8. A copy of all monitoring and tests results shall be submitted to the Office of Environmental Services for review and approval within 60 days of completion of testing.
- F. Radioactive Materials. Incineration of radioactive materials shall comply with the requirements of LAC 33:XV.463.

- 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), LR 34:1904 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2754 (November 2012), LR 39:3268 (December 2013).

# 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 bypassed 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<sub>2</sub>, 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. At least 30 days prior to performing any emission test, notification of testing shall be made to the Office of Environmental Services to afford the department the opportunity to conduct a pretest conference and to have an observer present.
- 11. A copy of all monitoring and tests results shall be submitted to the Office of Environmental Services for review and approval within 60 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), LR 34:1904 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2754 (November 2012).

# **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<sub>v</sub>, 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 Services for review and approval within 60 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 incorporated reference A, as LAC 33:III.3003);

- c. Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources (40 CFR Part 60, incorporated appendix A, as by reference 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 Services 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), LR 34:1904 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2754 (November 2012).

# **Chapter 27. Asbestos-Containing** Materials (ACM) in Schools and State **Buildings**

# §2701. Asbestos-Containing Materials (ACM) in **Schools and State Buildings**

A. Purpose. The purpose of this Chapter is to provide for the identification, management, and abatement of asbestoscontaining 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. Except for the requirement to submit Form AAC-8 pursuant to LAC 33:III.2723.A, state buildings built after 1978 are exempt from the requirements of this Chapter if:
- a. the state building is not used as a school building for the education of grades kindergarten through postgraduate; or
- b. the state building does not contain asbestos as determined through review and approval of the Office of Environmental Services prior to occupancy of the building by:

- a signed statement(s) of no asbestos in construction as defined in LAC 33:III.2703.A that addresses the entire building, and all additions and renovations; or
- an inspection report submitted in accordance with LAC 33:III.2707 as a result of an inspection stating that no asbestos is contained in, or on the outside of the state building, together with signed statement(s) of no asbestos in construction that address all additions and renovations conducted after the inspection; and
- c. a copy of the department approval of any documents submitted pursuant to Subparagraph B.2.a. of this Subsection shall be maintained at the administrative office of the building.
- 3. Except for the requirement to submit Form AAC-8 pursuant to LAC 33:III.2723.A, state buildings built prior to 1979 are exempt from the requirements of this Chapter provided that:
- a. the building is not used as a school building for the education of grades kindergarten through post-graduate;
- b. prior to occupancy, the department reviews and approves documentation of one of the following:
- the complete renovation of the state building after January 1, 1979 that complied with the following:
- inspection conducted during renovation that showed that all ACM was removed from the inside and the outside of the building; and
- (b). no asbestos containing material was added in the renovations as documented by signed statement(s) of no asbestos in construction; or
- an inspection conducted in accordance with LAC 33:III.2707.A reveals that no asbestos is contained in or on the outside of the state building; and
- c. no asbestos containing materials were added to the building subsequent to the inspection conducted pursuant to Clause B.3.b.i of this Section or the renovation conducted in accordance with Clause B.3.b.ii of this Section as documented by signed statement(s) of no asbestos in construction;
- d. a copy of the documentation submitted pursuant to Subparagraphs B.3.b and c of this Section shall be submitted to the Office of Environmental Services; and
- e. a copy of the documentation submitted pursuant to Subparagraphs B.3.b and c of this Section and department approval shall be maintained at the building administrative office.

# C. Scope

1. This regulation requires local education agencies and the state government to identify friable and nonfriable 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 at least 30 days prior to occupancy of any school or state building, and implement the plan within 180 days after occupancy.

- 2. If an exemption is requested for a state building that contains no asbestos, a determination supporting that exemption shall be submitted in accordance with Subparagraph B.2.b or 3.b of this Section.
- 3. Management plans submitted to and approved by the Department of Environmental Quality shall meet the inspection and assessment requirements of this Chapter.
- 4. 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 including the design of those actions.
- The regulation also includes recordkeeping requirements.
- 6. 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.
- 7. 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.
- 8. Local education agencies and the state government shall provide for the transportation and disposal of asbestos in accordance with provisions of LAC 33:III.Chapter 51, Subchapter M.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

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#### §2703. Definitions

A. The terms used in this Chapter are defined in LAC 33:III.111 and LAC 33:III.5151.B 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, accreditation by the Department of Environmental Quality under the provisions of LAC 33:III.2799 and when

referring to a laboratory, *accreditation* under the provisions of LAC 33:I, Subpart 3, Chapters 45-59.

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 asbestoscontaining 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 as determined by using the method specified in appendix E, subpart E, 40 CFR 763, section 1, polarized light microscopy.

Category I Nonfriable 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 E, subpart E, 40 CFR 763, section 1, polarized light microscopy that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

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 E, subpart E, 40 CFR 763, section 1, polarized light microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Damaged Floor Covering that Contains ACM—resilient floor covering or the mastic used to attach it to the floor surface that contains ACM which has deteriorated or sustained physical impact 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 impact on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

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.

Facility Component—any part of a facility, including equipment, that is under the control of a local education agency or the state.

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 as determined by using the method specified in appendix E, subpart E, 40 CFR 763, section 1, polarized light microscopy, which has been applied on ceilings, walls, structural members, piping, duct work, or any other part of the building, which when dry, may 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), the asbestos content can be verified by point counting using PLM or assume the amount to be greater than 1 percent and treat the material as ACM.

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.

Guest Instructor—an individual with expertise in a specific non-asbestos field who is designated by the RATP or principal trainer to provide instruction specific to certain course topics (i.e., law, medicine, etc.).

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 (ACM), whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and nonfriable known or assumed ACM 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.J 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, graduate, medical, dental, 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 regulated ACM in good condition, ensure cleanup of asbestos fibers previously released, and prevent further release by minimizing and controlling disturbance or damage of regulated ACM.

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.

*Principal Trainer*—the trainers recognized by the department and identified by the RATP in its application for recognition to provide instruction in asbestos training courses (e.g., inspector, etc.).

Recognized Asbestos Training Provider (RATP)—a person or organization recognized by the department, to provide training related to asbestos activities conducted in Louisiana.

### Regulated Asbestos-Containing Material (RACM)—

- a. friable asbestos material;
- b. category I and II nonfriable ACM that has become friable such as asbestos-cement material that is not removed from a facility prior to demolition;
- c. category I and II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, ground, sanded, cut, abraded, or reduced to powder by the forces that have acted or are expected to act on the material in the course of demolition or renovation operations; or
- d. resilient floor covering or the asbestos-containing mastic used to attach it to the floor surface that is scraped, sanded, abraded, bead blasted, cut, ground, crumbled, pulverized, or reduced to powder by any means, including hand and mechanical equipment. This definition does not include resilient floor covering removed by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact (minor tears or minor breakage is acceptable where, for all intents and purposes, the flooring is considered whole) or asbestos-containing mastic that has been removed by chemical or other means that results in the asbestos fibers in ACWM being bound within a macro substrate and cannot reasonably become airborne unless further forces are applied.

Related Scientific Field—animal science, biological sciences, chemistry, geosciences, atmospheric sciences, soil

sciences, physical geography, physics, health sciences, toxicology, environmental sciences, wildlife and fisheries sciences, engineering, nuclear science, agronomy, forestry, health physics, medical physics, or statistics and quantitative methods.

*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.

Resilient Floor Covering—asbestos-containing floor tiles, 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 E, subpart E, 40 CFR 763, section 1, polarized light microscopy.

Response Action—a method, including removal, encapsulation, enclosure, repair, operations, and maintenance, that protects human health and the environment from regulated ACM.

# Responsible Official—

- 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,
- 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; or
- 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.

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, including head start and pre-K programs located on elementary school campuses, secondary, college, graduate, medical, dental, or post-graduate education, as determined under state law, or any school of any agency of the United States. Schools do not include locations where the primary purpose is not the education of students, but that provide for internships or other on the job training.

#### 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 exterior structure, portico or covered exterior hallway or walkway and any exterior portion of a mechanical system used to condition interior space.

Significantly Damaged Floor Covering that Contains ACM—damaged floor covering that contains 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 ACM.

State Building—a building, or portion thereof, owned, used, or leased by the state of Louisiana. If the state does not own, lease, occupy, or use the entire building, the *state building* shall be only:

- a. that portion of the building, owned, leased, occupied, or used by the state;
- b. facility components as defined in LAC 33:III.2703;
- c. work areas, kitchens, restrooms, and other common areas that are co-owned, leased, or used by the state together with others; and
- d. any other portion of the building that shares a common heating, ventilation, and air conditioning (HVAC) system or common ingress/egress points with that portion of the building owned, leased, occupied or used by the state.

State Government—the state of Louisiana and any state agency as defined in R.S. 13:5102 that owns, leases, occupies, or uses the state building.

State of Louisiana or State—the state of Louisiana or any state agency as defined in R.S. 13:5102.

#### Statement(s) of No Asbestos in Construction—

- a. a signed written statement, by an architect, project engineer, or other principal responsible for the construction or renovation of the building, or a portion thereof, that no ACM was specified as a building material in the applicable construction documents for the building, or portion thereof (multiple signatures may be necessary to address the entire building); or
- b. a signed written statement by an accredited asbestos inspector who has conducted a thorough review of documents related to the construction or renovation of the building that no ACM was specified as a building material in

the construction documents for the building, including all subsequent additions or renovations.

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.

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 trainers and guest instructors; either serves as the signatory for training certificates or may designate other responsible individuals in the organization, or trainers as signatories.

*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.

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# §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 qualified to provide training 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.
- B. The requirements of this Chapter in no way supersede the worker protection and work practice requirements under 29 CFR 1910.1001 (Occupational Safety and Health Administration [OSHA] asbestos worker protection standards for general industry), 1926.1101 (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.

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#### §2707. Inspection and Reinspections

# A. Inspection

- 1. Except as provided in LAC 33:III.2701.B.2 and 3, and LAC 33:III.2735, each local education agency and the state government shall inspect each school or state building that they lease, own, occupy, or use to identify all locations of friable and nonfriable ACBM as specified in this Section and LAC 33:III.2701.C.1.
- 2. Any building leased or acquired that is to be used as a school or state building shall be inspected as described under Paragraphs A.3, 4, and 5 of this Section prior to use as a school or state building.
- 3. 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.
- 4. Each inspection of a school or state building shall be made by an accredited inspector.
- 5. 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 ACM;
- b. touch all suspected ACM to determine whether it is friable;
- c. identify all homogeneous areas of friable suspected ACM and all homogeneous areas of nonfriable suspected ACM;
- 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 ACM, and friable ACM identified during a previous inspection; and
- f. prepare a report that includes the necessary information and submit to the person designated under LAC 33:III.2705 a copy of such report for inclusion in the management plan within 30 days of the inspection. The report shall include:
- i. the date of the inspection signed by each accredited person making the inspection, and a copy of each inspector's accreditation certificate current at the time of inspection;
- ii. an inventory of the locations of the homogeneous areas where samples were 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 a copy of the inspector's accreditation certificate current at the time of inspection;
- iv. a list of whether the homogeneous areas identified under Subparagraph A.5.d of this Section are surfacing material, thermal system insulation, or miscellaneous material; and
- v. assessments made of friable material pursuant to Subparagraph A.5.e of this Section, the names and signatures of all accredited inspectors making the assessment, and a copy of the inspector's accreditation certificate current at the time of inspection.

#### 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 school building that they lease, own, or use for head start, pre-K programs, elementary, or secondary education.
- 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, a copy of his or her accreditation certificate current at the time of the reinspection, 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, a copy of the accreditation certificate current at the time of the reinspection; and
- iii. any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, and a copy of accreditation certificate current at the time of assessment or reassessment.
- 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), amended by the Office of the Secretary, Legal Division, LR 40:503 (March 2014).

# §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  $1,000~{\rm ft}^2$  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  $1,000 \text{ ft}^2$  but less than or equal to  $5,000 \text{ ft}^2$ , 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<sup>2</sup>, 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 air samples collected under LAC 33:III.2717, and submitted for analysis, analyzed for asbestos using laboratories accredited under the provisions of LAC 33:I, Subpart 3, Chapters 45-59.
- B. Bulk samples shall not be composited for analysis and shall be analyzed for asbestos content by polarized light microscopy (PLM), using the "interim method for the determination of asbestos in bulk insulation samples," found at 40 CFR 763, subpart E, appendix E.
  - 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.

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), amended by the Office of the Secretary, Legal Division, LR 40:504 (March 2014).

#### §2713. Assessment

- A. The local education agency or state 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, include a copy of his or her accreditation certificate current at the time of assessment 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 or state 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 a copy of his or her accreditation certificate current at the time of management plan development or other action, and submit a copy of the recommendation to the person designated under LAC 33:III.2705.A.7.

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 the Secretary, Legal Division, LR 40:504 (March 2014).

#### §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. If any damaged or significantly damaged thermal system insulation, friable surfacing ACM or miscellaneous ACM is present, the local education agency or the state government shall:

- 1. immediately isolate the area with the damaged or significantly damaged thermal system insulation, and restrict access to protect human health and the environment until the response action is completed; and
- 2. perform any response actions in accordance with appropriate requirements as provided in LAC 33:III.5151.
- 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. 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 for Damaged ACM

- 1. If damaged friable surfacing ACM or damaged friable miscellaneous ACM or damaged floor covering that contains ACM is present in a school or state 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 that meet the definition in LAC 33:III.2703 and, 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. Selection of Response Action for Significantly Damaged ACM

- 1. If significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM or significantly damaged floor coverings as defined in LAC 33:III.2703.A that contain ACM is present in a school or state building, the local education agency or the state government shall 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 friable miscellaneous ACM, or floor coverings that contain 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, friable miscellaneous ACM, or any floor covering that contains 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. A response action related to removal of floor coverings that contain ACM in a school or state building shall follow the requirements of this Section and those requirements related to renovations in LAC 33:III.5151.F. and J.
- H. Response actions including removal, encapsulation, enclosure, or repair, other than SSSD repairs, shall be designed, supervised and conducted by persons accredited to design, supervise and conduct response actions.
- I. Local education agencies and the state government shall comply with either the OSHA asbestos worker protection for general industry at 29 CFR 1910.1001 or the asbestos construction standard at 29 CFR 1926.1101, whichever is applicable.

#### J. 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 EPA regulations contained in 40 CFR 763, subpart E, appendix A to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for SSSD 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 Department of Environmental Quality according to

- LAC 33:I, Subpart 3, Chapters 45-59, to conduct such analysis using phase contrast microscopy (PCM) and transmission electron microscopy (TEM) equipped with an energy dispersive x-ray analysis system or, under circumstances permitted in this Section.
- 3. Except as provided in Paragraph J.4, 5, or 7 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 contained in EPA regulations 40 CFR 763, subpart E, appendix A is not statistically significantly different, as determined by the Z-test calculation found in EPA regulations 40 CFR 763, subpart E, appendix A 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 EPA regulations, 40 CFR 763, subpart E, appendix A is below the filter background level of 70 structures per square millimeter  $(70 \text{ s/mm}^2).$
- 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 EPA regulations, 40 CFR 763, subpart E, appendix A for the five air samples does not exceed the filter background level of 70 structures per square millimeter (70 s/mm<sup>2</sup>). If the average concentration of asbestos of the five air samples within the affected functional space exceeds 70 s/mm<sup>2</sup>, 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 37mm filter, the action shall be considered complete only when the requirements of Paragraph J.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 SSSD and less than or equal to 64 square feet or 60 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<sup>3</sup>] of air). A description of the method is available at the Office of the Federal Register information center. 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 ACM affected under Paragraph J.5 of this Section, the local education agency or

- the state government shall add the total square or linear footage of ACM within the containment barriers used to isolate the functional space for the action to remove, encapsulate, or enclose the ACM. 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 J.5 of this Section.
- 7. In the case of a demolition of a school or state building where occupants will not reenter the building, clearance sampling is not required.
- K. Response actions in a school building, state building, or public and commercial building including removal, encapsulation, enclosure, or repair, other than SSSD shall be designed, supervised, and conducted by persons accredited to perform such activities.

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 the Secretary, Legal Division, LR 40:504 (March 2014).

#### §2719. Operations and Maintenance

- A. Applicability. The local education agency or the state government shall implement and maintain an operations, maintenance, and repair (O and M) program under this Section whenever any friable ACM 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 ACM or nonfriable assumed ACM shall be treated as friable ACM 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. Local education agencies and the state government shall comply with either the OSHA asbestos worker protection for general industry at 29 CFR 1910.1001 or the asbestos construction standard at 29 CFR 1926.1101, whichever is applicable. Local education agencies and the state government may consult EPA regulations contained in 40 CFR 763, subpart E 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 properly labeled as may be required by LAC 33:III.5151.F.
- E. Maintenance Activities other than Small-Scale, Short-Duration. Maintenance activity that disturbs friable ACM in a school building, state building, or public and commercial building including removal, encapsulation, enclosure, or repair, other than SSSD shall be designed, supervised, and conducted by persons accredited to perform such activities.

#### 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 properly labeled as may be required by LAC 33:III.5151.F.

- 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.
- 3. A response action to a major fiber release in a school building, state building, including removal, encapsulation, enclosure, or repair, other than SSSD shall be designed, supervised, and conducted by persons accredited to perform such activities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

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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 1926.1101; 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 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.

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#### §2723. Management Plans

- A. Local education agencies or the state government shall submit Form AAC-8 concerning management plans for the following buildings. Local education agencies and the state government are exempt from the requirement to develop and submit a management plan in connection with Form AAC-8 if there has been a determination that there is no asbestos present in the building in accordance with LAC 33:III.2735.A.3, 4, 6, and 7.
- 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 used as school or state buildings, and submit the plan to the Office of Environmental Services. After June 20, 1994, the original submittal of each plan shall be submitted at least 30 days prior to its use as a school or state building using the Form AAC-8, required elements for asbestos 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, if applicable that cover portions of the school or state building under the authority of the local education agency or the state government as specified in LAC 33:III.2701.C.1.
- 2. If a building to be used as part of a school or is leased or acquired, the local education agency shall include the additional building in the management plan for the school prior to its use as a school. 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, shall include Form AAC-8, required elements for management plans.

- B. Each local education agency or the state government shall implement its management plan within 180 days after occupancy.
- 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 (by either hard copy, or as an electronic file), as well as any information that has been revised to bring the plan up-to-date.
- D. The management plan shall be developed by a management planner accredited by the department at the time the work was performed, 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, the name and signature, and a copy of the accreditation certificate current at the time of inspection 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 a copy of the accreditation certificate current at the time of inspection;
- 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, the name and signature of the person performing the analysis, and a copy of the laboratory accreditation certificate; 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 a copy of the accreditation certificate current at the time of inspection 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, the identity and qualifications of the person providing the training to the person designated, a description of and documentation of the training provided, and dates and training hours 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 a copy of the accreditation certificate current at the time 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, a statement that the person(s) is accredited under the provisions in LAC 33:III.2799, Appendix A and a copy of the accreditation certificate current at the time shall 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 shall 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 provide notice to parents, teachers, and employees of the availability of management plans by one or more of the following: letter, e-mail, text message, or website post. The management plan shall include a description of the steps taken to provide notice 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.

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 Environmental Assessment, LR 30:2021 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2444 (October 2005), LR 33:2090 (October 2007), amended by the Office of the Secretary, Legal Division, LR 40:507 (March 2014).

#### §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. The records may be kept in hard copy or electronic format providing all necessary information and documentation (e.g., signature) is included. 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 at the time of the action, 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.J, 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.J.2.b, and a copy of the laboratory accreditation certificate.
- 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 and qualifications of the person providing the training to the designated person, a description and documentation of the training provided.

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 the Secretary, Legal Division, LR 40:508 (March 2014).

# §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.

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 shall submit a copy of the signed statement of the architect, project engineer, or accredited inspector to the Office of Environmental Services and shall complete applicable portions of Form AAC-8 (pages 1, 4, and 5) to serve as that portion of the management plan for that school.
- 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), amended by the Office of the Secretary, Legal Division, LR 40:508 (March 2014).

#### §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 recognized training provider in accordance with these regulations. This training shall be in accordance with the asbestos abatement worker course as described in LAC 33:III.2799, Appendix A, Paragraph B.5, Initial Training and Subsection D, Refresher Training Courses. Workers who participate in the type of project described in this Paragraph shall be accredited in accordance with LAC 33:III.2799, Appendix A and shall 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 B.4, and Subsection D, Refresher Training Courses from a recognized training provider in accordance with these regulations. 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), amended by the Office of the Secretary, Legal Division, LR 40:508 (March 2014).

# §2741. Recognized Asbestos Training Providers (RATP) and Principal Trainers

- A. The recognized asbestos training providers (RATP) as defined in LAC 33:III.2703.A and its principal trainers shall comply with and direct others to comply with LAC 33:III.Chapters 27 and 51, and other applicable federal, state, and local regulations.
- B. Asbestos Training Course Requirements. The courses conducted by the RATP and its principal trainers shall meet the following requirements.
  - 1. Training courses shall:
- a. meet the requirements of LAC 33:III.2799, Appendix A and TSCA title II; and
- b. be directed to the training materials and be conducted in a professional manner.
  - 2. Initial training courses shall:
- a. include a minimum of two training hours of instruction as provided in LAC 33:III.Chapters 27 and 51; and
- b. be taught according to the criteria and length of time as specified in LAC 33:III.2799, Appendix A, Subsection A.
- 3. Refresher training courses shall be taught according to the criteria and length of time as specified in LAC 33:III.2799, Appendix D.
- 4. Principal Trainers. The principal trainer shall not be a student in the course.
  - 5. Training in a Foreign Language
- a. The training materials used shall be written in the language used for teaching the class.
- b. The principal trainer shall be fluent in the language in which the class is being taught to the students.

- c. Each student taking the class shall be fluent in the language used by the principal trainer.
- 6. Training Facility. The instruction room shall be housed in a commercial or industrial type setting.
- a. The room shall be set up in classroom style setting with an instruction board for the principal trainer to write on, seats, and flat writing surfaces for the students.
- b. The size of the room shall be adequate for instruction, including presentation equipment and hands on training.
  - 7. The principal trainers may utilize guest instructors.

#### 8. Training Materials

- a. Audio-visual methods, such as the use of overheads, slides, and projectors may be used as supplemental training materials.
- b. The training materials shall be applicable to the class being taught and include the latest version of the course materials submitted to the department with the initial or renewal application.
- c. The training materials shall include the most current versions of the DEQ forms posted on the department's website.
- 9. Each student shall be provided with a face photo to attach to his or her application for accreditation.

#### 10. Training Audits

- a. Training course providers and principal trainers shall permit representatives of EPA or the department to attend, evaluate, and monitor any training course without charge.
- b. Unannounced audits may be conducted by the department to ensure compliance with federal and state requirements for specific training courses.

# C. Training Completion Certificates

- 1. Unique sequentially-numbered certificates shall be issued to students who successfully pass the training course. The certificate shall include:
  - a. student's name;
- b. form of photo identification and associated number, (e.g., driver's license or state identification card);
- c. the course completed and whether it is initial or refresher training;
  - d. dates of the training course and the examination;
- e. expiration date for training that is one year after the date on which the student completed the course,
  - f. language in which the course was taught;
  - g. original signature of the principal trainer(s);
- h. the name, address, and telephone number of the RATP;

- i. the discipline for which training was received; and
- j. a statement that the person receiving the certificate has completed the requisite training for asbestos accreditation as required under this LAC 33:III.2799, Appendix A and the TSCA title II.
- 2. RATP who provide refresher training shall provide training completion certificates in accordance with Subparagraph C.1.a-j of this Section, except the examination date may be omitted.
- D. Recordkeeping Requirements of RATP. All RATP shall comply with the following minimum recordkeeping requirements.
- 1. Training Course Materials. A RATP shall retain copies of all instructional materials used in the delivery of the classroom training such as student manuals, principal trainer notebooks, and handouts.
- 2. Principal Trainer Qualifications. A RATP shall retain copies of all principal trainers' résumés, and the documents approving each principal trainer issued by the department in advance whenever it changes course principal trainers. Records shall accurately identify the principal trainers who taught each particular training course for each date that a course is offered.
- 3. Examinations. A RATP shall document that each person who receives an accreditation certificate for an initial training course has achieved a passing score on the examination. These records shall 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 shall correspond to those listed on that person's accreditation certificate.
- 4. Training Certificates. The RATPs 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 RATP shall maintain the records in a manner that allows verification by telephone of the required information.
- 5. The RATP shall maintain all required records for a minimum of three years. The RATP, however, may retain these records for a longer period of time.
- 6. The RATP shall allow reasonable access to all of the records required by LAC 33:III.2799, Appendix A, and to any other records which may be required for the approval of asbestos RATPs or the accreditation of asbestos training courses to both EPA and to state agencies on request.
- 7. If a RATP ceases to conduct training, the RATP shall notify DEQ and give the department the opportunity to take possession of the provider's asbestos training records.

#### E. RATP Notifications

- 1. The RATP shall notify the Office of Environmental Services of any change in status of the training organization, (e.g., pending fines, notices of violation, changes in principal trainer status, etc.).
- 2. The RATP shall notify the Office of Environmental Services of the courses that will be taught, including where, when, and who will conduct the class.
- a. The course notification shall include the address of all of the physical locations where the training will be held and the dates for each location.
- b. The course notification form shall include the name of each principal trainer for each training course.
- c. The course notification shall be received in writing, fax, via email, or other methods of submittal approved by the Office of Environmental Services at least five working days prior to class commencement, or one working day prior to class commencement, if only the Louisiana regulations course will be taught.
- 3. Notification of cancellation of classes, rescheduling, or amendment of notification shall:
- a. be received in writing, fax, via email, or other methods of submittal approved by the Office of Environmental Services one day before the class should have commenced; and
- b. indicate the date and time of the course that is being cancelled, rescheduled or amended;
- c. rescheduled classes or amended notifications shall also indicate the changes that are being requested. This includes, but is not limited to day, time, locations, principal trainer, etc.
- 4. Within 10 working days of the completion of a class, the following shall be received by the Office of Environmental Services in a format approved by the department:
- a. a complete roster of trainees and each principal trainer participating in the course;
- b. a class photograph with a legible name on the back or at the bottom identifying each student and principal trainer;
- c. each student's official identification number (e.g., driver's license, state identification card, or passport);
- d. a 1" x 1 1/4" photograph of the face (front view) of each student;
- e. the name of each principal trainer who taught the class; and
  - f. each student's examination grades.
- i. If a student fails an initial exam, the roster shall include the word "failed" adjacent to the name on the roster.
- ii. If a student retakes a previously failed exam, a separate notification shall be received by the Office of

Environmental Services within five working days of the exam

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 the Secretary, Legal Division, LR 40:508 (March 2014).

# §2799. Appendix A—Agent Accreditation Plan

- A. Purpose. Training requirements for purposes of accreditation are specified in both terms of required subjects of instruction and in terms of length of training. The duration of initial and refresher training courses is specified in numbers of days. A day of training equals eight consecutive training hours, including breaks and lunch. Course instruction shall be provided either by DEQ RATPs or from training providers recognized by EPA or an EPA authorized state. The training requirements that follow are for the training of persons required to have accreditation under the Toxic Substances Control Act (TSCA) title II and LAC 33:III.2739.
- 1. Initial training courses for a specific discipline (e.g., workers, inspectors) require hands-on training. For asbestos abatement supervisors and workers, hands-on training shall 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 shall permit all supervisors and workers to have actual experience performing tasks associated with asbestos abatement. For inspectors, hands-on training shall include conducting a simulated building walk-through inspection and respirator fit testing.
- 2. 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 ACM, or suspect ACM. 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
- B. Initial Training. The following are the initial training course requirements for persons required to have accreditation under LAC 33:III.2739 and Paragraph F.1 of this Section.
- 1. Inspectors. All persons who inspect for ACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools, and state buildings,

shall be trained in accordance with this Section and accredited by the department. 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 training 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 shall 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 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 typesphysical 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-build 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.
- 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. The department recommends that all samples be analyzed by a laboratory that meets the requirements of LAC 33:I.Subpart 3.Chapters 45-59.
- 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.
- 1. Regulatory Review: EPA Worker Protection Rule in 40 CFR 763, subpart G, TSCA title II; OSHA asbestos construction standard 29 CFR 1926.1101 et seq.; OSHA

respirator requirements found at 29 CFR 1910.134 et seq.; 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 facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and state buildings shall be trained in accordance with this Section and accredited by the department. 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 shall 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 offhours; rescheduling or canceling renovation in areas with ACM; boiler room maintenance; disposal of ACM; in-house ACM—bridging procedures for 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 29 CFR 1926.1101 et seq.; 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.
- 1. Course Review: review of key aspects of the training course.

[Note: Persons who perform the management planner role in public and commercial buildings are not required to be accredited. However, persons may find this training and accreditation helpful in preparing them to design or administer asbestos operations and maintenance programs for public and commercial buildings.]

3. Abatement Project Designers. A person shall be trained in accordance with this Section and accredited by the department as a project designer to design any of the following activities with respect to RACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including

but not limited to a school or state building: a response action other than a SSSD maintenance activity, a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, or 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 1926.1101(d)).
- 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.
- 1. 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; diagramming 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 1910.1001(c) or 29 CFR 1926.1101(c), whichever is applicable);
- v. Worker protection rule, in 40 CFR 763, subpart G; and
- vi. OSHA asbestos construction standard in 29 CFR 1926.1101 et seq. and OSHA hazard communication standard found at 29 CFR 1910.1200.
- t. Course Review: a review of key aspects of the training course.
- 4. Asbestos Abatement Contractor/Supervisors. A person shall be trained in accordance with this Section and accredited by the department as a contractor/supervisor to supervise any of the following activities with respect to RACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to a school or state building,: a response action other than a SSSD activity, a maintenance activity that disturbs RACM other than a SSSD activity, or 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 training hours of handson training, individual respirator fit testing, course review, and a written examination. The hands-on training shall include abatement work activities to include working with asbestos-substitute materials, the use of glove bags and protective clothing, proper bagging and wrapping, and constructing a decontamination unit. 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 shall be trained in this Section and accredited as accordance with contractor/supervisor. Hands-on training shall 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 covering clothing; regulations 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, including bagging and wrapping; 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 (29 CFR 1910.1001(c)), 29 CFR 1926.1101(c) and respiratory protection (29 CFR 1910.134 et seq.);
- v. OSHA asbestos construction standard (29 CFR 1926.1101 *et seq.*; 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 et seq.);
- ii. OSHA protection factors for respirators (29 CFR 1910.1001(g) et seq. and medical surveillance (29 CFR 1926.1101(m)); and
- iii. EPA protection factors for respirators (40 CFR 763.122).
- 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 shall be trained in accordance with this Section and accredited as a worker by the department to carry out any of the following activities with respect to RACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to a school or state building: response action other than a SSSD activity, a maintenance activity that disturbs RACM other than a SSSD activity, or a response action for a major fiber release episode. All persons seeking accreditation as

asbestos abatement workers shall complete at least a fourday training course as outlined below. The worker training course shall include lectures, demonstrations, at least 14 training hours of hands-on training, individual respirator fit testing, course review, and an examination. The hands-on training shall include abatement work activities to include working with asbestos-substitute materials, the use of glove bags and protective clothing, proper bagging and wrapping, and constructing a decontamination unit. The use of audiovisual materials is recommended to complement lectures, where appropriate. Hands-on training shall 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 including wrapping and bagging; 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, 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.
- C. 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 provider. 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.

- D. Refresher Training Courses. 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.
- 1. For all disciplines except inspectors, a one-day annual refresher training course is required for reaccreditation.
- 2. Refresher courses for inspectors shall be a half-day length.
- 3. Management planners shall attend the inspector refresher course, plus an additional half-day on management planning.
- 4. 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 courses.
- 5. 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.
- E. Qualifications. In addition to training and an examination, inspectors, management planners, and abatement project designers shall meet the requirements listed below.
- 1. Inspectors. Qualifications—possess a high school diploma or GED.
  - 2. Management Planners. Qualifications:
- a. a certification, registration, or license to practice as an architect, professional engineer, or certified industrial hygienist;
  - b. bachelor's degree in a related scientific field; or
- c. a bachelor's degree and five years' experience related to assessments and abatement projects in schools and state buildings as an accredited asbestos inspector.
  - 3. Abatement Project Designer. Qualifications:
- a. a certification, registration or license to practice as an architect, professional engineer, or certified industrial hygienist.
  - F. Accreditation of Agents
    - 1. Accreditation is required for:
- a. persons who inspect for the presence of asbestos in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and/or state buildings;
- b. persons who develop management plans for schools and/or state buildings, or those buildings used or leased by the state;
- c. persons who design or carry out response actions for facilities regulated under LAC  $33:III.Chapters\ 27$  and 51,

including but not limited to schools and/or state buildings involving RACM (other than SSSD);

- d. persons contracted to perform air monitoring in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and state buildings;
- e. persons contracted to strip, remove, or otherwise handle or disturb RACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools or state buildings.
- 2. Application for Accreditation. The applicant for accreditation shall submit the following items:
- a. the latest version of a completed and legible 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, telephone number, fax number, and email address;
- ii. the applicant's driver's license or state identification number and the issuing state;
- iii. the name, address, telephone number, fax number, and email address of the applicant's employer;
- iv. an identification of the disciplines in which accreditation is sought;
- v. Form AAC-1 statement of regulation possession, knowledge and enforceability;
- vi. the applicant's previous agency interest number (AI #), 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 shall also submit copies of initial training and all subsequent refresher (update) certificates;
- i. the training course(s) shall have at least contingent approval from EPA or be approved by a state authorized by the EPA to approve training courses;
- ii. applicants seeking accreditation from Louisiana that received current training from providers recognized by EPA or an EPA-authorized state not recognized by Louisiana shall also submit proof of a current two-hour training course in current Louisiana regulations from a Louisiana RATP (reciprocity);
- c. applications for inspector, management planner, and project designer shall include, where applicable:
- i. a copy of a high school diploma, general educational development (GED) certificate or documentation of the highest level of education achieved (including as necessary, a bachelor's degree in a related field);
- ii. a copy of proof of certification registration or license to practice as an architect, certified industrial hygienist, or a professional engineer;

- d. applicable fees as noted in LAC 33:III.223;
- e. a 1"  $\times$  1 1/4" photograph of the applicant's face (front view) labeled with their name.
- 3. The completed application with applicable fees (LAC 33:III.223) shall 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. Approved Applications

- a. Accreditation numbers shall be issued to all approved agents.
- b. 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.

#### 6. Renewal of Accreditation

- a. To renew accreditation, all persons shall submit an application in accordance with the requirements of Paragraph F.2 of this Appendix.
- b. A qualified individual shall maintain continuous accreditation provided the individual submits the required documents at least 30 days prior to his or her expiration/renewal date.
- i. If an individual seeking reaccreditation has received refresher training within 90 days prior to his or her existing expiration/renewal date, his or her accreditation shall be extended for one year from the existing expiration/renewal date.
- ii. If an individual seeking reaccreditation has received refresher training earlier than 90 days prior to his or her existing 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.
- c. If a qualified individual does not submit an application for renewal within the time provided in Subparagraph F.6.b of this Appendix, his or her accreditation will lapse at the expiration of the term of the accreditation. A qualified individual may be reaccredited upon an application for renewal in accordance with Subparagraph F.6.a of this Appendix. The accreditation expiration/renewal date will be one year after the last day of his or her most current training, provided the applicant has received refresher training within two years of the last course completion date. If a refresher is not taken within two years of the last course completion date, the initial training course shall be required for reaccreditation in accordance with Paragraph D.5 of this Appendix.
- 7. Agents who are supervisor accredited are responsible for ensuring that maintenance personnel in schools and state 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 for:
- a. 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. failure to notify the Office of Environmental Services of changes in status;
- c. failure to operate safely and/or protect the environment;
- d. failure to allow a department representative to inspect and review sites and documentation;
- e. failure to submit valid and accurate accreditation application documents and/or training documents;
- f. performing work requiring accreditation at a job site without evidence of required accreditation which shall include, but not be limited to, current DEQ issued identification cards or accreditation certificates being available for inspection by the administrative authority at the worksite;
- g. permitting the duplication or use of one's own accreditation certificate by another;
- h. performing work for which accreditation has not been received; and
- i. obtaining training from a training provider that does not have approval to offer training for the particular discipline from either EPA or from a state authorized by EPA that has an accreditation plan at least as stringent as the EPA model accreditation plan (MAP).
- 9. Revocation of accreditation shall be effective for no less than one year.

#### 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 submitted to/or maintained by the department is prohibited.
- c. A student shall not participate both as a student and as a principal trainer in their own asbestos training courses for certification, and shall not sign their own training certificate
- G. RATP and Principal Trainers. RATPs and principal trainers shall be recognized by the department prior to conducting training of approved courses in Louisiana. Principal trainers who conduct asbestos courses in Louisiana shall do so in association with a RATP recognized by the department.
- 1. Asbestos training providers requesting recognition shall provide the following:
- a. the latest version of the asbestos training provider 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;
- b. the latest version of the asbestos trainer recognition application, Form AAC-4, with resumes for principal trainers;
- c. two or more principal trainers shall be listed for each initial training course; and
  - d. appropriate fees (LAC 33:III.223).
- 2. The asbestos training provider recognition application shall, at a minimum, include the following:
- a. the name, address, telephone number, and email address of the training provider's primary offices and the representative serving as the contact for the provider for the scheduling of training courses and for other training activities;
- b. the signature of a responsible official for the training provider; and
  - c. information on the specific courses including:
- i. course discipline (e.g., worker, contractor/supervisor, inspector, etc.);
  - ii. course type (i.e., initial or refresher);
- iii. the language in which the course will be taught;
- iv. all addresses of the physical locations where courses will be held during the year;
- v. a description of the facility where the classes will be held (e.g., warehouse, industrial building, etc.);
- vi. copies of the latest version of training materials including texts, syllabi, and outlines, but not including exams:
- (a). if the latest version of training material was submitted with the last application, a note to that effect is sufficient:
- (b). the training material shall be provided in the language it will be taught; and
- (c). the department reserves the right to request a copy of the training material at any time;
- vii. a detailed statement about the development of the examination used in the course. The statement shall include, but is not limited to:
  - (a). the number of questions for each exam;
  - (b). the topics covered in the exam; and
- (c). the number of questions specifically relating to Louisiana regulations; and
- viii. a detailed statement clearly indicating how the course meets the requirements of this Appendix for:
  - (a). length of training days;

- (b). amount and type of hands-on training;
- (c). examination (e.g., length, format, passing score);
  - (d). topics covered in the course;
- (e). a copy of an example training completion certificate; and
- (f). a copy of the EPA letter recognizing approval of the training provider's course or approval from a state authorized by EPA to approve training courses, if applicable.
  - 3. Trainers seeking recognition shall submit:
- a. the latest version of the asbestos trainer recognition form, AAC-4;
  - b. appropriate fees (LAC 33:III.223);
- c. a resume indicating proof of experience in the subjects they will teach which includes the following experience requirements:
- i. a degree or training certification in the subject being taught; and
  - ii. experience in the field for two or more years;
- d. a person experienced as a supervisor/contractor is also considered experienced as a worker.
  - 4. Training Providers and Trainers Recognition
- a. Training providers and trainers shall be considered recognized upon written confirmation from the department or upon receipt of a certificate of recognition from the department.
- b. Training recognition numbers will be issued to all recognized training providers and principal trainers. The recognition is effective for one year from the date issued.
- c. Recognition of training providers and trainers may be renewed annually by submitting the latest revision of Forms AAC-3 and AAC-4 respectively along with all appropriate updates to the information required for the application and the applicable fees to the department.
- 5. Applications for training provider and trainer recognition may be denied for:
  - a. incomplete applications;
  - b. inaccurate or falsified information;
  - c. incomplete supporting documentation;
- d. failure to comply with applicable federal, state, and local regulations, which includes nonpayment of fees or a history of noncompliance with LAC 33:III. Chapters 27 and 51; and
- e. at the discretion of the department based on past compliance history.
- 6. Training courses will be given contingent approval based upon the review of course materials and inclusion of

those topics required under Subsection B of this Appendix when applicable. Full approval may be given upon completion of an audit of the courses.

- 7. Recognition for a training course may be denied if the training provider fails to:
- a. comply with the course requirements outlined in LAC 33:III.274.B; and
- b. comply with the notification requirements outlined in LAC 33:III.2741.B.
- 8. Compliance and Enforcement. A recognized training provider or recognized trainer may have their recognition withdrawn or revoked for one or more years according to one or more of the following criteria:
- a. failure to issue certificates which includes the information required by these regulations;
- b. failure to ensure that the training materials are applicable to the class taught, and are included in the latest material submitted to the department as part of the initial or renewal application;
- c. failure to ensure that the training material includes the most current version of the DEQ forms, obtained from the department website;
- d. failure to ensure that the Office of Environmental Services is informed of any change in status of the training organization, such as pending fines, notices of violation, changes in principal trainer status, etc;
- e. failure to ensure that a timely notification of courses that will be taught, including where, when, and who will conduct the class, or that a cancellation of classes is received by the Office of Environmental Services before the class should have commenced;
- f. failure to ensure that an accurate, timely, and complete roster is received by the Office of Environmental Services;
- g. misrepresentation of the extent of a training course's approval by a state or EPA;
- h. failure to submit required information or notifications in a timely manner;
  - i. failure to maintain requisite records;
- j. falsification of recognition or accreditation records, trainer qualifications, or other information;
- k. falsification of any information regarding the principal trainer and course location on the notification or roster;
- 1. misrepresenting the contents of a training course to the department and/or the student population;
- m. making false or misleading statements to the department, EPA, or another state in its application for recognition;

- n. failure to adhere to the training standards and requirements of the agent accreditation plan and the EPA MAP; and/or
- o. failure to meet any of the requirements of this Appendix.
- 9. Three violations of any of the requirements of this Subsection will result in the training provider or principal trainer permanently losing their recognition to teach courses in Louisiana.

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), amended by the Office of the Secretary, Legal Division, LR 40:510 (March 2014).

# 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, work practice standards for performing such activities, data collection, and reporting of lead hazards at *child occupied facilities (COFs)*, as defined in LAC 33:III.2803 and as specified in LAC 33:III.2813.B and LAC 33:III.2815 (e.g., daycare centers, preschools, or public and nonpublic elementary school facilities). Except as discussed below, all *lead-based paint activities*, as defined in this Chapter, shall be performed by accredited individuals, laboratories, and licensed contractors.
- B. This Chapter applies to all persons and contractors who are engaged in lead-based paint activities in *target housing*, as defined in LAC 33:III.2803, and COFs, 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), amended by the Office of the Secretary, Legal Division, LR 39:1466 (June 2013).

#### §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 (COF)—a building or portion of a building or common area, other than the child's principal residence, constructed prior to 1978, that meets at least one of the following criteria.

a. A building qualifies as a COF when visited regularly by the same child, 6 years of age or younger, on at least two different days within any week, provided that each day's visit lasts at least three hours, with the combined weekly visit lasting at least six hours, and that the combined annual visits last at least 60 hours. Examples of child-occupied facilities/common areas include, but are not limited

to, public and nonpublic schools, day care centers, parks, playgrounds, and community centers.

- b. A building qualifies as a COF when it 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 who are 6 years of age or younger.
- c. A building qualifies as a COF when used as 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  $\mu$ g/dl (micrograms of lead per deciliter of whole blood) for a single venous test or of 15-19  $\mu$ g/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 prevent or reduce human exposure or likely exposure to lead-based paint hazards found in dust, paint, or soil, including specialized cleaning, repairs, maintenance, painting, temporary containment, temporary barriers for contaminated soils, the ongoing monitoring of lead-based paint hazards or potential hazards, and the establishment and operation of lead hazard management plans for buildings and grounds subject to the provisions of this Chapter and occupant education programs.

*Lead Contractor*—any person, including self-employed individuals, who bid and/or perform lead-based paint abatements.

*Lead Hazard Notification (LHN)*—the notification document required by the department to report lead hazards in accordance with LAC 33:III.2813.B.

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, dustlead 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 accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I.Chapter 45 through 57, and accredited to perform an analysis of lead and 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 6 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 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, leadspecific 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  $1\frac{1}{4}$ " photograph for the trainee to submit to the department with the application for accreditation;
- b. one 1" x  $1\frac{1}{4}$ " photograph for the class roster submitted to the department by the training provider; and
- c. one 1" x  $1\frac{1}{4}$ " 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;\*
- $g. \quad interior \ dust \ abatement \ methods/cleanup/waste \\ disposal \ or \ lead-based \ paint \ hazard \ reduction; * \ and$

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
- the training course shall not start before the start date noted on the notification.
- F. Suspension and Revocation of Recognized Training Providers
- 1. 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 (1);
- c. a 1" x  $1\frac{1}{4}$ " 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. Reaccreditation

- 1. To maintain accreditation individuals shall be annually recertified by the Office of Environmental Services.
- 2. To maintain continuous accreditation, an individual shall perform the following:
- 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.
- D. 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).

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#### §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.

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#### §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 and the condition (i.e., good, fair, poor) 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 6 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 6 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 6 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 6 years and under, and in other common areas in the child-occupied facility where the risk assessor determines one or more children, age 6 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 Louisiana Environmental Laboratory Accreditation Program (LELAP) laboratory accredited for the media and methods used to determine the concentration of lead. The program requirements are described in LAC 33:I.Subpart 3.
- 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)* form, as defined in LAC 33:III.2803. 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. For emergencies during normal working hours, the contractor shall provide notification either by FAX or email to the Office of Environmental Services and the DEQ regional office responsible for inspecting the project site within 24 hours of the start of the project. After working hours, the contractor shall provide notification by FAX, email, or voice mail to the Office of Environmental Services and the DEQ regional office responsible for inspecting the project site within 24

- hours of the start of the project. The completed notification form shall be submitted within five working days and shall be accompanied by the appropriate processing fees (LAC 33:III.223).
- d. An amended LPN shall be submitted to the department and appropriate regional office when changes occur in the completion dates, methodology, and square footage.
- e. 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, preabatement 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 COF.
- b. If soil is not removed, soil abatement shall be conducted in one of the following ways.
- i. The lead-contaminated soil shall be *permanently covered*, as defined in LAC 33:III.2803.
- ii. An interim control of a permeable barrier shall be applied and covered with 3 to 6 inches of clean top soil per EPA and The Department of Housing and Urban Development guidelines, as described in Paragraph F.1 of this Section.
- 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 6 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 and submitted to the department within 30 days of the completion of the project. 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.

#### F. Interim Controls

1. Interim controls, which require monitoring to maintain lead-safe conditions, may be used in lieu of abatement to manage lead hazards in paint, dust, and soil. Various types of interim controls are outlined in the HUD guidelines: *The Evaluation and Control of Lead-based Paint in Public Housing*; and EPA guidelines, (e.g. the *Superfund Lead-Contaminated Residential Sites Handbook* (August 2003)).

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## §2813. Recordkeeping and Reporting 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 COF, during the life of the facility and no less than 3 years thereafter, and by the contractor or accredited individual who conducted the activities, for . 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.
- B. For a licensed day care center, preschool, or public or nonpublic elementary school facility that qualifies as a COF, the owner, inspector, or risk assessor shall jointly provide notification using Form LHN-7348 to DEQ within 90 days of receipt of reports of lead hazards, lead abatement activities, or any lead testing performed that exceeds the clearance standards outlined in this Chapter. A copy of the notification shall be displayed in a prominent location at the COF.
- C. A licensed day care center, preschool, or public or nonpublic elementary school facility that qualifies as a COF shall provide notification to all parents or legal guardians of each child enrolled at the facility of lead abatement activities, lead testing that exceeds the clearance standards outlined in this Chapter, or lead hazard reduction activities performed at the facility or on its grounds. The notification shall be made by written or electronic means (e.g., email, posting on the facility's website, or posting on a bulletin board).
- D. The notifications required in Subsections B and C of this Section shall not be required if a facility or its grounds has been inspected or has been subject to lead abatement or remediation prior to August 1, 2012. If a portion of the facility or its grounds has not been inspected or been the subject of lead abatement or remediation prior to August 1, 2012, then that portion of the facility or its grounds shall be subject to the provisions of this Section. The owner or operator of the facility shall maintain documentation that the inspection, lead abatement, or remediation activities were conducted in accordance with applicable requirements outlined in 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 23:1676 (December 1997), amended by the Office of the Secretary, Legal Affairs Division, LR 33:644 (April 2007), amended by the Office of the Secretary, Legal Division, LR 39:1468 (June 2013).

#### §2815. Data Collection

A. The owner of any licensed day care center, preschool, or public or nonpublic elementary school facility that qualifies as a COF and that was first placed in operation after August 1, 2012, shall have an inspector or risk assessor conduct a thorough inspection of the facility and grounds for the presence of lead hazards within 30 days of starting operation. No inspection shall be required if the facility or its grounds has been inspected or has been the subject of lead abatement or remediation since 1978. If a portion of the facility or its grounds has not been inspected or been the subject of lead abatement or remediation since 1978, then those portions of the facility or its grounds shall be subject to the provisions of this Section. The owner or operator of the facility shall maintain documentation that the inspection, lead abatement, or remediation activities were conducted in accordance with the applicable standards outlined in this Chapter.

B. The owner or operator of COFs that are licensed day care centers, preschools, and elementary schools shall maintain documentation that the inspection, lead abatement, or remediation activities were conducted in accordance with LAC 33:III.Chapter 28 and LAC 33:VI. If a lead hazard is found to be present, the inspector and the owner shall report those findings to the Inspection Division, Office of Environmental Compliance using the Lead Hazard Notification (LHN) for Child Occupied Facilities, Form 7348. These records shall be maintained at COFs for the life of the facility to show that the hazards were removed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011 and 2351 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 39:1469 (June 2013).

#### §2817. Enforcement

[Formerly §2815]

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), amended by the Office of the Secretary, Legal Division, LR 39:1469 (June 2013).

#### §2819. Reciprocity

[Formerly §2817]

- 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 current training course completion certificate from an EPA authorized state or tribal program;
- 2. a copy of the photo identification card (or equivalent) issued upon receipt of current accreditation; and
- 3. 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) shall 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), amended by the Office of the Secretary, Legal Division, LR 39:1469 (June 2013).

#### §2821. Fees

[Formerly §2819]

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), amended by the Office of the Secretary, Legal Division, LR 39:1469 (June 2013).

#### **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

 $\ensuremath{C_{t}}\xspace =$  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 1 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 1 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 but anol 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<sub>2</sub>), 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-<br>Carrying Tubing End |                     | Make-Up Air         |  |  |  |
| Port<br>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 masstransfer calculations and direct measurements of 1-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.
- 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:

1,000,000 x 6.97/760 = 9170 ppm in air saturated with 1-but anol vapor at 25°C; (1 atm = 760 mm).

- b. Dilution Factor in Generator/Bypass System. Dilution Factor:  $4.66 \pm .20$
- i. The concentration of 1-butanol in the flow supplied to the round splitter is then:

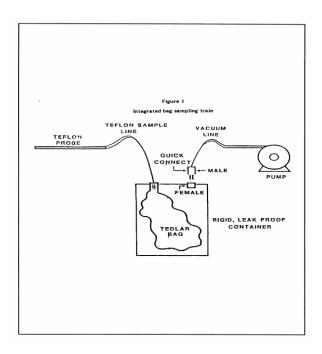
$$9170/4.66 = 1966 \pm 16$$
 ppm

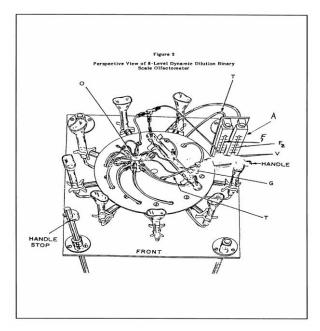
- ii. This is also the concentration supplied to Port Number 8.
- iii. Measurements for other ports are conducted by pulling the Teflon tubing out from the ports and connecting the Buck calibrator to these lines.
- iv. The following set of data illustrates the calculations. (See Table 2)
- v. The brass 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. 1/16 o.d., 0.030 i.d.
    - ii. 1/16 o.d., 0.020 i.d.
    - iii. 1/16 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., 1/32 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, 1/4 in. o.d., 1/16 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

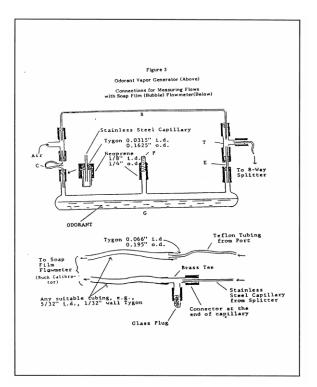
| 8.P                              | Table 2 8-Port 1-Butanol Olfactometer Port Concentration in ppm |      |      |     |     |     |     |
|----------------------------------|---|------|------|-----|-----|-----|-----|
| Date   7   6   5   4   3   2   1 |   |      |      |     |     |     |     |
| 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 (25°C 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.







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, 2012, are hereby incorporated by reference as they apply to the state of Louisiana. Also incorporated by reference are the following revisions to 40 CFR Part 60: Subpart OOOO as promulgated on August 16, 2012, in the Federal Register, 77 FR 49490-49600.
- 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 Services, where the state is designated authority by EPA as "the administrator," or shall be provided to the Office of Environmental Services 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 Services, 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                           |  |  |
|----------------|---|--|--|
|                | Emissions Guidelines and Compliance       |  |  |
| Cyclemout Cle  | Times for Large Municipal Waste           |  |  |
| Subpart Cb     | Combustors That Are Constructed on or     |  |  |
|                | before September 20, 1994                 |  |  |
| Subpart Cc     | Emission Guidelines and Compliance        |  |  |
| Subpart CC     | Times for Municipal Solid Waste Landfills |  |  |
| Subpart Cd     | Emission Guidelines and Compliance        |  |  |
| Subpart Cu     | Times for Sulfuric Acid Production Units  |  |  |
|                | Emission Guidelines and Compliance        |  |  |
| Subpart Ce     | Times for Hospital/Medical/Infectious     |  |  |
|                | Waste Incinerators                        |  |  |
|                | Emission Guidelines and Compliance        |  |  |
| Subpart BBBB   | Times for Small Municipal Waste           |  |  |
| зиоран вывы    | Combustion Units Constructed on or Before |  |  |
|                | August 30, 1999                           |  |  |
|                | Emission Guidelines and Compliance        |  |  |
|                | Times for Commercial and Industrial Waste |  |  |
| Subpart DDDD   | Incineration Units That Commenced         |  |  |
|                | Construction on or before November 30,    |  |  |
|                | 1999                                      |  |  |
|                | Emission Guidelines and Compliance        |  |  |
|                | Times for Other Solid Waste Incineration  |  |  |
| Subpart FFFF   | 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. The volumes containing those federal regulations incorporated by reference may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402 or their website, www.gpoaccess.gov/cfr/index.html.

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), LR 34:1391 (July 2008), LR 35:1107 (June 2009), LR 36:2273 (October 2010), LR 37:2990 (October 2011), LR 38:1230 (May 2012), amended by the Office of the Secretary, Legal Division, LR 38:2754 (November 2012), LR 39:1039 (April 2013), LR 39:1277 (May 2013).

# 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.
- D. Notwithstanding the provisions of Subsections A and B of this Section and except as provided below, the requirements of this Subchapter do not apply to an *affected source*, as defined in LAC 33:III.5103.A, that is subject to a national emission standard for hazardous air pollutants promulgated by the U.S. Environmental Protection Agency in 40 CFR Part 61 or 63.
  - 1. Affected sources shall be subject to:
- a. the annual emissions reporting requirements of LAC 33:III.5107.A;
- b. the ambient air standard requirements of LAC 33:III.5109.B; and
- c. applicable air toxics permit application fees and air toxics annual emissions fees provided by LAC 33:III.Chapter 2.

2. If an affected source emits a toxic air pollutant not listed in section 112(b) of the federal Clean Air Act above the minimum emission rate established for that pollutant by LAC 33:III.5112, Table 51.1, the affected source shall be subject to the requirements of this Subchapter for that pollutant. The department may determine that compliance with an applicable standard meets the requirements of this Subchapter.

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), amended by the Office of the Secretary, Legal Division, LR 38:2743 (November 2012)

#### §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.

Affected Source—the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the federal Clean Air Act. "Affected source" may be further defined by the relevant standard.

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.

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

 $\Omega = ohm$ 

 $\mu g = microgram = 10^{-6} gram$ 

#### 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

1 = 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

 $\mu l = microliter = 10^{-6} liter$ 

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), amended by the Office of the Secretary, Legal Division, LR 38:2743 (November 2012).

#### §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.

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#### §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 Services 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 2012, 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 Services on or before April 30 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 as defined in LAC 33:I.3905.A, the owner or operator of the source shall notify the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline in accordance with LAC 33:I.3915.A.
- 2. Nonemergency Conditions. Except as provided in Paragraph B.4 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.

- 3. Written Reports. For every such discharge or equipment bypass as referred to in Paragraphs B.1 and 2 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.
- 4. 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 and 3 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.

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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. MACT determinations 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. Ambient air standards shall not apply to roads, railroads, water bodies, or other areas where activities are transient in nature and long-term exposure to emissions is not reasonably anticipated.
- 2. Ambient air standards shall not apply to industrial properties adjacent to or impacted by emissions from a major source, provided the owner or operator of the major source demonstrates that worker protection standards enacted pursuant to the federal Occupational Safety and Health Act as permissible exposure limits will not be exceeded on the impacted property due to toxic air pollutant emissions from the major source.
- 3. New major sources shall demonstrate compliance with an ambient air standard in an application for a permit in accordance with LAC 33:III.5111.
- 4. 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.
- 5. 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.
- 6. 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.
- 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.

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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), amended by the Office of the Secretary, Legal Division, LR 38:2744 (November 2012).

#### §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<br>Minimum Emission Rates Toxic Air Pollutants<br>Class I. Known and Probable Human Carcinogens |           |                                      |         |  |  |
|--|-----------|--------------------------------------|---------|--|--|
| Compounds CAS Number Synonyms Minimu Rate (I   |           |                                      |         |  |  |
| 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<br>Minimum Emission Rates Toxic Air Pollutants<br>Class II. Suspected Human Carcinogens and Known or Suspected Human Reproductive Toxins |           |                              |         |  |  |
|---|-----------|------------------------------|---------|--|--|
| Compounds CAS Number Synonyms Minimum Er<br>Rate (Pound   |           |                              |         |  |  |
| 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<br>Minimum Emission Rates Toxic Air Pollutants<br>Class II. Suspected Human Carcinogens and Known or Suspected Human Reproductive Toxins |            |   |  |  |  |
|---|------------|---|--|--|--|
| Compounds   | CAS Number | Synonyms  | Minimum Emission<br>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 Emiss Rate (Pounds/ye   |           |                             |          |  |  |
| 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  |  |  |
| n-Hexane  | 110-54-3  |                             | 13,000.0 |  |  |
| Hydrochloric acid   | 7647-01-0 | Hydrogen chloride           | 500.0    |  |  |

| Table 51.1<br>Minimum Emission Rates Toxic Air Pollutants<br>Class III. Acute and Chronic (Non-Carcinogenic) Toxins |  |                                 |          |  |  |
|---|--|---------------------------------|----------|--|--|
| Compounds   | Minimum Emission<br>Rate (Pounds/year) |                                 |          |  |  |
| 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  $\mu g$  (×)/m³, 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  $100^{\circ}$ 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 |            |       |                           |                            |  |  |
|   |            | Class | Ambient Air Standard [14] |                            |  |  |
| Compounds   | CAS Number |       | (μg/m³*)<br>(8 Hour Avg.) | (μg/m³**)<br>(Annual Avg.) |  |  |
| Acetaldehyde  | 75-07-0    | II    | (* 8-/                    | 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     |                           | +                          |  |  |
| 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                       |  |  |

| Louis   | Table 51<br>Siana Toxic Air Pollutant |             | Standards                 |   |
|---|---------------------------------------|-------------|---------------------------|---|
| Louis   | dana Toxic Air Pollutant              | Ambient Air | Ambient Air Star          |   |
| Compounds   | CAS Number                            | Class       | (μg/m³*)<br>(8 Hour Avg.) | (μg/m³**)<br>(Annual Avg.)              |
| Biphenyl  | 92-52-4                               | II          | 23.80                     | (11111111111111111111111111111111111111 |
| 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           | -1.0                      | 0.06                                    |
| Carbon disulfide Carbon tetrachloride                           | 75-15-0<br>56-23-5                    | II<br>II    | 71.40                     | ( (7                                    |
| Carbon tetrachloride Carbonyl sulfide                           | 463-58-1                              | III         | 582.00                    | 6.67                                    |
| Chlorinated dibenzo-p-dioxins [2]                               | 3268-87-9                             | II          | 382.00                    | .003                                    |
| Chlorinated dibenzo furans [3]                                  | 51207-31-9                            | II          | +                         | .003                                    |
| Chlorine  | 7782-50-5                             | III         | 35.7                      | 1002                                    |
| 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] Copper (and compounds) [1] | 7440-47-3                             | I II        | 22.00                     | 0.01                                    |
| Cresol [4]  | 7440-50-8<br>1319-77-3                |             | 23.80                     |   |
| Cumene  | 98-82-8                               | III         | 238.00<br>5,860.00        |   |
| Diaminotoluene  | 25376-45-8                            | II          | 181.00                    |   |
| 1,2-Dibromoethane   | 106-93-4                              | I           | 101.00                    | 0.45                                    |
| Dibutyl phthalate   | 84-74-2                               | II          | 119.00                    | 01.10                                   |
| 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                  | 92.00                                   |
| Epichlorohydrin Ethyl acrylate                                  | 106-89-8<br>140-88-5                  | I II        | 476.00                    | 83.00                                   |
| Ethyl benzene   | 100-41-4                              | II          | 10,300.00                 |   |
| Ethylene glycol   | 107-21-1                              | III         | 2,380.00                  |   |
| Ethylene oxide  | 75-21-8                               | I           | 2,360.00                  | 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          | 100.00                    | 0.02                                    |
| Hydrochloric acid   | 7647-01-0                             | III         | 180.00                    |   |
| Hydrofluoric acid Hydrogen cyanide                              | 7664-39-3<br>74-90-8                  | III         | 61.90<br>260.00           |   |
| Hydrogen cyanide Hydrogen sulfide                               | 74-90-8                               | 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                    | 20.00                                   |
| 2-Nitropropane<br>Phenol  | 79-46-9<br>108-95-2                   | II<br>II    | 452.00                    | 20.00                                   |
| Phosgene  | 75-44-5                               | III         | 9.50                      |   |
| 1 Hoogene   | 13-44-3                               | ш           | 9.30                      |   |

| Lo                                    | Table 51<br>puisiana Toxic Air Pollutant |       | Standards                 |                            |
|---------------------------------------|--|-------|---------------------------|----------------------------|
|                                       |  |       | Ambient Air Stan          |                            |
| Compounds                             | CAS Number                               | Class | (μg/m³*)<br>(8 Hour Avg.) | (μg/m³**)<br>(Annual Avg.) |
| 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  $100^{\circ}$ 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<sup>3</sup>.
- [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.

| Loi                        | Table 51.<br>uisiana Toxic Air Pollutan | _     | ıl 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                   |
| 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                  |

|  | Louisiana Toxic Air Pollutants | s Supplementa | al List*                               |
|--|--------------------------------|---------------|--|
| Compounds  | CAS Number                     | Class         | Synonyms                               |
| 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           | Fd. 1. 16 (                            |
| 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           | DIE DIE                                |
| Dimethyl formamide                                     | 68-12-2                        | II            | DMF, DMFA                              |
| 1,1-Dimethyl hydrazine                                 | 57-14-7                        | II            | Dimazine                               |
| Dimethyl phthalate                                     | 131-11-3<br>77-78-1            | II<br>I       | Phthalic acid methyl ester             |
| Dimethyl sulfate                                       |                                | II            | Methyl sulfate, DMS                    |
| 3,3'-Dimethylbenzidine N,N-Dimethyl carbamoyl chloride | 119-93-7<br>79-44-7            | II<br>I       | 3,3'-tolidine, diaminoditolyl          |
| 4,6-Dinitro-o-cresol, and salts                        | 534-52-1                       | II            | (Dimethylamino)carbonyl chloride       |
| 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             | 1,1 diemoroemane                       |
| 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              |
| N-Nitrosomorpholine                                    | 59-89-2                        | II            | 4-nitrosomorpholine                    |
| Parathion  | 56-38-2                        | II            | AATP, ethyl parathion                  |
| Pentachloronitrobenzene                                | 82-68-8                        | II            | Quintobenzene, PCNB                    |

|                           | Table 51.<br>Louisiana Toxic Air Pollutant | •     | al List*                                     |
|---------------------------|--|-------|--|
| Compounds                 | CAS Number                                 | Class | Synonyms                                     |
| 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<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-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:  $R(OCH_2CH)_n\text{-}OH.$  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. The Office of Environmental Services shall be notified at least 30 days prior to testing to afford the department the opportunity to conduct a pretest conference

and to have an observer present. All tests shall be conducted by qualified personnel. The Office of Environmental Services shall be given a copy of the test results in writing signed by the person responsible for the tests within 60 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 Services by a certified letter sent before the close of business on the sixtieth 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 Services 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 Services 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 Services 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 Services for approval a plan describing the affected emission units 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), LR 34:1904 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2744, 2755 (November 2012), LR 39:3268 (December 2013).

# 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, 2012, and specifically listed in the following table, are hereby incorporated by reference as they apply to sources in the state of Louisiana.

| 40 CFR<br>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<br>Emissions from Glass Manufacturing Plants                                     |
| Subpart O         | National Emission Standard for Inorganic Arsenic<br>Emissions for Primary Copper Smelters   |
| Subpart P         | National Emission Standard for Inorganic Arsenic<br>Emissions from Arsenic Trioxide and Metallic Arsenic<br>Production Facilities |
| Subpart V         | National Emission Standard for Equipment Leaks (Fugitive Emission Sources)  |
| Subpart Y         | National Emission Standard for Benzene Emissions from<br>Benzene Storage Vessels  |
| Subpart BB        | National Emission Standard for Benzene Emissions from<br>Benzene Transfer Operations  |
| Subpart FF        | National Emission Standard for Benzene Waste Operations   |
| Appendix A        | National Emission Standards for Hazardous Air Pollutants,<br>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. The volumes containing those federal regulations incorporated by reference may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402 or their website, www.gpoaccess.gov/cfr/index.html.

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), LR 34:1391 (July 2008), LR 35:1108 (June 2009), LR 36:2273 (October 2010), LR 37:2990 (October 2011), LR 38:1230 (May 2012), amended by the Office of the Secretary, Legal Division, LR 39:1277 (May 2013).

# 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, 2012, are hereby incorporated by reference as they apply to major sources in the state of Louisiana.
- B. The volumes containing those federal regulations incorporated by reference may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402 or their website, www.gpoaccess.gov/cfr/index.html.
- 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), LR 34:1392 (July 2008), LR 35:1108 (June 2009), LR 36:2273 (October 2010), LR 37:2991 (October 2011), LR 38:1231 (May 2012), amended by the Office of the Secretary, Legal Division, LR 39:1278 (May 2013).

# Subchapters D. - 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.

Accessible—asbestos-containing material that is subject to disturbance by facility occupants, custodial or maintenance personnel in the course of their normal activities. Accessible also refers to asbestos-containing material that is available for examination and sampling purposes prior to a demolition or renovation.

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 materials, 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. Lack of water droplets means it is not adequately wet.

Asbestos—the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, and actinolite-tremolite.

Asbestos-Containing Material (ACM)—any material or product that contains more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR, 763, section 1, polarized light microscopy.

Asbestos-Containing Waste Material (ACWM)—mill tailings or any waste that contains commercial or previously 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 ACD, and disposable equipment and clothing.

Asbestos-Contaminated Debris (ACD)—demolition or renovation debris that contains regulated asbestos-containing material as defined in this Subsection.

Asbestos-Contaminated Debris Activity (ACDA)—the handling and/or disposal of asbestos-contaminated debris as RACM.

*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 (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 E, subpart E, 40 CFR, 763, section 1, polarized light microscopy that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

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 E, subpart E, 40 CFR, 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 permanent 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, barrier placed around ACM during activities that disturb asbestos to prevent the release of asbestos fibers into the ambient 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.

institutional, Facility—any commercial, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, and residential buildings having greater than four dwelling units); any ship; and any active or inactive waste disposal, or ACD site. Residential buildings that have four or fewer dwelling units are exempt from the provisions of this Subchapter, except those residential structures that are intentionally demolished or renovated as part of a commercial or public project, such as urban renewal or highway right-of-way projects and those that are intentionally burned. 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, that is under the control of an owner or operator.

*Fiber Release Episode*—any uncontrolled or unintentional disturbance of *ACM*.

Friable Asbestos Material—any material containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR, 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 assume the amount to be greater than 1 percent and treat the material as ACM.

*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 ACM. 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 1926.1101(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.J 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 part of a planned project 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 one percent asbestos as determined by the method specified in appendix E, subpart E, 40 CFR, 763, section 1, polarized light microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Nonscheduled Operation—a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operation experience, but for which an exact date cannot be predicted. Diaphragm cell renewal is considered a nonscheduled operation.

*Operations and Maintenance (O and M)*—Repealed March 2014.

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, Renovation, Response Action or ACD Activity (owner/operator)—any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated, or an ACDA or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both, response action, or an ACDA.

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—Repealed March 2014.

Recognized Asbestos Landfill (RAL)—a waste disposal site recognized by DEQ, Office of Environmental Services after receipt of an Asbestos Landfill Recognition Form (AAC-7). An in-state landfill shall comply with Subsection N of this Section and be permitted or authorized to accept ACWM. An out-of-state landfill shall be subject to 40 CFR Part 61.154 or another state's applicable regulation that EPA has determined to be at least as stringent as § 61.154.

# Regulated Asbestos-Containing Material (RACM)—

- a. friable asbestos material;
- b. category I and II nonfriable ACM that has become friable such as asbestos-cement material that is not removed from a facility prior to demolition;
- c. category I and II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, ground, sanded, cut, abraded, or reduced to powder by the forces that have acted or are expected to act on the material in the course of demolition or renovation operations; or
- d. resilient floor covering or the asbestos-containing mastic used to attach it to the floor surface that is scraped, sanded, abraded, bead blasted, cut, ground, crumbled, pulverized, or reduced to powder by any means, either hand or mechanical equipment. This definition does not include resilient floor covering removed by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact (minor tears or minor breakage is acceptable where, for all intents and purposes, the flooring is considered whole) or asbestos-containing mastic that has been removed by chemical or other means that results in the asbestos fibers in ACWM being bound within a macro substrate and cannot reasonably become airborne unless further forces are applied.

*Remove*—to take out RACM or facility components that contain or are covered with RACM.

*Renovation*—altering a facility or one or more facility components in any way, including the washing, stripping, or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Resilient Floor Covering—asbestos-containing floor tiles, 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 E, subpart E, 40 CFR, 763, section 1, polarized light microscopy.

Response Action—a method, including actions during demolition or renovation that provides for removal, encapsulation, enclosure, repair, and operations and maintenance activities, that protects human health and the environment from RACM.

*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—Repealed March 2014.

State Building—Repealed March 2014.

*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.

Urban Renewal—demolitions or renovations of blighted or condemned properties authorized or conducted by government entities (city, parish, or state) as part of commercial or public projects.

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, renovation, response action or ACD activity, used to track and substantiate the disposition of asbestos-containing waste material to a RAL.

Wet Methods—for resilient floor coverings, wetting sufficiently to cause the coverings to break loose or lift from the substrate in whole pieces.

Work Area Controls—work practices and engineering procedures that shall be used when removing RACM, as outlined in OSHA 29 CFR 1926.1101.g.

*Working Day*—Monday - Friday, including holidays that fall on any of the days Monday - 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.

|                                   | I                                 | nspection and Monitorin   | ng Record Form  |                          |                         |
|-----------------------------------|-----------------------------------|---|---|--------------------------|-------------------------|
|                                   |                                   |   |   |                          | AAC-6                   |
| Date of Inspection<br>(mo/day/yr) | Time of Inspection<br>(a.m./p.m.) | Air Cleaning Device<br>or Fugitive Source<br>Designation or<br>Number | Visible Emissions<br>Observed (yes/no),<br>Corrective Action<br>Taken | Daily Operating<br>Hours | Inspector's<br>Initials |
|                                   |                                   |   |   |                          |                         |
|                                   |                                   |   |   |                          |                         |
|                                   |                                   |   |   |                          |                         |
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|                                   |                                   |   |   |                          |                         |
|                                   |                                   |   |   |                          |                         |
|                                   | Figure 1. l                       | Record of Visible Emissic   | on 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
- 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:
  - 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:
  - date and time of each inspection;
  - b. presence or absence of visible emissions;
- 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
- 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, Renovation, Asbestos-Contaminated Debris Activities, Response Actions and Major Fiber Release Episodes
- 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, response action or ACD activity and prior to the commencement of the activity, the owner/operator shall either assume that RACM, as defined in Subsection B of this Section, is present or an accredited inspector shall thoroughly inspect the affected facility or part of the facility where the activity will occur for the presence of asbestos, including category I and category II nonfriable ACM. All homogeneous areas that potentially contain asbestos shall either be assumed to be ACM or samples shall be collected and submitted for analysis. The requirements of Paragraphs F.2 and 3 of this Section apply to each owner or operator of a demolition, renovation, response action or ACD activity as defined in Subsection B of this Section, as follows.
- a. In a facility being demolished, all the requirements of Subparagraphs F.2.a, b, d, and f, Clauses F.2.c.i and v, and Paragraph F.3 of this Section apply, except when the facility is being demolished under an order by a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse as provided in Subparagraph F.1.c of this Section, if the combined the amount of RACM is:
  - at least 60 linear feet on pipes;
- ii. at least 64 square feet on other facility components; or
- at least 27 cubic feet off facility components where the length or area could not be measured previously.
- b. In a facility being demolished, only the notification requirements of Subparagraphs F.2.a and b and Clauses F.2.c.ii and v, d.i-vii, ix, xiv and xvii of this Section apply, if category I or II nonfriable ACM present in the facility will remain in good condition, would not be rendered RACM as a result of the demolition activity (any category I or II nonfriable ACM that may be rendered RACM as a result of the demolition activity, such as asbestos-cement products, must be counted toward the thresholds below), and the combined amount of RACM (including category I or II nonfriable ACM that may be converted to RACM) is:
  - i. less than 60 linear feet on pipes;
- less than 64 square feet on other facility ii. components; or
- less than 27 cubic feet off facility components where the length or area could not be measured previously.
- 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), Subparagraph F.2.f, and Paragraph F.3 (except Subparagraph F.3.a) of this Section apply.

- d. If a facility is demolished or renovated prior to an inspection or notification, then all debris at the site is categorized as *asbestos-contaminated debris* (ACD), as defined in Subsection B of this Section unless the owner/operator affirmatively demonstrates there is no ACM in the debris. The owner/operator shall follow the procedures and requirements as provided in Subparagraphs F.2.a, b, d, and f and Clauses F.2.c.i and v of this Section, and shall handle and dispose of the debris in accordance with Paragraph F.3 and Subsection J of this Section.
- e. In a facility being renovated, including a response action and any individual nonscheduled renovation operation, all the requirements of Paragraphs F.2 and 3 of this Section apply if:
- i. the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is:
  - (a). at least 60 linear feet on pipes;
- (b). at least 64 square feet on other facility components; or
- (c). at least 27 cubic feet off facility components where the length or area could not be measured previously.
- ii. To determine whether Subclause F.1.e.i.(a), (b), or (c) of this Section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed, stripped dislodged, cut, drilled, or similarly disturbed during a calendar year of January 1 through December 31 based on past operating experience.
- iii. To determine whether Subclause F.1.e.i.(a), (b), or (c) of this Section applies to emergency renovation operations, including those associated with major fiber release episodes and response actions, estimate the combined amount of RACM to be removed, stripped, dislodged, cut, drilled, or similarly disturbed as a result of the sudden, unexpected event that necessitated the renovation.
- iv. If Clause F.1.e.i.of this Section is not applicable to the renovation activity, it is exempt from any further requirements of this Section (except to conduct the inspection or assume material is RACM pursuant to Paragraph F.1 of this Section).
- f. Owners or operators of demolition, renovation, response actions and ACD operations are exempt from the requirements of LAC 33:III.5105.A, 5109.E, 5111.A and 5113.A.
- g. Residential structures including those with four and fewer dwelling units that are demolished or renovated as part of a commercial or public project, such as urban renewal or highway right-of-way projects, are considered

installations and are subject to the provisions of this Subchapter.

- h. A person contracted to perform a demolition, renovation, or response action which disturbs RACM or conducts ACDA shall comply with any applicable requirements of the Louisiana State Licensing Board for Contractors to perform asbestos abatement. 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).
- i. If the activities are emergency demolition operations, all the requirements of Subparagraphs F.2.a, b, d, e, and f, and Paragraph F.3 of this Section apply.
- j. When greater than 64 square feet of either resilient floor covering, as defined in Subsection B of this Section, is removed by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact (minor tears or minor breakage is acceptable where, for all intents and purposes, the flooring is considered whole) or asbestos-containing mastic removed by chemical or other means that results in the asbestos fibers in the ACWM being bound within a macro substrate and cannot reasonably become airborne unless further forces are applied, Subparagraphs F.2.a and b, and Clauses F.2.c.vi, d.i-ix, and xv-xvii of this Section apply;
- k. Paragraphs F.2 and 3 of this Section (except Subparagraph F.3.a of this Section) apply to any ACDA.
- l. An asbestos renovation or demolition project, or ACDA shall not begin until an Asbestos Notification of Renovation and Demolition Form AAC-2 is received by the department, except in the case of an emergency.
- 2. Notification Requirements. Each owner or operator of a demolition, renovation, response action or ACD activity to which this Subsection applies shall:
- a. provide the Office of Environmental Services with typed notice of intention to demolish, renovate, conduct a response action, or an ACDA by completing and submitting the latest version of Notification of Demolition and Renovation and Asbestos-Contaminated Debris Activity Form, AAC-2, and fees, if applicable. 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, hand delivery, or email is acceptable. The use of a prior version of the AAC-2 Form is acceptable unless the department has previously provided the owner/operator with notice of or a copy of the current version, or the owner/operator is aware of the latest version.
- i. After review of the notification, if the application is incomplete, inaccurate, or the fee is not submitted, a response shall be faxed or emailed to the company indicating the application is incomplete, and processing will be discontinued until all applicable information is completed and submitted to DEQ.

- ii. Any unauthorized renovation, demolition, or ACDA project, including those not processed due to incompleteness or inaccurate information on Form AAC-2 is a violation of this Section.
- b. Update by highlighting or circling revisions on, a revised Form AAC-2, as necessary, (i.e., when the amount of asbestos affected changes by plus or minus 20 percent) and indicate revised total amount of the entire project in cubic yards, or if there is a change in transporter, contractor, or designated landfill.
  - 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 activity is a demolition or renovation of a facility where RACM is present as described in Subparagraphs F.1.a and e (except Clauses F.1.e.ii [nonscheduled operations] and iii [emergency operations]) of this Section;
- ii. at least five working days before demolition begins, if a facility is being demolished where RACM is below threshold levels as provided in Subparagraph F.1.b of this Section;
- iii. as early as possible before, but not later than the following working day, when the facility is being demolished under an order issued by a state or local government agency because the facility is structurally unsound and in danger of imminent collapse, according to Subparagraph F.1.c of this Section, or if the operation is an emergency renovation described in Clause F.1.e.iii of this Section;
- iv. 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.e.ii of this Section;
- v. for activity covered by Subsection F (except Clauses F.1.e.ii and iii), 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 as follows:
- (a). when activity covered by Subsection F will begin after the date contained in the notice (AAC-2 Form):
- (i). notify the DEQ regional office responsible for inspecting the project site of the new start date by fax or email as soon as possible before the original start date; and
- (ii). provide the Office of Environmental Services with a revised AAC-2 Form 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, fax, email, or hand delivery is acceptable:
- (b). when the activity covered by Subsection F will begin on a date earlier than the original start date, submit a revised AAC-2 Form with the new start date. The

revised notice shall meet the requirements of Subparagraph F.2.c; and

- (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.
- vi. Notify the DEQ regional office by fax or email three days prior to the start of the removal of *resilient floor covering*, as defined in Subsection B of this Section, by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact or asbestos-containing mastic removed by chemical or other means that results in the asbestos fibers in the ACWM being bound within a macro substrate and cannot reasonably become airborne unless forces are applied when required by Subparagraph F.1.i.

#### d. In the notice include:

- i. an indication of whether the notice is the original, additional, emergency, revised (including canceled), or nonscheduled maintenance operation (annual) notification, the number of ADVFs requested, and/or note if the structure is being demolished under an order of a state or local government agency;
- ii. name, address, telephone number, and email address of a contact person of both the facility owner and operator and the asbestos removal contractor owner or operator, with the current DEQ identification number assigned by the administrative authority;
- iii. type of operation: demolition, renovation, response action, or ACDA;
- iv. a description of the facility or affected part of the facility including the size (square feet, linear feet, and number of floors), age, and present and prior use of the facility;
- v. the procedure, including analytical methods, employed to detect the presence of RACM and category I and category II nonfriable ACM, or check the "Known or Assumed" box if assumed to be asbestos and no analytical data is provided;
- vi. estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear feet, surface area in square feet on other facility components, or volume in 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. In the case of asbestos-contaminated debris pile(s), estimate the approximate total volume of the debris to be disposed. Total volume of all RACM and ACD shall be documented in cubic yards;
- 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, renovated, or for ACDA;

- 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, renovation, or ACDA; planned renovation operations involving individual nonscheduled operations shall include the beginning and ending dates of the annual report period as described in Clause F.1.e.ii of this Section;
- ix. scheduled starting and completion dates of demolition, renovation, response action, or ACDA;
- x. description of planned demolition, renovation work, response action, or ACDA 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 RAL where the asbestos-containing waste material will be deposited;
- xiii. a signed certification that personnel performing the demolition or renovation activity, response action, or ACDA are trained and accredited as required by Subparagraph F.3.h of this Section when RACM is present.;
- xiv. for demolitions where RACM is below threshold levels as provided in Subsection F.1.b of this Section, a signed certification stating that RACM is below threshold levels;
- xv. for facilities demolished under an order of a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, 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;
- xvi. for emergency renovations, including emergency renovation operations of an estimated amount of RACM to be removed or stripped as a result of a sudden, unexpected event that necessitated the renovation, 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;
- xvii. description of procedures to be followed in the event that unexpected RACM is found or category II nonfriable ACM becomes RACM;
- xviii. name, mailing address, telephone number, and DEQ identification number of the solid waste transporter(s) carrying the waste to the RAL and offsite/temporary storage area; and

- xix. current ADVF numbers if they have been issued for the project;
- e. for emergencies, provide notification by phone, fax, email, or voice mail to the Office of Environmental Services and DEQ regional office responsible for inspecting the project site as soon as possible, but in no case later than four hours after learning of the incident that required emergency response action, demolition or renovation operations:
- i. the emergency notification shall include the following:
  - (a). the reason for the emergency;
- (b). steps taken to minimize hazards to workers and the public; and
- (c). estimated quantities of friable and nonfriable ACM to be handled;
- ii. within five working days after the emergency notification is made, a typed AAC-2 form together with required fees as specified in Subparagraphs F.2.a and d of this Section shall be submitted to the Office of Environmental Services;
- f. use the following procedures in order that the department can trace disposal of ACWM:
- i. each properly completed and submitted demolition, renovation, response action, or ACDA notification received by the department that is associated with a project that generates asbestos-containing waste material shall result in issuance of an ADVF with a specific ADVF project number to the owner/operator. The ADVF, or a copy, shall be kept at the facility, except as provided in Subparagraph F.1.1 of this Section, and available for inspection by the department during demolition, renovation, response action, and ACDA. Alterations of the ADVF shall invalidate the ADVF.
- ii. the owner or operator of a demolition, renovation, response action, or ACDA shall complete and sign their portion of the valid ADVF, including the quantity shipped in cubic yards, the date the project is scheduled to be completed (or has been completed as applicable), printed name, signed and dated certification, and relinquish the valid ADVF 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 RAL and complete name, dates received and delivered, sign the transporter portion, then relinquish the ADVF to the RAL site owner or operator at the time the asbestos waste is delivered for burial;
- iv. upon receipt from the transporter, the RAL owner or operator shall verify the ADVF, enter the date received, indicate the quantity received in cubic yards, print and sign the disposal facility portion of the ADVF, and mail the original ADVF to the Office of Environmental Services within 30 working days. A copy of the valid ADVF is to be returned to the waste generator within 30 working days;

- 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;
- the ADVF shall be completed in its entirety by the applicable person as indicated in the particular section of the form. Information entered onto the form must be legible;
- acceptance of an invalid ADVF by a contractor, waste transporter, or disposal site owner or operator is a violation of this Subchapter; and
- all ADVFs that are not used shall be returned by the owner/operator to the Office of Environmental Services within 30 working days after expiration.
- 3. Procedures for Asbestos Emission Control. Each owner or operator of a demolition, renovation, response action, or ACD activity to whom this Section applies, according to Paragraph F.1 of this Section, shall maintain the ADVF or a copy on-site, except for the provisions in Subparagraph F.1.1 of this Section and 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:
- it is category I nonfriable ACM that is not in poor condition and has a low probability that it will become RACM;
- it is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition;
- 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 ACD shall be treated as ACWM and adequately wet at all times until disposed of; and
- (a). the RACM and any ACD shall be adequately wet, and contained in leak-tight, clear transparent wrapping; and
- (b). the leak-tight, clear transparent wrapping shall be sealed and labeled according to Clause J.1.a.iv of this Section during all loading and unloading operations, transportation, and during storage;
- it is category II nonfriable ACM and the probability is low that the materials will become RACM.
- 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:
- adequately wet all RACM exposed during cutting or disjoining operations; and
- 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 removed during a response action or stripped from a facility component while it remains in place in the facility, adequately wet the RACM prior to and during the response action or the stripping operation. The work area controls as defined in Subsection B of this Section shall be employed to prevent the release of ACM 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).
- In renovation operations, wetting is not required only 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:
- 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.
- 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.
- 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:
  - adequately wet RACM during stripping; and
- 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 shall 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 J.1.a.iv of this Section during all loading and unloading operations, transportation, 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 leaktight 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 provided written authorization from the administrative authority is maintained on site during this exception to the wetting requirements.
- 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/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, provided written authorization from the administrative authority is maintained on-site during this exception to the wetting requirements.
- 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. Personnel and Accreditation

- i. No demolition or renovation activity that disturbs RACM or ACDA shall be conducted at a facility regulated by this Subsection unless at least one asbestos abatement contractor/supervisor trained in accordance with Subsection P of this Section is physically present.
- ii. All asbestos abatement workers who are performing demolition or renovation activity that disturbs RACM or ACDA shall be trained in accordance with Subsection P of this Section and supervised by a trained asbestos contractor/supervisor
- iii. Contractor/supervisors and workers employed by a contractor licensed by the Louisiana State Licensing Board and performing demolition or renovation activity that disturbs RACM or ACDA shall be accredited in accordance with Subsection P of this Section.
- iv. Evidence of the required training or accreditation shall be made available for inspection by the administrative authority at the demolition or renovation site. Evidence of required training or accreditation 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, renovation, response action, or ACDA 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 or residential structure is demolished by intentional burning, including activities related to the training of fire personnel, testing firefighting materials, or equipment, all RACM including category I and category II nonfriable ACM shall be removed in accordance with this Section before burning.
- k. There shall be no discharge of asbestos contaminated liquids from the demolition, renovation, response action, or ACDA which are contaminated with asbestos material if it is reasonably anticipated that such asbestos may become airborne.
- l. Prior to completion of a renovation, demolition, ACDA, or response action involving RACM, the work area (described area where the renovation, demolition, response action, or ACDA 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, renovation, response action, or ACDA has ended and the work area has been cleaned in accordance with Subparagraph F.3.1 of this Section, notify by fax or email the 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.
- n. After completion of a demolition activity, where no load-supporting structural member of a facility is left, no asbestos-containing floor covering or asbestos-containing mastic shall remain on surfaces where the material has the potential to become RACM.
- 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 one percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR, 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 E, subpart E, 40 CFR, 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  $\pm 1$ °C ( $\pm 2$ °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 ACWM during the loading and unloading of waste so that the signs are visible. The markings shall:
- i. be displayed in such a manner and location that a person can easily read the legend and;
- ii. conform to the requirements for signs specified in 29 CFR 1910.145(d)(4); and
- iii. display warning signs and labels with letter sizes and styles of sufficient size and contrast so as to be readily visible and legible as specified in 29 CFR 1926.1101(k)(8)(i-vi).
- 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 ACWM arrives at the disposal site:
  - 5. for all ACWM transported off the facility site:
- a. the owner or operator shall maintain a copy of the asbestos waste shipment record, using an ADVF form, which includes the following information:
- i. the name, DEQ identification number, and physical address of the waste generator, and project location;
- ii. the quantity of the ACWM shipped in cubic yards;
- iii. the name and telephone number of the recognized asbestos disposal facility owner or operator;
- iv. the name and physical site location of the disposal facility;
- v. the date the waste was transported from the project location;
- vi. the names, DEQ identification number, 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, Major Fiber Release Episodes, ACDA, Response Actions, 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 asbestoscontaining 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. The ACWM shall be maintained as intact as practicable. The ACWM shall not be needlessly fragmented or crushed.
- 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, ensuring that the ACWM is securely wrapped and sealed. 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 the Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) asbestos construction standard, 29 CFR 1926.1101(k)(8)(i) (vi). 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 asbestoscontaining 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 recognized asbestos landfill (RAL). Disposal of ACWM shall comply with any other applicable requirements, including but not limited to appropriate hazardous waste (LAC 33:Part V) and solid waste (LAC 33:Part VII) regulations. In particular:
- (a). RACM shall not be disposed in a Louisiana Type III (construction and demolition) landfill or processed in a composting facility;
- (b). Louisiana landfills accepting ACWM shall be properly permitted or authorized under appropriate regulations and recognized pursuant to this section to accept the waste;
- (c). disposal of ACWM in an out of state landfill shall be in an RAL, as defined in this section and authorized by that state's authority to accept ACWM.

[Note: Although landfills are permitted to accept asbestos wastes, a landfill should be contacted prior to transport to the solid waste facility to verify that the ACWM will be accepted and whether the facility has other requirements prior to disposal at that location.]

- 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.1.c or d of this Section, avoid crushing the ACM and adequately wet asbestos-containing waste material at all times prior to, during, and after

demolition and keep wet during handling, storage, and loading for transport to a disposal site. The ACWM shall be maintained as intact as practicable. The ACWM shall not be needlessly fragmented or crushed. Asbestos-containing waste materials covered by this Subparagraph shall be sealed in leak-tight containers or leak-tight, clear transparent wrapping then transported and disposed of at a solid waste Type I or Type II or hazardous waste landfill authorized to accept RACM.

- d. Use an alternative emission control and waste treatment method that has received prior written approval by the administrative authority 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 RACM prior to or during the course of removal, storage, transportation, and disposal.
- 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 approved site that converts RACM and ACWM 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 ACWM during the storage, loading, and unloading of waste so that the signs are visible. The markings shall conform to the requirements in Clauses I.4.a.i, ii, and iii of this Section.
  - 4. For all ACWM transported off the facility site:
- a. the owner, operator, and transporter shall maintain waste shipment records, using an ADVF Form, and include the following information:
- i. the name of the waste generator, DEQ identification number, physical address, and telephone number of the waste generator and project location;
- ii. the name and address of the administrative authority responsible for administering the asbestos Louisiana Emission Standards for Hazardous Air Pollutants (LESHAP) program;
- iii. the approximate quantity of ACWM in cubic meters (cubic yards);
- iv. the name and telephone number of the disposal site owner or 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 ACWM was deposited, at intervals of 165 feet or less. The warning sign shall:
- i. be displayed in such a manner and location that a person can easily read the legend;
- ii. conform to the requirements for signs specified in 29 CFR 1910.145(d); and
- iii. display warning signs and labels using the appropriate legend with letter sizes and styles of sufficient size and contrast so as to be readily visible and legible as specified in 29 CFR 1926.1101(k)(7).
- 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 administrative authority 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.
- 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 m³/min/m² (ft³/min/ft²) 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<sup>2</sup>) the minimum thickness in millimeters (inches), and the airflow permeability in  $m^3/min/m^2$  (ft<sup>3</sup>/min/ft<sup>2</sup>);
- 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 yd<sup>3</sup>/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 ACWM is deposited, at intervals of 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 for signs specified in 29 CFR 1910.145(d); and
- iii. display warning signs and labels using the appropriate legend with letter sizes and styles of sufficient size and contrast so as to be readily visible and legible as specified in 29 CFR 1926.1101(k)(7).
- 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 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 administrative authority according to the procedures of Subparagraph I.3.b of this Section.
- 5. For all ACWM 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, DEQ identification number, address, and telephone number of the transporter(s);
- iii. the quantity of ACWM in cubic yards and date received;
- 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 ADVF, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the ADVF along with the report; and
  - v. the date buried;
- 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 yards of ACWM 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 I.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  $9 \text{ m}^3/\text{min/m}^2$  (30 ft<sup>3</sup>/min/ft<sup>2</sup>) for woven fabrics or  $11^3/\text{min/m}^2$  (35 ft<sup>3</sup>/min/ft<sup>2</sup>) for felted fabrics, except that  $12 \text{ m}^3/\text{min/m}^2$

- (40 ft<sup>3</sup>/min/ft<sup>2</sup>) for woven and 14 m<sup>3</sup>/min/m<sup>2</sup> (45 ft<sup>3</sup>/min/m<sup>2</sup>) 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 aircleaning 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 required by this Section to be trained as a worker shall comply with Subsections B, C, and D of LAC 33:III.2799, Appendix A—Agent Accreditation Plan, in order to perform response actions, operations and maintenance, demolition or renovation activities that disturb RACM, and ACDA in a facility as required by this Section.
- b. Contractor/Supervisor. A person required by this section to be trained as a contractor/supervisor shall comply with Subsections B, C, and D of LAC 33:III.2799, Appendix A—Agent Accreditation Plan, in order to supervise response actions, operations and maintenance, and demolition or renovation activities that disturb RACM, and ACDA in a facility as required by this Section.
- c. Inspector. A person shall be accredited as an inspector in accordance with LAC 33:III.2799, Appendix A—Agent Accreditation Plan in order to inspect for asbestos materials in facilities regulated by this Section.

d. Air Monitor Personnel. A person shall be accredited as an asbestos contractor/supervisor in accordance with LAC 33:III.2799, Appendix A—Agent Accreditation Plan to conduct air monitoring for an asbestos abatement project or related activity in facilities regulated by this Section.

#### 2. Contracted Personnel

When RACM is disturbed in any manner, including removal, encapsulation, enclosure, maintenance, or repairs by contracted personnel, those persons shall be accredited by DEQ in accordance with LAC 33:III.2799, Appendix A – Agent Accreditation Plan in one of the applicable disciplines: worker, contractor/supervisor, inspector, and air monitor.

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), LR 34:1893 (September 2008), amended by the Office of the Secretary, Legal Division, LR 38:2745 (November 2012), LR 40:519 (March 2014).

# Subchapter P. Reserved Subchapter V. Reserved

# Chapter 53. Area Sources of Toxic Air Pollutants

# Subchapter A. Reserved

§5308. Reporting Requirements

[Formerly §5307]

### 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 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), amended by the Office of the Secretary, Legal Division LR 38:2755 (November 2012), repealed LR 39:3268 (December 2013).

# 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, 2012, are hereby incorporated by reference as they apply to area sources in the state of Louisiana.

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 Management and Finance, 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 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."

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), LR 34:1392 (July 2008), LR 35:1108 (June 2009), LR 36:2274 (October 2010), LR 37:2991 (October 2011), LR 38:1231 (May 2012), amended by the Office of the Secretary, Legal Division, LR 38:2756 (November 2012), LR 39:1278 (May 2013).

# 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.  $SO_2 800 \,\mu\text{g/m}^3 \,(0.3 \,\text{ppm}), 24\text{-hr average};$
  - ii.  $PM_{10} 350 \mu g/m^3$ , 24-hr average;
  - iii. CO 17 mg/m<sup>3</sup> (15 ppm), 8-hr average;
- iv. Oxidant (O<sub>3</sub>) 400  $\mu g/m^3$  (0.2 ppm), 1-hr average;
- v.  $NO_2 1130 \ \mu g/m^3 \ (0.6 \ ppm)$ , 1-hr average 282  $\mu g/m^3 \ (0.15 \ ppm)$ , 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.  $SO_2 1600 \,\mu\text{g/m}^3$  (0.6 ppm), 24-hr average;
  - ii.  $PM_{10}$  420 µg/m<sup>3</sup>, 24-hr average;
  - iii.  $CO = 34 \text{ mg/m}^3 (30 \text{ ppm}), 8\text{-hr average};$
- iv. Oxidant (O<sub>3</sub>)  $800 \mu g/m^3$  (0.4 ppm), 1-hr average;
- v.  $NO_2$  2260 µg/m³ (1.2 ppm), 1-hr average 565 µg/m³ (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.  $SO_2 2100 \mu g/m^3$  (0.8 ppm), 24-hr average;
  - ii.  $PM_{10} 500 \mu g/m^3$ , 24-hr average;
  - iii.  $CO 46 \text{ mg/m}^3 (40 \text{ ppm}), 8\text{-hr average};$
- iv. Oxidant (O<sub>3</sub>) 1000  $\mu g/m^3$  (0.5 ppm), 1-hr average;
- v.  $NO_2 3000 \ \mu g/m^3 \ (1.6 \ ppm)$ , 1-hr average 750  $\mu g/m^3 \ (0.4 \ ppm)$ , 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.   |  |  |  |  |
|  | vehicles should eliminate all unnecessary  |  |  |  |
| operations.  | 4 D. C C 4 . 2 4   |  |  |  |
|  | t B. Source Curtailment  |  |  |  |
|  | the operation of a source of air pollutants listed                                     |  |  |  |
| Source of Air Pollution  | control actions for this alert level.  Control Action                                  |  |  |  |
| Electric power   |  |  |  |  |
| generating facilities  | Substantial reduction by utilization of fuels     having lowest ash and sulfur content |  |  |  |
| generating facilities  | 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   |  |  |  |
| Process steam  | a. Substantial reduction by utilization of fuels                                       |  |  |  |
| generating facilities  | having low ash and sulfur content  |  |  |  |
| <i>g. g</i>  | 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   | a. Substantial reduction of air pollutants from  |  |  |  |
| industries of the  | manufacturing operations by curtailing,  |  |  |  |
| following  | postponing, or deferring production and all  |  |  |  |
| classifications: primary   | operations   |  |  |  |
| metals industry,   | b. Maximum reduction by deferring trade waste  |  |  |  |
| petroleum refining   | disposal operations which emit solid   |  |  |  |
| operations, chemical   | particles, gas vapors or malodorous  |  |  |  |
| industries, mineral  | substances   |  |  |  |
| processing industries,   | c. Maximum reduction of heat load demands  |  |  |  |
| paper and allied<br>products and grain                                       | for processing   |  |  |  |
| industry   | d. Maximum utilization of mid-day (12 noon to  |  |  |  |
| moustry  | 4 p.m.) atmospheric turbulence for boiler  |  |  |  |
|  | lancing or soot blowing  |  |  |  |

| Fi D  | Table 6   |  |  |
|---|---|--|--|
| Emission Reduction Plans—Warning Level  |   |  |  |
| Part A. General  1. There shall be no open burning by any person              |   |  |  |
|   | <ol> <li>There shall be no open burning by any person.</li> <li>The use of incinerators for the disposal of any form of solid waste or</li> </ol> |  |  |
| liquid waste shall be prohibit  | 1   |  |  |
| *   | urning equipment which requires boiler lancing  |  |  |
|   | m such operations only between the hours of 12  |  |  |
| noon and 4 p.m.   | in such operations only between the nours of 12   |  |  |
| 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  |  |  |
| Electric power  | a. Maximum reduction by utilization of fuels  |  |  |
| generating  | 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  |  |  |

|  | Table 6  |
|--|--|
| Emission Re  | eduction Plans—Warning Level   |
|  | Part A. General  |
| 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  |
| 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 | taken if an emergency develops  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  |
| 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              | boiler lancing or soot blowing  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        |

- 3. All places of employment described below shall immediately cease operations.
  - a. Mining and quarrying of non-metallic minerals.
  - 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.
  - 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.
  - Establishments rendering amusement and recreational services, including motion picture theaters.
  - 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.

| raiti   | 5. Source Curtainnent                  |  |
|---|--|--|
| Any person responsible for the operation of a source of air pollutants listed |  |  |
| below shall take all required control actions for this emergency level.       |  |  |
| C CA'. D. II 4'.  | G . 1 . 1                              |  |
| Source of Air Pollution   | Control Action                         |  |
| 1. Electric power   | a. Maximum reduction by utilization of |  |

Part R Source Curtailment

| Source of Air Pollution | Control Action                             |  |
|-------------------------|--|--|
| Electric power          | a. Maximum reduction by utilization of     |  |
| generating facilities   | 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                             |  |

| Table 7<br>Emission Reduction Plans—Emergency Level  |   |  |  |
|--|---|--|--|
| 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, 2012.
- 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), LR 34:1392 (July 2008), LR 35:1109 (June 2009), LR 36:2274 (October 2010), LR 37:2991 (October 2011), LR 38:1231 (May 2012), amended by the Office of the Secretary, Legal Division, LR 39:1278 (May 2013).

## §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<br>Planning<br>Quantity<br>(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                   | 2500  |  |
|   | percent nitrogen)                              | 1000  |  |
| 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 percent)            | 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 percent 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   |  |

|   | Table 59.0                                  |   |  |  |
|---|---|---|--|--|
| Supplemental List of Regulated Substances and Their Threshold |   |   |  |  |
| Ouantities for Accidental Release Prevention                  |   |   |  |  |
| CAS Number  | Chemical Name                               | Threshold<br>Planning<br>Quantity<br>(pounds) |  |  |
| 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  |  |  |
| 20816-12-0  | Osmium tetroxide                            | 100   |  |  |
| 7783-41-7   | Oxygen difluoride                           | 100   |  |  |
| 19624-22-7  | Pentaborane                                 | 100   |  |  |
| 7601-90-3   | Perchloric acid (Conc>60 percent 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.

| <b>Table 59.1</b>  |                    |                    |  |  |
|--|--------------------|--------------------|--|--|
| Supplementary List of Regulated Toxic Substances and Their |                    |                    |  |  |
| Threshold Quantities for Accidental Release Prevention     |                    |                    |  |  |
| (Alphabetical Order)                                       |                    |                    |  |  |
|  |                    | Threshold Planning |  |  |
| CAS Number   | Chemical Name      | 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).