Title 33

ENVIRONMENTAL QUALITY

Part VII. Solid Waste

Subpart 1. Solid Waste Regulations

Chapter 1. General Provisions and Definitions

§101. Scope and Purpose

A. The Louisiana Legislature recognizes that the safety and welfare of state citizens "require efficient and reasonable regulation of solid waste disposal practices as well as a coordinated, statewide resource recovery and management ~~system~~program" (R.S. 30:2152). Therefore, the Department of Environmental Quality has formulated these rules and regulations to:

~~A.~~ 1. establish standards governing the storage, collection, recovery and reuse, and disposal of solid waste;

~~B.~~ 2. implement a management program that will protect the air, groundwater, and surface water, and the environment from pollution from solid wastes and thus eliminate the potential threat to human health from such pollution;

~~C.~~ 3. encourage both citizens and industry to reduce the amount of waste developed and generated in the state; and

~~D.~~ 4. ~~implement~~promote the ~~program specified in R.S. 30:2305 et seq. through the Louisiana Resource Recovery and Development Authority (LRRDA) to utilize~~utilization of solid waste for useful purposes whenever practicable.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2514 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§103. Authority

A. The Louisiana Environmental Quality Act (R.S. 30:2001 et seq.) established the enforcement authority and procedures for carrying out the purposes of the act. ~~The Louisiana Resource Recovery and Development Act (R.S. 30:2301 et seq.) created a Resource Recovery and Development Authority which shall be a function and responsibility of the Department of Environmental Quality.~~ These rules and regulations were developed under the authority of the secretary of the Department of Environmental Quality, as mandated by the Louisiana Solid Waste Management and Resource Recovery Law (R.S. 30:2151 et seq.). The Louisiana Solid Waste Operator Certification and Training Program statute (R.S. 37:3151 et seq.) created the Louisiana Solid Waste Operator Certification and Training Program. The principal domicile of the board shall be that of the Department of Environmental Quality.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§105. Repeals

~~A. These regulations repeal and replace in their entirety all previously promulgated regulations cited as LAC 33:VII.Subpart 1.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), repealed by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§107. Effective Date

A. These rules and regulations shall be ~~in full force and~~ effective on _____. ~~on February 20, 1993. However, the effective date of these regulations as they apply to existing earthen ditches at industrial establishments and which receive solid waste is August 20, 1993~~Applicants that have submitted permit applications or requests for modifications, or renewals prior to the effective date of these rules and regulations may not be required to revise their previously submitted applications or requests to address these rules and regulations, The administrative authority reserves the right to require revisions to previously submitted permit applications, modification requests, or renewals which have not received final approval by the department.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187

(February 1993), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§109. Severability

A. If any provision of these rules and regulations or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the act and these regulations that can be given effect without the invalid provision or application, and to this end provisions of these rules and regulations are declared to be severable.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§110. Confidentiality (moved from §309)

A. Provisions for confidential information may be found in LAC 33:I.Chapter 5.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§111. Review of the Rules and Regulations

~~These rules and regulations shall be reviewed and revised as follows.~~

A. ~~Frequency.~~ The department ~~will~~shall review these rules and regulations ~~at~~

~~least once every three years~~periodically for their effectiveness in meeting the purposes set forth in LAC 33:VII.101.

~~B. Criteria. The review criteria will focus on the effectiveness of the rules and regulations in meeting the purposes set forth in LAC 33:VII.101 of these regulations.~~

~~C. Revisions. All revisions of the rules and regulations shall be adopted and promulgated in accordance with the Administrative Procedure Act (R.S. 49:950 et seq.) and the Environmental Quality Act (R.S. 30:2001 et seq.).~~

~~D. Public Input. Participation by the public and by officials in all levels of government and industry will be solicited in the revision process, as required by LAC 33.VII.111.C.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2514 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§112. Division of Responsibility (moved from §317)

A. The administrative authority is responsible for the following:

1. identifying solid waste processing and disposal facilities;

2. classifying such facilities for "closure" or "upgrade";

3. performing all necessary regulatory operations, including:

a. operating the permit system;

b. surveillance and monitoring to determine facility compliance; and

c. initiating and processing enforcement actions when necessary to meet the purposes of these regulations;

4. soliciting, administering, and distributing federal, state, and other funds; and

5. entering into contracts as necessary to carry out the mandates of the act.

B. Municipalities, parishes, and regional commissions are responsible for the following:

1. planning, siting, and operating necessary pickup and collection systems, including recycling programs, and delivering solid waste to permitted processing or disposal facilities ~~authorized by the Louisiana Resource Recovery and Development Authority~~;

2. planning and operating permitted processing and/or disposal facilities while cooperating with the department, ~~authorized by the Louisiana Resource Recovery and Development Authority, or cooperating with the Louisiana Resource Recovery Development Authority,~~ or other entit~~y~~ies, to implement regional management systems;

3. providing necessary financial support for the regional management systems authorized by the ~~Louisiana Resource Recovery and Development Authority~~ through fees or other means;

4. administering supplementary funds received from federal or state

sources through the administrative authority~~ or Louisiana Resource Recovery and Development Authority~~; and

5. entering into contracts when necessary to provide for maximum efficiency of the program.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§113. Public Information Service

A. Responses to Suggestions and Complaints. The department ~~will~~shall respond to complaints and suggestions and disseminate all pertinent information concerning solid waste. Information will be disseminated by letter or telephone communication in response to direct inquiries and through a departmental bulletin issued periodically that will include lists of permits, enforcement actions, and similar information of general interest, if such a bulletin is available.

B. Public Hearings. A summary of all discussions, presentations, and comments submitted ~~will~~shall be prepared after each hearing and made available to all who request it, in accordance with R.S. 44.1, et seq.

C. Mailing List. The department ~~will~~shall maintain a mailing list of groups or individuals interested in public hearings and other such activities of the Office of Environmental Services, Permits Division.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2514 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§114. Assignment and Reassignment of Responsibilities (moved from §319)

A. Assignment of New Responsibilities. The administrative authority may assign to local authorities new responsibilities required to implement elements of the program not assigned in LAC 33:VII.~~317~~112.B.

B. Reassignment of Responsibilities. The administrative authority may reassign responsibilities within the department or to local authorities in LAC 33:VII.~~317~~112.B as may be deemed necessary to operate the program more effectively.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§115. Definitions

A. For all purposes of these rules and regulations, the terms defined in this Section shall have the following meanings, unless the context of use clearly indicates otherwise.

100-Year Flood—a flood that has a one percent or greater chance of occurring in any year, or a flood of a magnitude equaled or exceeded once in 100 years on average over a significantly long period.

Abandonment—to leave behind or desert solid waste at a location without adhering to the proper disposal or processing standards required by LAC 33:VII.

Access Road—a passageway for vehicles leading from the entrance of a facility to each unit of the facility.

Act—the Louisiana Environmental Quality Act (R.S. 30:2001 et seq.).

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

Agricultural Waste—nonhazardous waste resulting from the production and processing of agricultural products, including manures, prunings, and crop residues. Some examples of agricultural wastes are included in LAC 33:VII.~~3015~~Chapter 7.Appendix D. This term does not include solid wastes defined as industrial solid waste in this Section.

Air Curtain Destructor—operates by forcefully projecting a curtai of air across an open chamber or open pit in which combustion occurs. Destructors of that type can be constructed above or below ground and with or without refractory walls or floor. *Air Curtain Destructors* are also referred to as bit burners, trench burners, and air curtain incinerators.

Animal Feed—any crop, such as pasture crops, forage, and grain grown for consumption by animals.

Applicant—any person who intends to be a standard permit-holder for a solid waste processing and/or disposal facility and who has submitted a permit application to the Department of Environmental Quality.

Aquifer—a formation, group of formations, or part of a formation that contains

enough saturated permeable materials to yield significant quantities of water to wells or springs. For the purposes of these regulations, a significant quantity of water is enough water to yield a groundwater sample within 24 hours after purging a monitoring well.

Areal—pertaining to an area, as an areal map.

Areal Map—a geologic map showing the horizontal extent and distribution of geologic units exposed at the surface or subsurface.

Areas Susceptible to Mass Movement—those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the facility, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

Assessment Well—see *Monitoring Well*.

Assets—all existing and all probable future economic benefits obtained or controlled by a particular entity.

~~*Authority*—the Louisiana Resource Recovery and Development Authority established by R.S. 30:2301.1 et seq.~~

Autoclave—steam sterilization at a temperature of at least 250°F and a pressure of at least 15 pounds per square inch for at least 30 minutes. Longer times are required depending on the amount of waste, the presence of water, and the type of container used. Alternate patterns of temperature, pressure, and time may be used if compatible with the sterilization equipment being used and demonstrably sufficient to kill disease-causing

microorganisms.

Background Soil pH—the pH of the soil before the addition of substances that alter the hydrogen-ion concentration (see *Soil pH*).

Bailing—a method of obtaining samples of water from a groundwater monitoring well by lowering and raising a weighted bottle, capped length of pipe, or similar device.

Baler—a facility ~~which~~that ~~reduces and restrains~~mechanically compacts and binds, or wraps, a solid waste ~~volume by mechanical compaction to achieve a higher-density-per-unit volume~~into bundles, called bales, for convenient handling, storage, and shipping.

Beneficial Use—the use of waste material for some profitable purpose (e.g., incorporating sludge into soil to amend the soil). Avoidance of processing or disposal cost alone does not constitute beneficial use.

Board of Certification and Training—a board for the certification and training of operators of systems or facilities for the disposal of commercial and residential solid waste (established by R.S. 37:3151 et seq.).

Cation-Exchange Capacity—the sum of exchangeable cations a soil can absorb, expressed in milliequivalents per 100 grams of soil, as determined by sampling the soil to the depth of cultivation or solid waste placement, whichever is greater, and analyzing, by the summation method, for distinctly acid soils, or, by the sodium acetate method, for neutral, calcareous, or saline soils.

Clean Closure—the act of closing a facility whereby all solid waste is removed, including contamination that results from solid waste placement.

Closure—the act of securing a facility that has been used to process, store, or

dispose of solid waste in a manner that minimizes harm to the public and the environment.

Closure Plan—a plan for closure and/or post-closure of a facility prepared in accordance with the requirements of LAC 33:VII.Subpart 1.

Coastal Zone—the coastal waters and adjacent shorelands within the boundaries of the coastal zone established by the State and Local Coastal Resources Management Act of 1978 (R.S. 49:213.1-213.21).

Collect—to accumulate of industrial solid waste or solid waste generated by more than one household or commercial establishment, or by a storage or processing facility.

Commercial Establishment—a business, including its structures and property, that is involved in the exchange or distribution of goods or commodities, or that rents, leases, or sells space for such activities.

Commercial Solid Waste—all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial solid wastes.

Compactor—a solid waste facility, other than collection and transportation vehicles, ~~which~~that reduces a solid waste volume by mechanical compaction to achieve a higher-density~~ per unit volume~~.

Compost—a solid waste ~~which~~that has undergone biological decomposition of organic matter and has been stabilized using composting or similar technologies, to a degree that is beneficial to plant growth and that is used, or sold for use, as a soil amendment, artificial topsoil, growing-medium amendment, or other similar uses.

Composting—a controlled process of degrading organic matter with

microorganisms.

Composting Facility—a facility where organic matter is processed by natural or mechanical means to aid the microbial decomposition of the organic matter.

Construct—to build, erect, excavate, or form any portion of a solid waste facility.

Construction/Demolition (C&D) Debris—nonhazardous waste generally considered not water-soluble that is produced in the process of construction, renovation, or demolition of structures. Structures include buildings of all types (both residential and nonresidention) as well as roads and bridges. Solid waste that is not *C&D* debris (even if resulting ~~, including but not limited to metal, concrete, brick, asphalt, roofing materials (shingles, sheet rock, plaster), or lumber~~ from ~~a~~the construction, remodeling, repair, and ~~or~~ demolition ~~project~~of structures) includes but is not limited to~~, but excluding~~ friable *regulated asbestos-containing*~~contaminated waste~~ *material* as defined in LAC 33:III.5151.B, white goods, tires, lighting or electrical components containing hazardous liquids such as fluorescent light ballasts or transformers ~~furniture, trash, or treated lumber~~. ~~The admixture of construction and demolition debris with more than five percent by volume of paper associated with such debris or any other type of solid waste (excluding woodwaste or yard waste) will cause it to be classified~~ other than ~~construction/demolition debris.~~

Contamination (Environmental)—the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.

Contamination (Solid Waste)—the admixture of any solid waste with any amount of hazardous waste, or any other type of waste not meeting the definition of solid waste.

Contingency Plan—an organized, planned, coordinated course of action to be

followed in the event of a fire, explosion, or discharge or release of waste into the environment that could endanger human health or the environment.

Cover Material—soil, or other suitable material approved by the administrative authority, applied on the top and side slopes of disposed solid waste to control vectors, gases, erosion, fires, and infiltration of precipitation; to support vegetation; to provide trafficability; or to ensure an aesthetic appearance.

Crops for Human Consumption—crops grown for human consumption that are not processed to minimize pathogens before they are distributed to consumers.

Curing Area—an area where organic material that has undergone the rapid initial stage of composting is further stabilized into a humus-like material.

Current Assets—cash, other assets, or resources commonly identified as those which are reasonably expected to be realized in cash, sold, or consumed during the normal operating cycle of the business.

Current Liabilities—obligations whose liquidation is reasonably expected to require the use of existing resources, properly classifiable as current assets, or the creation of other current liabilities.

Daily Cover—cover material applied at the end of the operating day to a unit, the working face of a unit, or a facility. ~~(If earthen, cover will consist of a minimum of six inches of cover material).~~

Department—the Department of Environmental Quality as created by R.S. 30:2001 et seq.

Disease Vector—animals such as rodents, fleas, flies, mosquitoes, and other arthropods that are capable of transmitting diseases to humans.

Displacement—the relative movement of any two sides of a fault measured in any direction.

Disposal—the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste on or into any land or water so that such solid waste, or any constituent thereof, may have the potential for entering the environment or being emitted into the air or discharged into any waters of Louisiana. Abandonment of solid waste, whether or not it comes into contact with land or water, is also considered disposal.

Ditch—an earthen trench or excavation principally used to convey wastewaters without regard to whether solids settling or treatment of wastewater occurs therein.

Emergency Exemption—a special authorization issued to a person by the administrative authority that allows freedom from obligation to these regulations or any portion thereof for a specified period of time, owing to emergencies such as strikes or acts of God.

Estimated Life of Facility—the length of time a solid waste facility is capable of accepting wastes, based on its current permit or permit application.

Exemption—a special authorization issued to a person by the administrative authority that allows freedom from obligation to these regulations or a portion thereof.

Existing Facility—any facility, ~~(~~as defined in ~~LAC 33:VII.115)~~this Subsection, that receives solid waste or that exists or is being constructed on February 20, 1993 that does or will store, process, or dispose of solid wastes. (Facilities closed prior to January 20, 1981, or facilities that have completed the closure/post-closure requirements prior to February 20, 1993, are not considered existing facilities.)

Existing Operation—any solid waste operation that manages, collects, stores,

processes, or receives solid waste that exists or that is being constructed on February 20, 1993. (Operations closed prior to January 20, 1981, or operations that have completed the closure and/or post-closure requirements prior to February 20, 1993, are not considered existing operations.)

Exploration and Production Waste (E&P Waste)—drilling wastes, salt water, and other wastes associated with the exploration, development, or production of crude oil or natural gas wells and that is not regulated by the provisions of, and is therefore excluded from, the Louisiana Hazardous Waste Regulations and the Federal Resource Conservation and Recovery Act Subtitle C, as amended.

Facility—actual land and associated appurtenances used for storage, processing, and/or disposal of solid wastes, but possibly consisting of one or more units. (Any earthen ditches leading to or from a unit of a facility and that receive solid waste are considered part of the facility to which they connect, except for ditches lined with materials capable of preventing groundwater contamination. The term facility does not necessarily mean an entire industrial manufacturing plant.)

Fault—a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to those on the other side.

Final Cover—cover material that is applied to minimize the infiltration of precipitation in a facility and revegetated to control erosion.

Flood Plain—the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

Food-Chain Crops—crops grown for human consumption; tobacco; and crops

grown to feed animals that are consumed by humans.

Freeboard—the vertical distance between the lowest point of the top of a facility levee and the surface of the liquid waste contained therein.

Freshwater Aquifer—an aquifer containing water with quantities of total dissolved solids of less than 10,000 mg/L that is capable of yielding usable quantities of groundwater to drinking-water wells, industrial pumps, springs, or streams.

Friable Asbestos Waste~~—asbestos waste identified as friable in the current Air Quality Regulations (LAC 33:III)~~See definition for RACM.

Garbage—solid waste that includes animal and vegetable matter from the handling, preparation, cooking, and serving of foods (including grease trap waste), but that does not include industrial solid waste.

Generator—any person whose act or process produces solid waste as defined in these regulations.

Geotechnical Borehole—an exploratory borehole drilled, augered, bored, or cored to obtain soil samples to be analyzed for chemical and/or physical properties.

Groundwater—water below the land surface in the zone of saturation.

Hazardous Waste—waste identified as hazardous in the current Louisiana Hazardous Waste Regulations (LAC 33:V) and/or by the federal government under the Resource Conservation and Recovery Act and subsequent amendments.

Hazardous Waste Determination—the process performed in accordance with LAC 33:V.1103.

Holocene—the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

Implement—to carry out, accomplish, and ensure actual fulfillment by specific means or by providing instruments or means of accomplishment.

Implementation Schedule—a timetable for completing a predetermined implementation plan.

Impoundment—see Surface Impoundment.

Inactive (or Abandoned) Facility—a solid waste storage, processing, or disposal facility that no longer receives solid waste and has not been closed in accordance with Louisiana Solid Waste Regulations.

Incinerator—any enclosed device using controlled-flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace and is not a boiler nor an industrial furnace as defined in LAC 33:V.109.

Incinerator Ash—residual solid waste which has been received, thermally oxidized, and/or decomposed by an incinerator.

Incinerator Waste-Handling Facility—a facility which processes solid waste which has been received, thermally oxidized, and/or decomposed by an incinerator.

Incorporation into Soil—the injection of solid waste beneath the surface of soil, or the mixing of solid waste with the surface soil.

Industrial Establishment—a business, including its structures and property, that is involved in the production or manufacture of goods or commodities.

Industrial Solid Waste—solid waste generated by a manufacturing, industrial, or mining process, or ~~which~~that is contaminated by solid waste generated by such a process. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals;

food and related products; by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; and transportation equipment. This term does not include hazardous waste regulated under the Louisiana hazardous waste regulations or under federal law, or waste which is subject to regulation under the Office of Conservation's Statewide Order No. 29-B or by other agencies.

Industrial Solid Waste Facility—a facility for the processing, storage, and/or disposal of industrial solid waste.

Infectious Waste—waste that contains pathogens of sufficient virulence and quantity that exposure to it could result in an infectious disease in a susceptible host.

Initial Promulgation—the date on which the Louisiana Solid Waste Management Program first became effective, January 20, 1981.

Interim Compacted Cover—a minimum of two feet of compacted silty or sandy clay.

Interim Cover—a minimum of one foot of soil that is applied to a portion of a unit or a facility.

Isopach—a line drawn on a map through points of equal true thickness of a designated stratigraphic unit or group of stratigraphic units.

Isopach Map—a map that shows the thickness of a bed, formation, sill, or other tabular body throughout a geographic area by means of isopachs at regular intervals.

Karst Terrai~~n~~es—areas where karst topography, with its characteristic surface and

subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrai~~ne~~ns include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

Landfarm—a facility for the disposal of solid wastes in which wastes are applied to the land and/or incorporated into the soil for biological reduction and soil attenuation.

Landfill—a facility for the disposal of solid waste, other than landfarm(s) or surface impoundment(s), that disposes of solid waste by placing it on or into the land surface and usually also compacting and covering with suitable cover material to a depth and at a frequency sufficient to control disease vectors and odors and in a manner that protects human health and the environment.

Land Treatment Facility—a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

Leachate—a liquid that has passed through or emerged from solid waste and may contain soluble, suspended, or miscible materials removed from such wastes.

Leak-Detection Well—a well used to determine the escape of liquids from a permitted solid waste facility.

Liabilities—probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

Liner—layer or layers of material(s) beneath and on the sides of a solid waste disposal facility that are designed to restrict the escape of wastes or their constituents

from the facility.

Liquid Waste—any waste material that is determined to contain free liquids as defined by Method 9095 (Paint Filter Liquids Test), as described in Test Methods of Evaluating Solid Wastes, Physical/Chemical Methods (EPA Pub. No. SW-846).

Lithified Earth Material—all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth's surface.

Litter—exposed solid waste outside the active portion of a unit of a facility.

Lower-Explosive Limit—the lowest percent by volume of a mixture of explosive gases in the air that will propagate a flame at 25 degrees centigrade and atmospheric pressure.

Major Modification—any change in a site, facility, process or disposal method, or operation ~~which~~that substantially deviates from the permit or tends to substantially increase the impact of the site, facility, process or disposal method, or operation on the environment.

Mandatory Modification—any change in a site, facility, unit, process or disposal method, or operation that is required as a result of ~~these~~the solid waste regulations as promulgated on February 20, 1993.

Mandatory Modification Document—a document submitted by existing facilities in conformance with LAC 33:VII.~~31~~513.~~G~~A-L as promulgated on February 20, 1993, ~~which~~that applies for a mandatory modification and which amends or adds to each

portion of the permit at issue so that the permit meets the requirements of ~~these regulations~~the solid waste regulations as promulgated on February 20, 1993.~~ The document must conform to the requirements for permit modifications found in LAC 33:VII.517.~~

Editor's Note: The amended text of the above-referenced and related regulations is located in these regulations promulgated [enter date] as follows:

Prior LAC 33:VII.315.G moved to LAC 33:VII.513.A-L.

Prior LAC 33:VII.315.H moved to LAC 33:VII.513.M.

Prior LAC 33:VII.315.I moved to LAC 33:VII.513.N.

Manure—a solid waste composed of excreta of animals and any residual materials that have been used for bedding, sanitary, or feeding purposes for such animals.

Maximum Horizontal Acceleration in Lithified Earth Material—the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

Mesophilic Stage—a biological stage in the composting process characterized by active bacteria which favor a moderate temperature range of 20 to 45 degrees Centigrade. It occurs later in the composting process than the thermophilic stage and is associated with a moderate rate of decomposition.

Minor Modification—any modification that does not meet the criteria for a major modification.

Modification—any change in a site, facility, unit, process or disposal method, or

operation that deviates from the specifications in the permit. Routine or emergency maintenance which does not cause the facility to deviate from the specifications of the permit is not considered a modification. Name change of the facility does not constitute *modification*.

Monitoring Well—a well used to obtain hydraulic and/or water-quality data and to satisfy regulatory requirements for groundwater monitoring at regulated units, which is usually installed at or near a known or potential source of groundwater contamination.

Municipal Solid Waste Landfill or MSW Landfill—an entire disposal facility in a contiguous geographical space where residential solid waste and/or commercial solid waste is placed in or on land.

Net Worth—total assets minus total liabilities and equivalent to the person's equity.

Observation Well—a well used to obtain information on the water resources of an area.

Off-site Location—a location that is not the land area and appurtenances thereon used for processing and/or disposal of solid waste on the same property or on geographically contiguous property, where waste is generated. *Off-site location* does not include two or more pieces of property that are geographically contiguous but divided by a public or private right(s)-of-way.

Off-Site Processing/Disposal Area—a location for the processing and/or disposal of solid waste that is not on the generator's site.

On-Site Processing/Disposal Area—the land area and appurtenances thereon used for processing and/or disposal of solid waste on the same property or on geographically

contiguous property, where waste is generated. Two or more pieces of property that are geographically contiguous but divided by public or private right(s)-of-way are considered a single site.

Open Burning—the combustion of solid waste without control of combustion air to maintain adequate temperature for efficient combustion, containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and control of the emission of the combustion products.

Open Dump—a solid waste processing or disposal facility ~~which~~that has been issued a temporary permit and may not comply with the standards set by these regulations.

Operating Area—the portion of a facility that is actively involved in the storage, processing, or disposal of solid waste.

Operator—person(s) who is responsible for the overall operation of a facility or part of a facility.

Order Authorizing Commencement of Operations—a written authorization issued by the administrative authority after a permit-holder has completed all upgrading measures or completed construction measures, provided the required certification and a successful initial start-up inspection has been conducted by a representative of the department.

Owner—person(s) who owns a facility or part of a facility.

Parent Corporation—a corporation ~~which~~that directly owns at least 50 percent of the voting stock of the corporation ~~which~~that is the facility permit holder; the latter corporation is deemed a "subsidiary" of the parent corporation.

Permit—a written authorization issued by the administrative authority to a person for the construction, installation, modification, operation, closure, or post-closure of a certain facility used or intended to be used to process or dispose of solid waste in accordance with the act, these regulations, and specified terms and conditions.

Permittee/Permit Holder—a person who is issued a permit and is responsible for meeting all conditions of the permit and these regulations at a facility.

Person—an individual, trust, firm, joint-stock company, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of the state, interstate body, or the federal government or any agency of the federal government.

PH—the logarithm of the reciprocal of hydrogen-ion concentration.

Pickup Station—a facility, at which one or more containers are located, ~~which~~that is used to accumulate ~~industrial solid waste or to accumulate~~ solid waste generated by more than one household or commercial establishment for pickup by a transporter. This definition does not include containers ~~which~~that receive only solid waste generated on property ~~which~~that is contiguous with the property on which the container is located (e.g., containers located at and receiving solid waste only from a multiunit dwelling, a commercial establishment, or an industrial establishment.)

Piezometer—a well with the sole function of determining groundwater elevation.

Pilot Hole—a hole drilled with the intent to install casing and to produce water. It is usually of a smaller diameter than the proposed well and has to be reamed to a larger diameter for the installation of a casing and screen.

Poor Foundation Conditions—those areas where features exist ~~which~~that indicate

that a natural or man-induced event may result in inadequate foundation support for the structural components of a facility.

Potable Water—water with bacteriological, physical, and chemical properties that make it suitable for human consumption.

Potentiometric Map—a map showing the elevation to which groundwater will rise in a well by means of contour lines connecting points of equal rise for a given aquifer. Such a map provides velocity plus direction of groundwater movement.

Potentiometric Surface—the surface that represents the static head with reference to a specified datum, such as the National Geodetic Vertical Datum (NGVD). As the term relates to aquifers, it is defined by the levels to which water will rise in tightly cased wells.

Practice(s)—act(s) of storing, processing, collecting, transporting, or disposing of solid wastes.

Process—a method or technique, including recycling, recovering, compacting (but not including compacting ~~which~~that occurs solely within a transportation vehicle), composting, incinerating, shredding, baling, ~~transferring,~~ recovering resources, pyrolyzing, or any other method or technique that is designed to change the physical, chemical, or biological character or composition of a solid waste to render it safer for transport; reduced in volume; amenable for recovery, storage, reshipment, or resale. The definition of process does not include treatment of wastewaters to meet state or federal wastewater discharge permit limits. Neither does the definition include activities of an industrial generator to simply separate wastes from the manufacturing process.

Promiscuous Dump—a solid waste disposal facility that has resulted from

disposal activities of persons other than the landowner and whose operation is not permitted by the administrative authority.

Putrescible—susceptible to rapid decomposition by bacteria, fungi, or oxidation, creating noxious odors.

Reclassified Waste—a particular solid waste that the administrative authority has determined is no longer classified as a hazardous waste subject to regulation under the Louisiana hazardous waste regulations. Such wastes are "reclassified" as solid waste and are subject to regulation under these regulations.

Recovery Well—a well used to remove groundwater that has been determined to be contaminated.

Refuse-Derived Fuel—fuel processed from combustible solid waste.

Refuse-Derived Fuel Facility—a solid waste facility where fuel is processed from combustible solid waste.

Regulated Asbestos-Containing Material (RACM)—material specified in LAC 33:III.5151.B.

Residence—a single or multiunit dwelling, whether owned, leased, or rented by its occupant(s).

Residential Solid Waste—any solid waste (including garbage, trash, yard trash, and sludges from residential septic tanks and wastewater treatment facilities) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

Resource Recovery—the process by which solid waste that retains useful physical

or chemical properties is reused or recycled for the same or other purposes, including uses as energy sources.

Runoff—any rainwater, leachate, or other liquid that drains from any part of a facility.

Run-On—any rainwater or other liquid that drains onto any part of a facility.

Salvaging—the controlled removal of waste materials for later use.

~~*Sanitary Landfill*—a landfill for the disposal of commercial or residential solid waste by deposit in a landfill in layers covered with suitable cover material of a depth and at a frequency adequate to control disease vectors and odors, and in such a manner that minimizes the risk to human health and the environment. It is located, contoured, and designed so that it will not constitute a source of water pollution~~

Saturated Permeable Zone—the subsurface zone in which all interconnected openings are full of water.

Scavenging—unauthorized removal of solid waste materials from a disposal or processing facility.

Seismic-Impact Zone—an area with a 10 percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 250 years.

Separation Facility—a Type III solid waste processing facility at which recyclables are separated from ~~the~~a non-putrescible solid waste stream for future use.

Septage—the contents of a septic tank, cesspool, or other individual sewage-treatment facility ~~which~~that receives domestic-sewage wastes.

Service Area—the geographic area serviced by a solid waste facility in which

solid waste is generated, collected, and transported for delivery to that solid waste facility.

Sewage Sludge—sludge resulting from treatment of wastewater from publicly or privately owned or operated sewage-treatment plants.

Shredder—a solid waste facility ~~which~~that reduces the particle size of solid waste by grinding, milling, shredding, or rasping.

Site—the physical location, including land area and appurtenances, of an existing or proposed storage, processing, or disposal facility. A site may consist of a number of facilities, each subject to a permit to process or dispose of solid waste.

Sludge—residue produced by or precipitated from a treatment process.

Soil pH—a pH value obtained by sampling the soil to the depth of cultivation or solid waste placement. Test methodologies shall be in accordance with Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (EPA Pub. No. SW-846).

Solid Waste—any garbage, refuse, or sludge from a waste~~water~~ treatment plant, water-supply treatment plant, or air pollution-control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. Solid waste does not include solid or dissolved material in domestic sewage; solid or dissolved materials in irrigation-return flows~~;~~ or industrial discharges ~~that~~which are point sources subject to permits under R.S. 30:207~~5~~4; or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954 (68 Stat. 923 et seq.), as amended (42 U.S.C. Section 2011 et seq.); or hazardous waste subject to permits under R.S. 30:2171 et seq.

Solid Waste Management System—the entire process of collection, transportation, storage, processing, and disposal of solid waste by any person engaged in such process as a business or by any municipality, authority, trust, parish, or any combination thereof.

Spill—any unauthorized discharge or release of solid waste into or onto the land, air, or water.

Stabilize (Compost)—compost that has at least passed through the thermophilic stage and in which biological decomposition of the solid waste has occurred to a sufficient degree to allow beneficial use.

Standard Permit—written authorization issued by the administrative authority to an applicant who has successfully completed the permit application process for a processing or disposal facility.

Storage—the containment of solid waste on surfaces capable of preventing groundwater contamination in a means not constituting processing or disposal.

Structure Contour Map—a map depicting lines drawn through points of equal elevation on a stratum, key bed, or horizon in order to depict the attitude of geologic units.

Surface Application—placement of solid waste onto a landfarm without incorporating it into the soil.

Surface Impoundment—a facility consisting of a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), designed to hold an accumulation of liquid waste and/or sludge, that is not an injection well, landfarm, landfill, or tank. Runoff and containment areas (ROCAs) of landfarms are considered to be surface impoundments.

Surface-Recharge Zone—an area where a formation or formations that compose an aquifer intersect the land surface and receive water from percolation, precipitation, or surface-water bodies.

Tangible Net Worth—the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents and royalties.

Tank—a stationary device designed to contain an accumulation of solid waste and constructed of nonearthen materials that provide structural support. The term tank does not include underground storage tanks as defined by the Underground Storage Tank Rules and Regulations (LAC 33:Part XI).

Temporary Permit—a written authorization issued by the administrative authority for a specific amount of time to a person for the construction, installation, operation, closure, or post-closure of a particular facility, or operation of an existing facility, used or intended to be used for processing or disposing of solid waste in accordance with the act, these regulations, and specified terms and conditions.

Thermophilic Stage—a biological stage in the composting process characterized by active bacteria ~~which~~that favor a high temperature range of 45°C to 75°C. It occurs early in the composting process, before the mesophilic stage, and is associated with a high rate of decomposition.

Test Hole—an exploratory borehole drilled to obtain geologic, hydrologic, or water-quality data.

Topographic Map—a map displaying lines that include points of equal value showing the elevation of the Earth's surface.

Topsoil—the surface layer of soil, capable of promoting growth of vegetation.

Toxicity Characteristic Leaching Procedure (TCLP)—a method to determine if a waste exhibits hazardous characteristics conducted in accordance with LAC 33:Part V.

Transfer Station (processing)—a Type I-A or II-A solid waste processing facility where solid waste is transferred from collection vehicles, processed, and placed in other vehicles for transportation (e.g. facilities that separate recyclables from industrial or putrescible waste streams).

Transfer Station (non-processing)—a solid waste ~~processing~~ facility where solid waste is transferred from collection vehicles ~~and placed in~~to other vehicles for transportation without processing.

Transport—to move industrial solid waste off-site and/or to move solid waste of a commercial establishment or more than one household to a storage, processing, or disposal facility.

Transporter—any person who moves industrial solid waste off-site and/or who moves solid waste of a commercial establishment or more than one household to a ~~storage~~transfer station, processing, or disposal facility.

Trash—nonputrescible refuse including white goods, furniture, and wood and metal goods.

Treatment Zone—the depth in the soil of a landfarm into which solid waste has been incorporated and additional depths to which decomposition is occurring based on site-specific conditions.

Type (of Waste)—a category of waste in a general classification defined for solid waste management purposes (e.g., commercial, industrial, residential).

Type I Facility—a facility used for disposing of industrial solid wastes (e.g., landfills, surface impoundments, or landfarms). (If the facility is ~~also~~ used for disposing of residential or commercial solid waste, it is also a Type II facility).

Type I-A Facility—a facility used for processing industrial solid waste (e.g., transfer station (processing), ~~incinerator waste-handling facility~~, shredder, baler, ~~or compactor~~etc.). (If the facility is ~~also~~ used for processing residential or commercial solid waste, it is also a Type II-A facility).

Type II Facility—a facility used for disposing of residential and/or commercial solid waste (e.g., landfills, surface impoundments, or landfarms). (If the facility ~~also~~ is used for disposing of industrial solid waste, it is also a Type I facility).

Type II-A Facility—a facility used for processing residential, infectious, or commercial solid waste (e.g., transfer station (processing), composting municipal solid waste facility, ~~incinerator waste-handling facility,~~ refuse-derived fuel facility, shredder, baler, autoclave, ~~or compactor~~etc.). (If the facility is ~~also~~ used for processing industrial solid waste, it is also a Type I-A facility.)

Type III Facility—a facility used for disposing or processing of construction/demolition debris or woodwaste, composting organic waste to produce a usable material, or separating recyclable wastes (a separation facility)(e.g., construction/demolition-debris and woodwaste landfills, separation facilities, composting facilities). ~~Residential, commercial, or industrial solid waste must not be disposed of in a Type III facility.~~

Unauthorized Discharge—a continuous, intermittent, or one time discharge, whether intentional, anticipated, or unanticipated, from any source, permitted or

unpermitted, ~~which~~that is in contravention of any provision of the act or of any permit or license terms and conditions, or of any applicable regulation, compliance schedule, variance, or exemption of the administrative authority.

Unauthorized Dump—a solid waste disposal facility whose operation is not authorized by the administrative authority.

Unit of a Facility—designated area of a facility wherein solid waste is, has been, or will be processed, stored, or disposed of.

Unstable Area—a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movement, and Karst terrain~~e~~s.

Uppermost Aquifer—the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

Uppermost Water-Bearing Permeable Zone—any relative permeable zone, other than the uppermost aquifer, that may act as a potential contaminant pathway.

Vector—see *Disease Vector*.

Water Table—the upper surface of the zone of saturation at which the pressure is equal to the atmospheric pressure.

Wetlands—those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in

saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

White Goods—discarded domestic and commercial appliances, such as refrigerators, ranges, washers, and water heaters.

Woodwaste—yard trash and types of waste ~~typically~~ generated by land and right-of-way clearing operations, sawmills, plywood mills, and woodyards associated with the lumber and paper industry, such as wood residue, cutoffs, wood chips, sawdust, wood shavings, bark, wood refuse, wood-fired boiler ash, wood ash, and plywood or other bonded materials that contain only polyurethane, phenolic-based glues, or other glues that are approved specifically by the administrative authority. Uncontaminated, un-~~T~~treated or un-painted lumber is ~~not~~ considered woodwaste under this definition.

Working Face—that portion of a landfill where waste is currently being added during the operating day.

Yard Trash—vegetative matter resulting from landscaping, maintenance, or land-clearing operations, including trees and shrubbery, leaves and limbs, stumps, grass clippings, and flowers.

Zone of Incorporation—the depth to which solid waste has been incorporated into the soil of a landfarm.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 22:279 (April 1996), amended by the Office of Waste

Services, Solid Waste Division, LR 23:1145 (September 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2514, 2609 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§117. Experimental Operations for New Technologies

A. This Section allows applicants to submit requests allowing for experimental operations for new technology prior to requesting a permit modification (eg. Alternate daily cover).

B. Permission may be granted to facilitate experimental operations intended to develop new methods or technology providing strict conformity with these regulations is demonstrated in the request.

C. Experimental operations shall be considered only where significant health, safety, environmental hazards, or nuisances will not be created, and when a detailed proposal is submitted and accepted which sets forth the objectives, procedures, controls, monitoring, reporting, time frame, and other data regarding the experiment

D Restrictions. Experimental operations shall be limited up to a maximum of two (2) years; however, the department may renew the request for additional time periods upon a showing by the person that the need for a continuance is valid.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Chapter 3. Scope and Mandatory Provisions of the Program

§301. ~~Wastes Governed by These Regulations~~ Exempted Waste

A. All solid wastes as defined by the act and these regulations are subject to the provisions of these regulations, except as ~~follows:~~provided in the following Subsections.

~~A~~B. All solid wastes as defined by the act and these regulations are subject to the provisions of these regulations. Wastes regulated under other authority and not processed or disposed of in solid waste facilities permitted under these regulations, including, but not limited to, the following wastes:

1. agricultural-crop residues, aquacultural residues, silvicultural residues, and other agricultural wastes stored, processed, or disposed of on the site where the crops are grown or which are stored, processed, or disposed in accordance with a best management practice plan which has been provided to the Office of Environmental Services, Permits Division and approved in writing by the Department of Agriculture, and within the jurisdiction of the Department of Agriculture;

2. mining overburden, spoils, tailings, and related solid wastes within the jurisdiction of the Department of Natural Resources, Office of Conservation;

3. produced-waste fluids and muds resulting from the exploration for or production of petroleum and geothermal energy, and all surface and storage waste facilities incidental to oil and gas exploration and production, within the jurisdiction of the Department of Natural Resources, Office of Conservation;

4. uncontaminated dredge or earthen excavation spoil;

5. solid wastes while they are stored at residences or commercial

establishments and regulated by local ordinance, or within the jurisdiction of the Department of Health and Hospitals;

6. uncontaminated residues from beneficiation of earthen material;

7. uncontaminated stormwater and uncontaminated noncontact cooling water;

8. infectious waste or other hospital or clinic wastes that are not processed or disposed of in solid waste processing or disposal facilities permitted under these regulations; and

9. sewage sludge (including domestic septage) that is generated, treated, processed, composted, blended, mixed, prepared, transported, used, or disposed of in accordance with~~and domestic septage as defined by~~ LAC 33:IX.Chapter 69.~~ of the Water Quality regulations will be exempt from all requirements of LAC 33:VII, except for the transportation requirements in LAC 33:VII.503, 529, and 705, upon the date of receipt by the department of sewage sludge program authority from EPA in accordance with 40 CFR Part 501 under the NPDES program.~~ Provisions addressing sewage sludge and domestic septage found throughout these regulations will no longer apply.~~ once the department receives program authority.~~

~~B~~C. Wastes excluded by the definition of solid waste in the act and/or as otherwise specified in the act including:

1. hazardous wastes subject to regulation under R.S. 30:2171 et seq.;

2. solid or dissolved material in domestic sewage (such as domestic-oxidation ponds), except separated sludges;

3. solid or dissolved materials in irrigation-return flow;

4. discharges that are downstream from point sources subject to permit under R.S. 30:2074, except waste contained in solid waste facilities prior to the final discharge point. However:

a. wastewaters in existing ditches which are downstream of a designated internal state or federal wastewater discharge point are exempt from the definition of solid waste if they require no further treatment to meet final state or federal wastewater discharge point permit limits or if they require only pH adjustment to meet final pH permit limits or suspended solids settling specifically to meet final total suspended solids permit limits;

b. wastewasters in existing ditches upstream of a designated final state or federal wastewater discharge point which require no further treatment to meet final state or federal permit limits or which only require pH adjustment to meet final pH permit limits or solids settling specifically to meet total suspended solids permit limits are exempt from the definition of solid waste;

c. solids or sludges in ditches are exempt from the definition of solid waste until such time as such solids or sludges are removed from the ditches for disposal, provided however, that this exclusion from the definition of solid waste only applies to solids and sludges derived from wastewaters described in Subparagraphs B.4.a and b of this Section;

d. the administrative authority reserves the right to withdraw the exemption for wastewaters in Subparagraphs B.4.a and b if the wastewaters

contribute to groundwater contamination;

5. source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.); and

6. compost produced by an individual for his own beneficial use, as provided in R.S. 30:2416.G.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 22:279 (April 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2515 (November 2000), LR 28:780 (April 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§303. Wastes Not Subject to the Permitting Requirements or Processing or Disposal Standards of These Regulations

A. The following solid wastes, ~~that~~when ~~are~~ processed or disposed of in an environmentally sound manner, are not subject to the permitting requirements or processing or disposal standards of these regulations:

~~A.~~ 1. wastes resulting from land and right-of-way clearing (trees, stumps) and disposed of on the site where generated;

~~B.~~ 2. solid wastes in facilities that have been closed in a manner acceptable to the administrative authority prior to January 20, 1981. (This Subsection is not intended to require permitting of any facilities which have been closed in a manner

acceptable to the administrative authority and which remain closed.);

~~C.~~ 3. materials such as waste papers, plastics, metals, and glass that are presorted to be recycled or reused and not destined for disposal;

~~D.~~ 4. uncontaminated earthen materials such as limestone, clays, sands, clamshells, river silt, and uncontaminated residues from beneficiation of earthen materials;

~~E.~~ 5. brick, stone, reinforced and unreinforced concrete, and asphaltic roadbeds;

~~F.~~ 6. sludges resulting from the treatment of water at public or privately owned water-supply treatment plants;

~~G.~~ 7. petroleum-refining catalysts and other materials utilized as feedstocks ~~which~~that are managed at a facility in order to recover these wastes for further use;

~~H.~~ 8. agricultural wastes, including manures, that are removed from the site of generation by an individual for his own personal beneficial use on land owned or controlled by the individual. The amount of wastes covered by this exemption shall not exceed 10 tons per year (wet-weight) per individual per use location;

~~I.~~ 9. solid wastes ~~which~~that are treated or disposed of in a hazardous waste treatment or disposal facility ~~which~~that is regulated under LAC 33:Part V;

~~J.~~ 10. woodwastes ~~which~~that are beneficially-used in accordance with a Best Management Practice Plan approved in writing by the Department of Agriculture and submitted to the Office of Environmental Services, Permits Division, provided that the following requirements are met:

~~1.~~ a. the generator ~~must~~shall notify the Office of Environmental Services, Permits Division of such activity at each site in accordance with LAC 33:VII.~~503~~401.A;

~~2.~~ b. the generator ~~must~~shall submit to the Office of Management and Finance, Financial Services Division a disposer annual report ~~in accordance with the standards in LAC 33:VII.1109,~~ which report amounts of woodwastes beneficially-used at each site;

~~K.~~ 11. solid wastes re-used in a manner protective of human health and the environment, as demonstrated by a soil re-use plan or beneficial use plan prepared in accordance with LAC 33:VII.Chapter 113~~3~~. ~~and approved by the administrative authority; and~~

~~L.~~ 12. other wastes deemed acceptable by the administrative authority based on possible environmental impact.

13. Spent blasting sand generated from the preparation of unpainted surfaces.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, LR 24:2250 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2515 (November 2000), repromulgated LR 27:703 (May 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§305. Facilities Not Subject to the Permitting Requirements or Processing or Disposal Standards of These Regulations

A. The following facilities that are operated in an environmentally sound manner are not subject to the permitting requirements or processing or disposal standards of these regulations:

~~A.~~ 1. incinerators ~~which~~that receive only on-site-generated commercial solid waste and ~~which~~that have a design rate of no more than 250 pounds per hour;

~~B.~~ 2. shredders, autoclaves, balers, and compactors that receive no waste volume from off-site sources;

~~C.~~ 3. facilities ~~which~~that process ~~or reuse~~ on-site-generated, nonhazardous, petroleum-contaminated media and debris from underground storage tank corrective action or other remedial activity, provided such processing ~~or reuse~~ is completed in less than 12 months and is in accordance with a corrective action plan authorized by the ~~Underground Storage Tank Regulations~~administrative authority.

~~D.~~ 4. construction/demolition-debris disposal facilities ~~which~~that receive only on-site-generated construction/demolition-debris, provided that the following requirements are met:

~~1.~~ a. the facility ~~must~~shall notify the Office of Environmental Services, Permits Division of such activity in accordance with LAC 33:VII.~~503~~ 401.A; and

~~2.~~ b. the facility ~~must~~shall submit to the Office of Management and Finance, Financial Services Division a disposer annual report in accordance with the standards for construction/demolition-debris disposal facilities found in LAC

33:VII.721.B.1.a;

c. the facility owner shall update the parish mortgage and conveyance records by entering the specific location of the facility and specifying that the property was used for the disposal of solid waste. The document shall identify the name and address of the person with the knowledge of the contents of the facility. An example of the form to be used for this purpose is provided in Appendix F. The facility shall provide the Office of Environmental Services, Permits Division, with a true copy of the document filed and certified by the parish clerk of court.

~~E.~~ 5. solid waste injection wells which are under the jurisdiction of the Department of Natural Resources~~.~~, provided, ~~H~~however, that any storage, processing, or disposal (not including injection) incidental to such injection wells is subject to these regulations;

~~F.~~ 6. industrial facilities ~~which~~that process solid waste by non-destructive and non-thermal means on the site where the waste is generated (i.e., none of the waste is from off-site sources);

~~G.~~ 7. secondary containment systems (e.g., sumps or dikes) ~~which~~that are designed and operated to contain non-routine spill events (i.e., do not routinely receive solid waste except for de minimus spillage) from manufacturing or product storage areas within an industrial establishment. This exemption does not include secondary containment systems for solid waste disposal units;

~~H.~~ 8. woodwaste facilities at which only woodwaste is disposed of on property owned by the generator of the woodwaste, provided that the following requirements are met:

~~1.~~ a. the facility ~~must~~shall notify the Office of Environmental Services, Permits Division of such activity in accordance with LAC 33:VII.~~503~~ 401.A;

~~2.~~ b. the facility ~~must~~shall submit to the Office of Management and Finance, Financial Services Division a disposer annual report in accordance with the standards for woodwaste disposal facilities in LAC 33:VII.721.B.1;

~~3.~~ c. the facility ~~must~~shall comply with applicable Louisiana Water Pollution Control Regulations;

~~4.~~ d. the facility ~~must~~shall comply with the perimeter barrier, ~~and~~ security requirements, ~~in LAC 33:VII.719.B.1.a, b and c,~~ and ~~with~~ the buffer zone requirements in LAC 33:VII.719.B.~~2~~1;

~~I.~~ 9. facilities at which only woodwastes resulting from utility right-of-way clearing are received, provided the following conditions are met:

~~1.~~ a. the facility property ~~must~~shall be controlled by the utility company which generates the woodwaste;

~~2.~~ b. the facility ~~must~~shall comply with the natural or manmade perimeter barrier and security requirements in LAC 33:VII.719.B.1.a, b and c;

~~3.~~ c. the facility ~~must~~shall not receive solid waste from any source other than the utility company (or its authorized contractors) which generates the waste;

~~4.~~ d. the facility ~~must~~shall notify the Office of Environmental Services, Permits Division of its activities in accordance with LAC 33:VII.~~503~~ 401.A;

~~5.~~ e. the facility ~~must~~shall submit to the Office of Management and Finance, Financial Services Division a disposer annual report which accurately

estimates volumes of waste disposed in accordance with the standards for woodwaste disposal facilities found in LAC 33:VII.721.B.1.a; and

~~6.~~ f. the facility ~~must~~shall comply with applicable Louisiana Water Quality regulations (LAC 33:Part IX).

~~J.~~ 10. ditches that receive nonroutine spillage (i.e., do not routinely receive solid waste except for de minimus spillage) from manufacturing or product storage areas within an industrial establishment. This exemption does not include ditches for solid waste disposal units such as landfills, landfarms, or surface impoundments.

11. recycling facilities, as described in LAC 33:VII.303.A.3, that receive only source separated recyclables;

12. hospitals and other health care facilities that store or treat regulated infectious waste generated on-site or that accept waste from off-site wholly or partly owned subsidiaries.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 22:279 (April 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:1264 (June 2000), LR 26:2515, 2609 (November 2000), repromulgated LR 27:703 (May 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§307. Exemptions

A. Any person subject to these regulations who generates, collects, stores,

transports, processes, or disposes of solid waste may petition the administrative authority for exemption from these regulations or any portion thereof.

1. The administrative authority may provide exemptions from these regulations or any portion thereof when petitions for such are deemed appropriate after consideration of the factors enumerated in Subparagraphs B.2.a and b of this Section as well as any other pertinent factors.

2. The administrative authority shall make a decision whether or not to grant the exemption requested within 180 days from the date on which the request for exemption was filed, unless a longer time period is agreed upon by mutual consent of the applicant and the administrative authority. In no case shall the time period be greater than one year.

B. Each request for an exemption ~~must~~shall:

1. identify the specific provisions of these regulations from which a specific exemption is sought;

2. provide sufficient justification for the type of exemption sought, ~~which~~that includes, but may not be limited to, the following demonstrations:

a. that compliance with the identified provisions would tend to impose an unreasonable economic, technologic, ~~or~~ safety, or other unreasonable burden on the person or the public as determined by the department; and

b. that the proposed activity will have no significant adverse impact on the public health, safety, welfare, and the environment, and that it will be consistent with the provisions of the act;

3. include proof of publication of the notice as required in Paragraph

C.1 of this Section, except for emergency exemptions.

C. Public Notification of Exemption Requests

1. Persons requesting an exemption shall publish a notice of intent to submit a request for an exemption, except as provided in Paragraph C.2 of this Section. This notice shall be published one time as a single classified advertisement measuring three columns by five inches in the legal-notices section of a newspaper of general circulation in the area and parish where the facility is located, and one time as a classified advertisement in the legal-notices section of the official journal of the state. If the facility is in the same parish or area as the official journal of the state, a single classified advertisement measuring three columns by five inches, in the legal-notices section of the official journal of the state, will be the only public notice required.

2. Persons granted emergency exemptions by the administrative authority shall publish a notice to that effect in the legal-notices section of a newspaper of general circulation in the area and parish where the facility requesting the exemption is located. The notice shall be published one time as a single classified advertisement measuring three columns by five inches in the legal-notices section of a newspaper of general circulation in the area and parish where the facility is located, and one time as a classified advertisement in the legal-notices section of the official journal of the state. The notice shall describe the nature of the emergency exemption and the period of time for which the exemption was granted. Proof of publication of the notice shall be forwarded to the Office of Environmental Services, Permits Division within 60 days after the granting of an emergency exemption.

D. Innovative or Alternate Technology Exemption. Persons requesting an

exemption based on innovative or alternate technology shall follow the procedure specified in Subsections A, B, and C, except for Subparagraph B.~~1~~2.a, of this Section. Requests for exemptions based on innovative technology may be granted by the administrative authority based on the ability of the applicant to make the following demonstrations:

1. the request is based on innovative or alternative technology;

2. the innovative or alternative technology ~~must~~shall satisfy all of the applicable standards in LAC 33:Part VII other than those for which the exemption is sought; and

3. the innovative or alternative technology ~~must~~shall produce performance or provide protection that is equivalent or superior to that required by all the standards for which the exemption is sought.

E. No exemptions may be granted for Type II landfills ~~which~~that would allow noncompliance with federal regulations, specifically 40 CFR 257 and 258, as amended on October 9, 1991.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2516 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§309. Confidentiality (Editor's note: moved to §110)

§311. Submittal of Information by Persons Other than Permit Holder or Applicant

Repealed

~~A. Documentation must be provided to the Office of Environmental Services, Permits Division by the permit holder or applicant authorizing other persons to submit information on their behalf.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2516 (November 2000), repealed by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§313. Classification

Repealed.

~~A. All solid waste facilities will be classified in accordance with the provisions of LAC 33:VII.Subpart 1.~~

~~B. All existing solid waste facilities not previously classified or issued a standard permit will be classified in accordance with the provisions of these regulations in one of the two following categories:~~

~~1. upgrade, to meet the standards set forth in LAC 33:VII.Chapter 7 of these regulations; or~~

~~2. closure, in accordance with the standards set forth in LAC 33:VII.Chapter 7 of these regulations.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), repealed by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§315. Mandatory Provisions

~~All persons conducting activities regulated under these regulations shall comply with the following provisions.~~

A. Generating, Collecting, Transporting, Storing, Processing, and Disposing of Solid Waste. Solid waste shall be generated, collected, transported, stored, processed, and disposed of only in accordance with these regulations.

B. ~~Storage of Wastes.~~ No solid waste shall be stored or allowed to be stored in a manner that ~~it~~ may cause a ~~nuisance or~~ health hazard <u>or detriment to the environment</u> as determined by the administrative authority. <u>No solid waste shall be stored or allowed to be stored at an offsite location.</u>

C. <u>Except as otherwise provided in these regulations, all solid waste shall be disposed of at a permitted solid waste facility.</u> ~~Existing Facilities Not Operating under a Standard Permit. All facilities without a standard permit, whether operating or inactive, shall be upgraded or closed in accordance with LAC 33:VII.Subpart 1 unless they have previously been satisfactorily closed in accordance with LAC 33:VII.Subpart 1.~~

D. <u>Abandonment of solid waste shall be considered an act of disposal.</u> ~~Permits for Existing Facilities Operating without a Standard Permit. All existing solid~~

~~waste facilities classified for upgrading shall apply for a standard permit according to these regulations.~~

~~E. Permits for New Facilities. No new solid waste facilities shall be constructed or operated after January 20, 1981, without a permit issued by the administrative authority in accordance with these regulations.~~

~~F. Construction of New or Modified Facilities. No construction of a new facility or modification of an existing facility may commence without a permit.~~

~~G. Permit Upgrade Schedule for Existing Facilities Operating under a Standard Permit~~

~~1. Existing Type I Landfills and Type I Landfarms~~

~~a. Permit holders for existing Type I landfills and Type I landfarms operating under a standard permit must submit to the Office of Environmental Services, Permits Division, no later than February 1, 1994, a mandatory modification document to address these regulations.~~

~~b. Existing Type I landfills and Type I landfarms shall be upgraded in accordance with these regulations no later than December 31, 1997.~~

~~2. Existing Type II Landfills~~

~~a. Permit holders of existing Type II landfills operating under a standard permit must submit to the department, no later than August 1, 1994, a mandatory modification document to address these regulations.~~

~~b. Except as provided in Subparagraph G.2.c of this Section, existing Type II landfills shall be upgraded in accordance with these regulations no later than December 31, 1997.~~

~~c. Special Subtitle D Upgrade Requirements. Notwithstanding Subparagraphs G.2.a and b of this Section, the following upgrade schedule applies.~~

~~i. Existing Type II landfills must be upgraded, to comply with LAC 33:VII.709.A.2 (regarding airports), LAC 33:VII.709.B.1.a, b, and c (regarding restriction of public access), LAC 33:VII.709.B.5 and LAC 33:VII.711.D.1.a (regarding hazardous-waste exclusion), LAC 33:VII.709.B.6 (regarding discharges to surface water), LAC 33:VII.709.C.3 (regarding unstable areas), LAC 33:VII.711.A.1 (regarding 100-year floodplains), LAC 33:VII.711.A.2 and 3 (regarding run-on/runoff control), LAC 33:VII.711.B.2 (regarding daily cover), LAC 33:VII.711.D.1.b (regarding open burning), LAC 33:VII.711.D.1.g (regarding liquid waste exclusion), LAC 33:VII.711.D.3.a (regarding methane monitoring), and LAC 33:VII.711.D.3.c (regarding vector control) no later than October 9, 1993.~~

~~ii. Units of Type II landfills which did not receive solid waste prior to October 9, 1993, must comply with LAC 33:VII.709.A.4 (regarding wetlands demonstrations), LAC 33:VII.709.A.5 (regarding fault areas), LAC 33:VII.709.C.2 (regarding seismic impact zones), LAC 33:VII.709.E (regarding groundwater monitoring) and LAC 33:VII.711.B.4 and 5 (regarding plans and specifications for leachate collection and liners) before receiving solid waste.~~

~~iii. Units of Type II landfills which are less than one mile from a drinking water intake must be upgraded to comply with LAC 33:VII.709.E (regarding groundwater monitoring) no later than October 9, 1994.~~

~~iv. Units of Type II landfills which are less than two miles from a drinking water intake must be upgraded to comply with LAC 33:VII.709.E~~

~~(regarding groundwater monitoring) no later than October 9, 1995.~~

~~v. Units of Type II landfills which are greater than two miles from a drinking water intake must be upgraded to comply with LAC 30:VII.709.E (regarding groundwater monitoring) no later than August 1, 1996.~~

~~vi. The administrative authority may extend the date for compliance with LAC 33:VII.315.G.2.c.i to April 9, 1994, for qualified existing Type II landfill units.~~

~~vii. The administrative authority may extend the post-closure waste acceptance dates in LAC 33:VII.711.F.2.a and b to April 9, 1994 for existing units of qualified Type II landfills.~~

~~viii. For the purposes of Clauses G.2.c.vi and vii, a qualified Type II landfill is one which:~~

~~(a). received no more than 100 tons per day of solid waste between October 9, 1991 and October 9, 1992, based on a calendar daily average; and~~

~~(b). will receive no more than 100 tons per day of solid waste based on a daily average computed each month between October 9, 1993 and April 9, 1994.~~

~~3. All Other Existing Type I, Type I-A, Type II, and Type II-A Facilities~~

~~a. Permit holders for all other Type I, Type I-A, Type II, and Type II-A facilities operating under a standard permit must submit to the department, no later than February 1, 1994, a mandatory modification document to address these~~

~~regulations.~~

~~b. Existing Type I, Type I-A, Type II, and Type II-A facilities shall be upgraded in accordance with these regulations no later than December 31, 1997.~~

~~4. Financial Assurance. Existing Types I, II, or III facilities that are owned or operated by local governments must comply with the financial assurance requirements in LAC 33:VII.727 no later than April 9, 1997. The administrative authority may waive the requirements of this Section for up to one year until April 9, 1998, for good cause if an owner or operator demonstrates that the April 9, 1997, effective date for the requirements of this Section does not provide sufficient time to comply with these requirements and that such a waiver will not adversely affect human health and the environment. All other facilities must comply by February 20, 1995.~~

~~5. Units of existing Type II landfills which are not upgraded in accordance with these regulations must cease accepting waste and complete closure on or before December 31, 1997.~~

~~6. Units of facilities, other than Type II landfills, which are not upgraded in accordance with these regulations must cease accepting waste and complete closure on or before their respective upgrade deadlines provided in Subsection G of this Section.~~

~~7. Permit-holders of facilities which have earthen ditches that lead to or from units of the facility and receive solid waste must:~~

~~a. submit a plan to the department by February 1, 1994, to:~~

~~i. upgrade the ditches to meet these regulations (This plan must be in the form of a permit modification, and may be included in the mandatory~~

~~modification document for the facility.); or~~

~~ii. remove the solid waste from the ditches and line them with materials capable of preventing groundwater contamination; or~~

~~iii. remove the solid waste from the ditches and cease disposing of solid waste in the ditches.~~

~~b. upgrade the ditches in accordance with these regulations and the permit modification by February 1, 1998.~~

~~8. Type I and II facilities with closure plans approved prior to and which do not receive solid waste on or after October 9, 1993, may complete closure and post-closure under the terms of the approved closure plan, except that Type II landfills which received solid waste on or after October 9, 1991 must meet standards for placement and maintenance of final cover in LAC 33:VII.711.E and F.~~

~~9. The permit holder of a Type II facility must submit to the department a new or amended closure plan and a post-closure plan in the form of a permit modification to address these regulations no later than October 9, 1993, or by the initial receipt of waste, whichever is later.~~

~~10. Municipal solid waste landfills that commenced construction, reconstruction, or modification or began accepting waste on or after May 30, 1991, are subject to 40 CFR Part 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills. Described landfills may be required to have an operating permit under the Air Quality regulations, LAC 33:III.~~

~~11. Municipal solid waste landfills that accepted waste on or after November 8, 1987, or for which construction, reconstruction, or modification was~~

~~commenced before May 30, 1991, may be subject to 40 CFR Part 60, Subpart Cc-Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills. Described landfills may be required to have an operating permit under the Air Quality regulations, LAC 33:III.~~

~~H. Existing Facilities Operating under a Temporary Permit with Pending Permit Applications. Permit holders of existing facilities operating under a temporary permit must submit to the department, no later than January 1, 1994, an addendum to the permit application to address these regulations. Existing facilities which do not hold a standard permit must be upgraded in accordance with the applicable deadlines according to facility type in Subsection G of this Section unless earlier deadlines are required by the administrative authority.~~

~~I. Applicants of Proposed Facilities with Pending Permit Applications~~

~~1. Applicants of proposed facilities with permit applications on file with the department must submit to the Office of Environmental Services, Permits Division, no later than January 1, 1994, an addendum to their application to address these regulations.~~

~~2. Failure to submit an addendum to the application by January 1, 1994, shall be considered a withdrawal of the permit application and shall require no further action.~~

~~J~~E. Access to Facilities. The administrative authority or his representative shall have access to the premises of all facilities used for the management of solid waste for all purposes authorized under R.S. 30:2001 et seq., particularly R.S. 30:2012. These inspections may be conducted during normal operating hours; however, the department

reserves the right to conduct inspections before and after operating hours. Upon request of the operator or permit holder, the administrative authority or his representative shall discuss the preliminary findings of any such investigation before leaving the premises.

~~K~~F. ~~Reporting of~~ Unauthorized Discharge. Any discharge, deposit, injection, spill, dumping, leaking, or placing of solid waste into or on the water, air, or land of the state in contravention of the act, these regulations, or the terms and conditions of a permit issued thereunder, or any accident, fire, explosion, or other emergency that results in such unauthorized solid waste discharge, shall be reported by any person causing, allowing, or suffering said discharge or by any person with knowledge of the discharge to the Office of Environmental Compliance in accordance with LAC 33:I.Chapter 39.

~~L~~G. Cleanup of Unauthorized Discharge. The cleanup, isolation, removal, or otherwise rendering safe of solid waste processed or disposed of in a manner not authorized by these regulations, or at a facility not permitted to receive such wastes, shall be conducted in accordance with LAC 33:I.Chapter 13 (RECAP), these regulations, or the terms and conditions of any order issued by the administrative authority. Such orders shall not preclude other enforcement action under R.S. 30:2025.

~~M~~H. Notice of Damage to Structures in a Solid Waste Facility. The Office of Environmental Compliance shall be notified in accordance with ~~within 48 hours, in the manner provided in~~ LAC 33:I.3923, when damage to or degradation of any structure of a solid waste facility occurs that would impair the ability of the facility to meet the conditions of its permit.

I. The owner/operator shall provide advanced written notice, at least 30 days prior to construction, to the parish governing authority whose jurisdiction may be

affected, of the intent to operate a transfer station or other type of facility for the offloading and/or transloading of processed solid waste and sewage sludge destined for disposal.

~~N~~J. Hazardous or Nuclear Wastes in Solid Waste Facilities. No hazardous waste or nuclear material regulated under the Louisiana hazardous waste rules and regulations or Louisiana radiation regulations shall be processed or disposed of at a solid waste facility except in conformance with those regulations. Collectors, transporters, processors, and disposers of solid waste ~~must~~shall determine, according to approved methods, that the waste is not hazardous before collecting, transporting, processing, or disposing of it.

~~O~~K. Compliance with Other Regulations. All facilities may be subject to applicable federal and state laws and regulations, including, but not limited to Section 402 (NPDES) and Section 404 (Dredge and Fill) of the Clean Water Act; the Coastal Zone Management Act and Federal Aviation Administration regulations; the National Historic Preservation Act of 1966, as amended; the Endangered Species Act; the Wild and Scenic Rivers Act; the Fish and Wildlife Coordination Act; the Clean Air Act; the Toxic Substances Control Act; the Marine Protection Research and Sanctuary Act; the Resource Recovery and Conservation Act; and the Federal Insecticide, Fungicide, and Rodenticide Act.

~~P~~L. Contamination of the Waters of the State. No person(s) shall cause, allow, or permit solid waste to be disposed of in such a manner that it enters the waters of the state. This does not apply to discharges into waters of the state in accordance with state or federal wastewater-discharge permits.

~~Q~~M. Open burning of solid waste is prohibited, except for individual residences, local governmental authorities and ~~as otherwise provided~~ in accordance with ~~these regulations~~R.S. 30:2001 et seq. and LAC 33:III.1109.

~~R~~N. Spent Bauxite Waste and By-Product Gypsum and Related Wastes

1. The administrative authority may give special consideration to landfills ~~which~~that receive only by-product gypsum and related wastes (resulting from the production of phosphoric acid, phosphate fertilizers, and hydrofluoric acid) which is generated on-site, with regard to standards for receipt of liquid waste, standing water, specific design and operation of liners and leachate collection and removal systems, daily cover, and final cover, which may include waiver or modification of these standards.

2. The administrative authority may give special consideration to surface impoundments ~~which~~that receive only spent bauxite waste and related wastes (resulting from production of alumina) ~~which~~that is generated on-site, with regard to standards for liners and final cover which may include waiver or modification of these standards.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 19:1143 (September 1993), LR 19:1315 (October 1993), repromulgated LR 19:1421 (November 1993), amended LR 22:279 (April 1996), amended by the Office of Waste Services, Solid Waste Division, LR 23:954 (August 1997), LR 23:1145 (September 1997), amended by the Office of Environmental

Assessment, Environmental Planning Division, LR 26:2516 (November 2000), LR 30:1675 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§317. Division of Responsibility (Editor's note: moved to §112)

§319. Assignment and Reassignment of Responsibilities (Editor's note: moved to §114)

Chapter 4. Administration, Classifications, and Inspection Procedures for Solid Waste Management Systems

§401. Notification (Editor's note: moved from §503)

A. ~~Except as provided for in Paragraph A.2 of this Section, p~~Persons who generate industrial solid waste and/or persons who transport, process, or dispose of solid waste shall, within 30 days after they become subject to these regulations, notify the Office of Environmental Services, Permits Division in writing of such activity. A form to be used for notification shall be obtained from the Office of Environmental Services, Permits Division or through the department's website.

B. Persons who generate industrial solid waste and persons who transport, process, or dispose of solid waste who have previously notified the department of such activity are not required to renotify, unless changes are warranted.

C. Owners or operators of pickup stations and transfer stations (non-processing) are required to notify the Office of Environmental Services, Permits Division ~~of such activities within 30 days after they become subject to these regulations~~prior to operation of these types of facilities. Existing facilities ~~which~~that have previously notified are not required to renotify.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§403. Existing Facilities Classification ~~Classification of Existing Facilities Which Have Not Been Previously Classified or Which Are Not Presently Operating under a Standard Permit~~ (Editor's note: moved from §505)

A. Classification

1. Existing facilities ~~which~~that have ~~neither~~not been previously regulated, classified ~~nor~~or issued a standard permit shall be classified by the administrative authority to the classification categories of "closure" or "upgrade."

2. Within 120 days after the review and acknowledgment of the notification by the administrative authority, a representative of the department ~~will~~shall perform an on-site investigation of the facility to determine its classification. At the time of the classification inspection, the processor and/or disposer shall provide the representative with a map clearly depicting the location and size of each facility (and units thereof) to be classified and a schematic of the waste entering each unit of a facility to be classified.

3. Within 30 days after the classification inspection, any person who processes or disposes of solid waste shall file with the Office of Environmental Services, Permits Division a notice of his intent to upgrade or close a facility.

B. Existing Facilities Not Operating under a Standard Permit. All facilities without a standard permit, whether operating or inactive, shall be upgraded or closed in

accordance with LAC 33:VII.Subpart 1 unless they have previously been satisfactorily closed in accordance with LAC 33:VII.Subpart 1.

C. Permits for existing facilities operating without a standard permit. All existing solid waste facilities classified for upgrading shall apply for a standard permit according to these regulations.

D. Existing facilities ~~which~~that have not previously been classified or that are not operating under a standard permit shall be classified for upgrade or closure ~~as required in LAC 33:VII.313.B~~ by the following criteria and procedure.

1. Classification criteria are based on compliance with standards detailed in LAC 33:VII. Chapters 5, 7, and 8, with emphasis on the following:

a. potential for pollution of surface water;

b. potential for pollution of groundwater;

c. potential for pollution of air;

d. location in flood plains or in wetlands;

e. potential for danger to health due to disease vectors, use of waste-filled lands for food crops, and similar health-related practices;

f. safety considerations, including danger from explosive gases, from fires, and from birds attracted to the site that might obstruct the glide path of aircraft; and

g. threat to endangered species.

2. The classification procedure comprises identifying, evaluating, and preliminary classification of facilities.

a. an ongoing effort ~~will~~shall be made to identify all solid

waste facilities.

b. The facilities ~~will~~shall be evaluated on the basis of the criteria listed in ~~LAC 33:VII.505.B.1 of these regulations~~this Subsection and based on the needs and plans of the facility.

E. Issuance of Temporary Permits

1. The administrative authority may issue a temporary permit for upgrading to persons who process or dispose of solid waste. The temporary permit ~~will~~shall require the submission of a permit application. The temporary permit will allow the facility to continue operations in accordance with an approved interim operational plan pending the standard permit application process.

2. The administrative authority may issue a temporary permit for closure to persons who process or dispose of solid waste. The temporary permit shall require the submission of a closure plan permit application and implementation schedule. The temporary permit may allow the facility to continue operations in accordance with an approved interim operational plan pending the closure process.

3. Temporary permits are subject to annual permit maintenance fees as provided in LAC 33:VII.1505.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§405. Categorization of Facilities (Editor's note: moved from §507)

A. All existing and proposed facilities ~~will~~ shall be categorized as defined in

LAC 33:VII.115 and as one or more of the following:

~~A~~1. *Type I*. Industrial disposal facilities (landfills, surface impoundments, or landfarms);

~~B~~2. *Type I-A*. Industrial processing facilities (transfer stations [processing], shredder, baler, etc.);

~~C~~3. *Type II*. Nonindustrial disposal facilities (landfills, surface impoundments, or landfarms);

~~D~~4. *Type II-A*. Nonindustrial processing facilities (transfer stations [processing], composting municipal solid waste facility, refuse-derived fuel facility, shredder, baler, autoclave, etc.); ~~and~~ or

~~E~~5. *Type III*. Construction/demolition-debris and woodwaste landfills, separation facilities, composting facilities, or other.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§407. Inspection Types and Procedures (Editor's note: moved from 509)

A. Classification Inspection. A classification inspection is required for all existing facilities not previously classified, and each facility's initial classification is based on this inspection. It is performed after the department receives notification of operations (LAC 33:VII.~~503~~401.A.~~1~~).

B. Compliance Inspections. The department shall inspect each facility and

each facility's records periodically to determine the facility's compliance with the terms of standard or temporary permits and these regulations.

C. Initial Start-Up Inspection—Newly Permitted Facilities

1. For existing facilities, the initial start-up inspection shall be made after a standard permit has been issued, all upgrading measures are completed, new activities as a result of upgrade are implemented, and certification is submitted to the Office of Environmental Services, Permits Division by a ~~registered~~professional engineer, licensed in the state of Louisiana, that the facility is constructed and has been upgraded in accordance with the permit.

2. For new facilities, the initial start-up inspection shall be made after a standard permit has been issued, construction measures have been completed, and certification is submitted to the Office of Environmental ~~Assessment~~Services, ~~Environmental Technology~~Permits Division by a ~~registered~~professional engineer, licensed in the state of Louisiana, that the facility is constructed in accordance with the permit.

3. All start-up inspections shall be initiated within 10-working days of receipt of certification by the Office of Environmental ~~Assessment~~Services, ~~Environmental Technology~~Permits Division unless a longer time period is set by mutual agreement.

4. Within 15 working days after a new or existing facility has undergone the initial start-up inspection, the administrative authority shall either issue an order authorizing commencement of operation or a written notice of deficiency to the permittee, unless a longer time period is set by mutual agreement.

D. Construction Inspections. At least 10 days prior to commencing construction of a liner, leak-detection system, leachate-collection system, or monitoring well at a Type I or Type II facility, the permit holder shall notify the Office of Environmental Assessment ~~Services~~, Environmental Technology ~~Permits~~ Division, in writing, of the date on which construction will begin, in order to allow a representative of the division the opportunity to witness the construction.

E. Unit Start-Up Inspections—All Facilities

1. Start-up inspections for new units of a standard permitted facility shall be conducted after completion of all construction measures and after submittal of certification to the Office of Environmental Assessment, Environmental Technology Division, by a ~~registered~~professional engineer licensed in the state of Louisiana, that the unit is constructed in accordance with the permit.

2. All start-up inspections shall be initiated within 10 working days of receipt of certification by the Office of Environmental Assessment, Environmental Technology Division.

3. Within 10 working days after a new unit of a facility has undergone a unit start-up inspection, the administrative authority shall issue either an approval of the construction or a notice of deficiency. The unit may commence operation only upon approval of the construction of the unit by the administrative authority.

F. Modification Start-Up Inspections—All Facilities

1. Start-up inspections for modified construction of a standard permitted facility shall be conducted after construction measures of the modification are completed and certification is submitted to the Office of Environmental Assessment,

Environmental Technology Division by a ~~registered~~professional engineer licensed in the state of Louisiana, that the modified feature/unit has been constructed in accordance with the modification approved by the administrative authority and any conditions specified in such approval.

2. After a modified unit/feature of a facility has successfully undergone a start-up inspection and after the permit holder has been notified in writing of this, operation of the modified unit/feature may commence.

G. Closure Inspections. Closure inspections will be conducted within 30 days after the Office of Environmental Services, Permits Division has received written notice from the permit holder that closure requirements have been met in accordance with the approved closure plan and the permit holder has filed a request for a closure inspection. Closure inspections ~~must~~shall be conducted before backfilling of a facility takes place. The administrative authority reserves the right to determine if a facility has been closed properly.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Chapter 5. Solid Waste Management System

Subchapter A. General Standards for Nonpermitted Facilities

(Editor's note: Subchapter A is taken from chapter 7; the previous Subchapter A is now B, B is now C, etc.)

§501. ~~Administration~~ Standards Governing Industrial Solid Waste Generators

(Editor's Note: Moved from §701 and original §501 language is taken out)

~~A. This program shall be administered by the Department of Environmental Quality.~~

A. Annual Reports

1. Generators of industrial solid waste shall submit annual reports to the Office of ~~Environmental Services~~Management and Finance, ~~Environmental Assistance~~Financial Services Division listing the types and quantities, in wet-weight tons per year, of industrial solid waste they have disposed of off-site.

2. The generator's annual report shall name the transporter(s) who removed the industrial solid waste from the generator's site and the permitted solid waste processing or disposal facility or facilities that processed or disposed of the waste both in and out of state. The form to be used shall be obtained from the department or through the department's website at www.deq.state.la.us.

3. The reporting period shall be from July 1 through June 30.

4. The report shall be submitted to the Office of ~~Environmental Services~~Management and Finance, ~~Environmental Assistance~~Financial Services Division by August 1 of each reporting year.

5. Generators of industrial solid waste shall maintain, for two years, all records concerning the types and quantities of industrial solid waste disposed of off-site.

B. Generator Notification and Waste Testing

1. Prior to the initial transport of an industrial solid waste off-site,

generators of industrial solid waste shall:

a. submit to the Office of Environmental Services, Permits Division a generator notification form, ~~(which is to be provided by the administrative authority)~~ which is available on the department website or by contacting the Office of Environmental Services, Permits Division, which includes analysis, analytical data, and/or process knowledge ~~which~~that confirms that the waste is not a characteristic or listed hazardous waste as defined in LAC 33:Part V or by federal regulations; and

b. obtain an industrial waste code number from the disposal facility~~Office of Environmental Services, Permits Division~~.

2. Subsequent movements of the same industrial waste off-site shall not require new waste testing or a new industrial waste code number, unless the process ~~which~~that generates the waste or the characteristics of the waste change. However, the waste characterization data and the waste code required in Paragraph B.1 of this Section ~~must~~shall be maintained by the generator.

~~3. Paragraph B.1 and 2 of this section are applicable to solid waste shipments on or after April 1, 1993.~~

C. Except as otherwise provided in these regulations, all solid waste shall be processed or disposed of at a permitted solid waste facility.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental

Planning Division, LR 26:2517 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§503. Standards Governing Solid Waste Accumulation and Storage (Editor's Note: Moved from §703; original §503 language is moved to §401)

A. Solid Waste Accumulation

1. No solid waste shall be stored ~~for more than 30 days~~ or allowed to be stored long enough to cause a nuisance, health hazard or detriment to the environment as determined by the administrative authority.

2. Containers used for solid waste shall prevent access by rodents and insects, shall minimize the escape of odors, and shall keep out water.

3. On-site processing or disposal, other than the exclusions provided for in LAC 33:VII.301, 303, or 305, is not allowed on the sites of commercial or industrial generators, unless a permit is obtained.

B. Solid Waste Stored in Tanks

1. Storage tanks shall be designed, constructed, and operated to prevent release of their solid waste contents into the surrounding environment.

2. A storage vessel that is partially buried underground ~~must~~shall meet the definition of *tank* provided in LAC 33:VII.115 in order to be considered a tank; otherwise, it will be considered a surface impoundment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental

Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2517 (November 2000), amended by the Office of Environmental Assessment, LR 30:2024 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§505. Standards Governing Collectors and Off-Site Transporters of Solid Waste

(Editor's Note: Moved from §705; original §505 is moved to §403)

A. Vehicle Requirements

1. The types and sizes of vehicles shall comply with the regulations and licensing of the Department of Transportation and Development and with applicable local ordinances governing weight and size for the streets that ~~must~~shall be traveled for solid waste pickup.

2. Cover

a. The bodies of vehicles used to transport trees, tree limbs, construction materials, or metals shall contain such waste without allowing materials to fall or blow off the vehicle.

b. The bodies of vehicles used to collect or transport all other solid waste shall be covered at all times, except during loading and unloading, in a manner that prevents rain from reaching waste, inhibits access by rodents and insects, prevents waste from falling or blowing from the vehicle, minimizes escape of odors, and does not create a nuisance.

c. The bodies of vehicles used for the transportation of ash

shall be leak-resistant and covered so as to prevent emissions.

3. The bodies of all vehicles used to transport solid waste that produces leachate shall be equipped with a collection and containment system to ensure that leachate from the waste is not discharged in violation of these regulations.

4. The interior and exterior of the body of a vehicle used to transport putrescible solid waste shall be washed down as often as needed to ensure that odors generated by putrescible matter are minimized.

B. Vehicle Washdown Area

1. The vehicle washdown area shall be designed, constructed, and operated to prevent leakage ~~which~~that may lead to groundwater contamination or uncontrolled contaminated surface runoff.

2. Water collected shall be discharged and the containment system thoroughly cleaned as often as is needed to minimize odors. The leachate and the cleanout water shall be discharged in accordance with all applicable state and federal regulations.

C. Standards Governing Waste Transportation by Other Modes

1. Barge and Ship Transport

a. Barge and ship transport shall be governed by Paragraphs A.2, 3, and 4 and Paragraphs B.1 and 2 of this Section.

b. Loading and unloading facilities shall comply with LAC 33:VII.~~7~~507, as applicable.

2. Pipelines

a. Transfer points, pumping stations, and other facilities with a potential for spillage shall be located above grade, or in watertight compartments, and shall be in containment areas constructed to hold the maximum potential spill.

b. Containment areas shall consist of a base and dikes constructed of concrete, compacted clay, or other impervious materials. All joints ~~must~~shall be sealed.

3. Rail

a. Rail car transport shall be governed by Paragraphs A.2, 3, and 4 and Paragraphs B.1 and 2 of this Section.

b. Loading and unloading facilities shall comply with LAC 33:VII.~~7~~507, as applicable.

4. Other. Collectors and off-site transporters utilizing facilities not covered by Subsections A and C of this Section shall apply to the administrative authority for regulations governing the proposed facility.

D. Transportation to Processing and Disposal Facilities. Solid waste shall be transported, for processing or disposal, only to facilities permitted to receive such waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental

Planning Division, LR 26:2517 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§507. Standards Governing Pickup Stations for Solid Waste (Editor's note: moved from §707; original §507 is moved to §405)

A. Owner/operator of p~~P~~ickup stations ~~must~~shall comply with existing local zoning, siting, and comprehensive land-use regulations and ordinances. Owner/operator shall be responsible for the management of the pick up station, in accordance with this Section.~~They must also occupy sufficient land so that vehicles using the station will not block traffic or otherwise constitute a hazard or endanger public safety.~~

B. Containers shall provide complete containment of waste, thereby preventing litter, discharges, odor, and other pollution of adjoining areas. Pickup stations ~~must~~shall meet the standards found in LAC 33:VII.~~7~~503.A. They shall also occupy sufficient land so that vehicles using the station will not adversely affect traffic or otherwise constitute a hazard or endanger public safety.

C. Cleanup of the station ~~must~~shall be timed at intervals in order to comply with the requirements of LAC 33:VII.~~7~~505.B.1 and 2.-All waste accumulated or stored at the facility shall remain in containers that meet the following requirements:

1. Containers shall provide sufficient capacity to contain waste and prevent litter.

2. Containers shall be designed, constructed, and operated to keep out water and prevent leakage.

3. Containers shall be constructed and maintained to minimize odors

and access by rodents and insects.

4. Containers shall be emptied before accumulation becomes a nuisance, a health hazard, or detriment to the environment as determined by the administrative authority.

D. Inspections of pickup stations shall be made by the owner/operator at a minimum of twice per week looking for cleanliness of the site, overfill of containers, closed lids, leaking containers, and deterioration of containers. Records of inspections shall be created, maintained, and available for inspection within 24 hours of request.

~~E. Each person must provide written notice to the parish governing authority, at least 30 days prior to construction, of his intent to operate a pick-up station for the offloading and/or transloading of processed solid waste and sewage sludge destined for disposal.~~

E. No processing or disposal shall occur at a pickup station.

F. Removal of all remaining wastes to a permitted facility shall occur at closure.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§508. Standards Governing Transfer Stations (Non-Processing) for Solid Waste

A. Owners and/or operators of transfer stations (non-processing) shall notify the local governing authority and comply with existing local zoning, siting and comprehensive land-use regulations and ordinances. Buffer zones of not less than 200 feet shall be provided between the facility and the property line.

B. No processing or disposal shall occur at a transfer station (non-processing) unless a standard permit is obtained.

C. Transfer stations (non-processing) shall notify in accordance with LAC 33:VII.401. They shall also occupy sufficient land so that vehicles using the station will not adversely affect traffic or otherwise constitute a hazard or endanger public safety.

D. Facilities shall have control measures at the facility that prevents unauthorized ingress or egress, except by willful entry. During operating hours, each facility entry point shall be continuously monitored, manned, or locked. During non-operating hours, each facility entry point shall be locked.

E. Facilities shall be inspected by the owner/operator at the end of each operating day and litter or waste shall be cleaned up and placed into the last transportation vehicle. Odors shall be controlled by the best means practicable.

F. Discharges from the facility shall be controlled and shall conform to applicable state and federal laws, including the federal Clean Water Act and the Water Pollution Control Act.

G. All waste shall be removed to a permitted facility at closure. Facilities shall comply with LAC 33:V.503 and 505.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et

seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter B. Permit Administration~~, Classification, and Inspection Procedures~~

§509. Permit System (Editor's note: moved from §511; original §509 is moved to §407)

A. Scope

1. A permit ~~must~~shall be secured by any person who processes and/or disposes of solid waste, with the exception of those wastes or processing and disposal facilities described in LAC 33:VII.301, 303, and 305. Facilities (existing and proposed) subject to the permitting requirements detailed in these regulations are defined in LAC 33:VII.115 and categorized in LAC 33:VII.405.A.

~~a. Type I—a facility used for the disposal of industrial solid waste;~~

~~b. Type I-A—a facility used for processing industrial solid waste;~~

~~c. Type II—a facility used for the disposal of residential or commercial solid waste;~~

~~d. Type II-A—a facility used for processing residential or commercial solid waste; and~~

~~e. Type III:~~

~~i. a facility used for disposing of construction/demolition-debris, as defined in LAC 33:VII.115;~~

~~ii. a facility used for processing or disposing of woodwaste as defined in LAC 33:VII.115, and tree limbs, leaves, and stumps;~~

~~iii. a facility used to compost organic wastes to produce a usable material; and~~

~~iv. a separation facility as defined in LAC 33:VII.115.~~

2. ~~The following will not be required to secure permits.~~

~~a.~~ Generators ~~who~~that are not processors or disposers of solid waste are not required to secure a permit. Generators of industrial solid waste ~~must~~shall notify the Office of Environmental Services, Permits Division, in accordance with LAC 33:VII.~~401~~501.~~A~~B. Generators of industrial solid waste are subject to the applicable standards provided in LAC 33:VII.~~7~~501.

3. ~~b.~~ Transporters ~~who~~that are not processors or disposers of solid waste are not required to secure a permit~~, but~~. Transporters of solid waste ~~must~~shall notify the Office of Environmental Services, Permits Division, in accordance with LAC 33:VII.~~503~~401.A.~~1~~ and B. Transporters of solid waste are subject to the applicable standards provided in LAC 33:VII.~~7~~505.

~~c. Storers who are not processors or disposers of solid waste are not required to secure a permit. Storers of solid waste are subject to the applicable standards provided in LAC 33.VII.703.~~

4. ~~d.~~ Transfer station (non-processing) and p~~P~~ickup stations ~~at which no solid waste is processed or disposed of~~ are not required to secure a permit. ~~Pickup stations~~These are subject to the standards found in LAC 33:VII.~~7~~503 and ~~7~~507 and ~~must~~shall notify the Office of Environmental Services, Permits Division in

accordance with LAC 33:VII.~~503~~ 401.A and B.

(Editor's note: moved from §315.E & F)

5. ~~Permits for New Facilities.~~ No new solid waste facilities shall be constructed or operated without ~~a permit~~approval issued by the administrative authority in accordance with these regulations.

B. Types of Permits

1. Temporary Permit

a. A temporary permit allows continued operation of an existing facility that becomes subject to regulations in accordance with an interim operational plan, but does not allow the expansion or modification of the facility without prior approval of the administrative authority. The administrative authority may issue a temporary permit in the following situations:

i. to allow operations to continue at an existing facility while a standard permit application is being processed;

ii. to allow operations to continue at an existing facility while a closure plan permit application is being processed or while a facility is being closed in accordance with a closure plan; or

iii. to allow an applicant for a permit for a proposed facility to begin construction ~~and/or operation~~ on a limited basis while an application for a proposed facility is being processed for good cause shown.

b. The types of temporary permits issued on or after February 20, 1993, will correspond to the facility categories defined in LAC 33:VII.405.A~~:~~ (Type I, Type I-A, Type II, Type II-A, and Type III).

c. Temporary permits ~~which~~that may have been issued in the form of administrative orders, compliance orders to upgrade, orders to upgrade, compliance orders to close, orders to close, and settlement agreements prior to February 20, 1993, may remain in effect until otherwise determined by the administrative authority. Notwithstanding this Subparagraph, any such temporary permit holder ~~must~~shall comply with applicable upgrade requirements and deadlines in LAC 33:VII.~~31~~513.~~G and H.~~

2. Standard Permit. Standard permits may be issued by the administrative authority to applicants for solid waste processing and/or disposal facilities that have successfully completed the standard permit application process. The types of standard permits issued on or after February 20, 1993, shall correspond to the facility categories ~~defined~~set forth in LAC 33:VII.~~507~~405.A~~:~~ (Type I, Type I-A, Type II, Type II-A, and Type III).

C. Existing Facilities Not Previously Classified or Not Presently Operating Under a Standard Permit

1. Only those existing facilities that the administrative authority classifies for upgrading may apply for a standard permit. The person(s) notifying the Office of Environmental Services, Permits Division, ~~will~~shall be issued a temporary permit and may continue operations in accordance with the interim operational plan, pending a decision on the standard permit application.

2. Facilities classified for closure ~~will~~shall be issued a temporary permit. That permit may allow operations to continue in accordance with the interim operational plan until closure activities are accomplished and may require that closure

and/or post-closure activities be conducted in accordance with the approved closure plan.

D. Duration of Permit

1. Temporary permits are issued for a period not to exceed three years.

2. Standard permits are issued for a period not to exceed 10 years.

a. Processing and/or disposal facilities with an effective standard permit shall submit to the Office of Environmental Services, Permits Division a new permit application at least 455 days before the expiration date of the standard permit, unless permission for later filing is granted by the administrative authority. If the reapplication is submitted on or before the deadline above, and the administrative authority does not issue a final decision on the reapplication on or before the expiration date of the standard permit, the standard permit shall remain in effect until the administrative authority issues a final decision.

b. ~~Permits for processing and/or disposal facilities which~~that ~~have been issued with an expiration date greater than 10 years after the effective date of the permit shall expire 10 years after the date the permit was effective or on August 1, 1996, whichever is later These facilities shall be subject to the provisions in Subparagraph D.2.a of this Section.~~ For permits with expiration dates greater than ten years, upon expiration, the department may, in accordance with rules and regulations, extend or reissue a permit, for another time period of up to ten years.

E. Property Rights. Permits issued by the administrative authority do not convey any property rights of any sort or any exclusive privilege.

F. Public Hearings

1. Public hearings ~~will~~may be held concerning standard permits for facilities ~~when the administrative authority determines that there is sufficient public interest~~at the discretion of the secretary.

2. Public hearings ~~will~~may be held concerning major modifications of standard permits ~~when the administrative authority determines that there is sufficient public interest~~at the discretion of the secretary.

3. Public hearings ~~will~~shall not be held concerning mandatory modifications, which are considered an enhancement of a standard permitted facility.

(Editor's note: Subsections 4-7 are existing language moved from §513.F.4-7)

4. Public hearings shall be conducted in accordance with the rules of procedure of the administrative authority for fact-finding hearings or other hearing procedures developed by the administrative authority and the Administrative Procedure Act (R.S. 49:950 et seq.).

5. Public Opportunity to Request a Hearing. Any person may, within 30 days after the date of publication of the newspaper notice (LAC 33:VII.~~503~~509.F.3), request that the administrative authority consider whether a public hearing is necessary. If the administrative authority determines that the requests warrant it, a public hearing will be scheduled. If the administrative authority determines that the requests do not raise genuine and pertinent issues, the Office of Environmental Services, Permits Division, shall send the person requesting the hearing written notification of the determination. The request for a hearing ~~must~~shall be in writing and ~~must~~shall contain the name and affiliation of the person making the request and the comments in support of or in objection to the issuance of a permit.

6. Public Notice of a Public Hearing. If the administrative authority determines that a hearing is necessary, notices shall be published at least 20 days before a fact-finding hearing in the official journal of the state and in the official journal of the parish where the facility is located. The notice shall be published one time as a single classified advertisement measuring three columns by five inches in the legal or public notices section of the official journal of the parish where the facility is located. If the affected area is Baton Rouge, a single classified advertisement measuring three columns by five inches in the official journal of the state shall be the only public notice required. Those persons on the Office of Environmental Services, Permits Division's mailing list for hearings shall be mailed notice of the hearing at least 20 days before a public hearing. A notice shall also be published in the departmental bulletin, if available.

7. Receipt of Comments Following a Public Hearing. Comments received by the Office of Environmental Services, Permits Division, until the close of business 30 days after the date of a public hearing shall be reviewed by the Office of Environmental Services, Permits Division.

G. Other Requirements

1. The applicant may be required to obtain additional permits from other local state and federal agencies. Typical permits that may be needed are as follows:

a. NPDES/ LPDES (Section 402 of the Clean Water Act);

b. Louisiana Water Discharge Permit;

c. Louisiana Coastal Use Permit (issued by the Department of Natural Resources, Coastal Management Division);

d. Louisiana Air Emissions Permit;

e. U.S. Army Corps of Engineers Permit (Dredge and Fill, Section 404 of the Clean Water Act); or

f. appropriate local permits, licenses, certification, registration, or approval.

2. It is the responsibility of the applicant to identify the other applicable permits that may be required. A listing of the permits that the applicant intends to apply for shall be included in the solid waste permit application.

3. The applicant shall provide appropriate documentation to the Office of Environmental Services, Permits Division that the proposed use does not violate zoning or other land-use regulations that exist at the time of the submittal of the standard permit application.

H. Suspension, Revocation, or Amendment of Permit. The administrative authority may review a permit at any time. After review of a permit, the administrative authority may, for cause, suspend, revoke, or require amendment of a permit in whole or in part in accordance with the procedures outlined in LAC 33:VII.Chapter 9 ~~of these regulations~~ and R.S. 30:2025.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2517 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§511. Permit System (Editor's note: moved to §509)

§513. Mandatory Modification Requirements (Editor's note: moved from §315, Subsections G-I; original §513 is moved to §514)

A. This section applies to those facilities that were required to submit mandatory modification applications to the department in accordance with the regulations promulgated on February 20, 1993. Subsections B-N of this Section are an upgrade schedule for those facilities and regulatory references therein or to the regulations promulgated on February 20, 1993.

B. Existing Type I Landfills and Type I Landfarms

1. Permit holders for existing Type I landfills and Type I landfarms operating under a standard permit ~~must~~shall submit to the Office of Environmental Services, Permits Division, no later than February 1, 1994, a mandatory modification document to address these regulations.

2. Existing Type I landfills and Type I landfarms shall be upgraded in accordance with these regulations, no later than December 31, 1997.

C. Existing Type II Landfills

1. Permit holders of existing Type II landfills operating under a standard permit ~~must~~shall submit to the department, no later than August 1, 1994, a mandatory modification document to address these regulations.

2. Except as provided in Subparagraph G.2.c of this Section, existing Type II landfills shall be upgraded in accordance with these regulations, no later than December 31, 1997.

3. Special Subtitle D Upgrade Requirements. Notwithstanding

Subparagraphs C.1 and 2.a and b of this Section, the following upgrade schedule applies.

a. Existing Type II landfills ~~must~~shall be upgraded, to comply with LAC 33:VII.709.A.4 (regarding airports), 709.B.1.b.ii (regarding restriction of public access), 709.B.~~2~~1.c and 711.D.1.a (regarding hazardous-waste exclusion), 709.B.2 (regarding discharges to surface water), 709.A.10.~~c~~d (regarding unstable areas), 711.A.1 (regarding 100-year floodplains), 711.A.2 and 3 (regarding run-on/runoff control), 711.B.2 (regarding daily cover), 711.D.1.b (regarding open burning), 711.D.1.g (regarding liquid waste exclusion), 711.D.3.a (regarding methane monitoring), and 711.D.3.c (regarding vector control) no later than October 9, 1993.

b. Units of Type II landfills ~~which~~that did not receive solid waste prior to October 9, 1993, ~~must~~shall comply with LAC 33:VII.709.A.8 (regarding wetlands demonstrations), 709.A.10.b (regarding fault areas), 709.A.10.~~b~~c (regarding seismic impact zones), 805 (regarding groundwater monitoring) and 711.B.4 and 5 (regarding plans and specifications for leachate collection and liners) before receiving solid waste.

c. Units of Type II landfills ~~which~~that are less than one mile from a drinking water intake ~~must~~shall be upgraded to comply with LAC 33:VII.805 (regarding groundwater monitoring) no later than October 9, 1994.

d. Units of Type II landfills ~~which~~that are less than two miles from a drinking water intake ~~must~~shall be upgraded to comply with LAC 33:VII.805 (regarding groundwater monitoring) no later than October 9, 1995.

e. Units of Type II landfills ~~which~~that are greater than two miles from a drinking water intake ~~must~~shall be upgraded to comply with LAC

33:VII.805 (regarding groundwater monitoring) no later than August 1, 1996.

f. The administrative authority may extend the date for compliance with Subparagraph C.3.a of this section to April 9, 1994, for qualified existing Type II landfill units.

g. The administrative authority may extend the post-closure waste acceptance dates in LAC 33:VII.711.F.2.a and b to April 9, 1994 for existing units of qualified Type II landfills.

h. For the purposes of Subparagraphs C.3.f.and g, of this Section, a qualified Type II landfill is one ~~which~~that:

i. received no more than 100 tons per day of solid waste between October 9, 1991 and October 9, 1992, based on a calendar daily average; and

ii. ~~will~~ received no more than 100 tons per day of solid waste based on a daily average computed each month between October 9, 1993 and April 9, 1994.

D. All Other Existing Type I, Type I-A, Type II, and Type II-A Facilities

1. Permit holders for all other Type I, Type I-A, Type II, and Type II-A facilities operating under a standard permit ~~must~~shall submit to the department a mandatory modification document to address these regulations.

2. Existing Type I, Type I-A, Type II, and Type II-A facilities shall be upgraded in accordance with these regulations no later than December 31, 1997.

E. Financial Assurance. Existing Types I, II, or III facilities that are owned or operated by local governments ~~must~~shall comply with the financial assurance

requirements in LAC 33:VII. Chapter 13 no later than April 9, 1997. The administrative authority may waive the requirements of this Section for up to one year until April 9, 1998, for good cause if an owner or operator demonstrates that the April 9, 1997, effective date for the requirements of this Section does not provide sufficient time to comply with these requirements and that such a waiver will not adversely affect human health and the environment. All other facilities ~~must~~shall comply by February 20, 1995.

F. Units of existing Type II landfills ~~which~~that are not upgraded in accordance with these regulations ~~must~~shall cease accepting waste and ~~complete~~proceed with closure.

G. Units of facilities, other than Type II landfills, ~~which~~that are not upgraded in accordance with these regulations ~~must~~shall cease accepting waste and complete closure on or before their respective upgrade deadlines provided in Subsection C of this Section.

H. Permit-holders of facilities ~~which~~that have earthen ditches that lead to or from units of the facility and receive solid waste ~~must~~shall:

1. submit a plan to the department by February 1, 1994, to:

a. upgrade the ditches to meet these regulations (This plan ~~must~~shall be in the form of a permit modification, and may be included in the mandatory modification document for the facility.);

b. remove the solid waste from the ditches and line them with materials capable of preventing groundwater contamination; or

c. remove the solid waste from the ditches and cease disposing of solid waste in the ditches.

2. upgrade the ditches in accordance with these regulations and the permit modification.

I. Type I and II facilities with closure plans approved prior to and ~~which~~that do not receive solid waste on or after October 9, 1993, may complete closure and post-closure under the terms of the approved closure plan, except that Type II landfills ~~which~~that received solid waste on or after October 9, 1991 ~~must~~shall meet standards for placement and maintenance of final cover in LAC 33:VII.711.E and F.

J. The permit holder of a Type II facility ~~must~~shall submit to the department a new or amended closure plan and a post-closure plan in the form of a permit modification to address these regulations no later than October 9, 1993, or by the initial receipt of waste, whichever is later.

K. Municipal solid waste landfills that commenced construction, reconstruction, or modification or began accepting waste on or after May 30, 1991, are subject to 40 CFR Part 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills. Described landfills may be required to have an operating permit under the Air Quality regulations, LAC 33:III.

L. Municipal solid waste landfills that accepted waste on or after November 8, 1987, or for which construction, reconstruction, or modification was commenced before May 30, 1991, may be subject to 40 CFR Part 60, Subpart Cc-Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills. Described landfills may be required to have an operating permit under the Air Quality regulations, LAC 33:III.

M. Existing Facilities Operating under a Temporary Permit with Pending

Permit Applications. Permit holders of existing facilities operating under a temporary permit ~~must~~shall submit to the department, no later than January 1, 1994, an addendum to the permit application to address these regulations. Existing facilities ~~which~~that do not hold a standard permit ~~must~~shall be upgraded in accordance with the applicable deadlines according to facility type described in this Section, unless earlier deadlines are required by the administrative authority.

N. Applicants of Proposed Facilities with Pending Permit Applications

1. Applicants of proposed facilities with permit applications on file with the department ~~must~~shall submit to the Office of Environmental Services, Permits Division, no later than January 1, 1994, an addendum to their application to address these regulations.

2. Failure to submit an addendum to the application by January 1, 1994, shall be considered a withdrawal of the permit application and shall require no further action.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2519 (November 2000), amended by the Office of Environmental Assessment, LR 30:2032 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§514. Permit Process for Upgrading Existing Facilities and for Proposed Facilities

(Editor's note: moved from §513)

A. Applicant Public Notice

1. ~~No sooner than 45 days prior to the submittal of a standard permit application to the Office of Environmental Services, Permits Division, t~~The prospective applicant shall publish a notice of intent to submit an application for a standard permit. This notice shall be published one to forty-five (1-45) days prior to submission of the application to the Office of Environmental Services, Water and Waste Permits Division. This notice shall be published one time as a single classified advertisement measuring three columns by five inches, in the legal or public notices section of the official journal of this state and in a major local newspaper of general circulation. If the affected area is Baton Rouge, a single classified advertisement measuring three columns by five inches, in the legal or public notices section of the official journal of the state will be the only public notice required.

2. The public notice shall be published in accordance with the form provided in LAC 33:VII.3001 Appendix A.

3. Proof of publication of the notice shall be included in all applications for existing and proposed facilities submitted to the administrative authority.

B. Permit Application Requirements

1. Any person who generates, transports, or stores solid waste, and is not issued a permit, but is under the jurisdiction of the department~~, and must~~shall comply with the applicable provisions of these regulations.

2. Submittal of Permit Applications

a. Any applicant for a standard permit for existing or

proposed processing and disposal facilities shall complete Part I, Part II, and Part III of the standard permit application, following the instructions for the appropriate facility class in LAC 33:VII.519, 521, 522, and 523, and submit ~~four~~six copies to the Office of Environmental Services, Permits Division. Each individual copy of the application shall be a standard three-ring-bound document measuring 8 1/2 by 11 inches. All appendices, references, exhibits, tables, etc., shall be marked with appropriate tabs.

b. Each application for which a standard permit application fee is prescribed shall be accompanied by a remittance in the full amount of the appropriate standard permit application review fee. No application shall be accepted or processed prior to payment of the full amount specified.

c. The completed separate standard permit application for each existing facility shall be submitted to the Office of Environmental Services, Permits Division within 180 days after issuance of the temporary permit.

C. Notices to Parish Governing Authorities. As provided in R.S. 30:2022, upon receipt of a permit application the Office of Environmental Services, Permits Division shall provide written notice on the subject matter to the parish governing authority, who shall promptly notify each parish municipality affected by the application.

D. Permit Application Review and Evaluation

1. LAC 33:VII.Chapters 5, ~~and~~ 7, and 8 establish the evaluation criteria used by the administrative authority.

2. The applicant shall make available to the department the assistance of professional engineers or other trained individuals responsible for the design of the facility to explain the design and operation.

3. The applicant shall furnish all other technical information the department may require to evaluate the standard permit application, monitor the performance of the facility, and insure that the purposes of this program are met.

E. Standard Permit Applications Deemed Unacceptable or Deficient

1. Applications deemed unacceptable for technical review will be rejected. For the administrative authority to reconsider the application, the applicant ~~must~~shall resubmit the entire standard permit application to the Office of Environmental Services, Permits Division, including the review fee, by a reasonable due date set by the administrative authority.

2. Applicants submitting applications ~~which~~that are acceptable for technical review, but lack the information outlined in these regulations, will be informed of such deficiencies. These deficiencies ~~must~~shall be corrected by the submission of supplementary information by a reasonable due date set by the administrative authority.

3. The supplementary information as stipulated in Subparagraph E.2 of this Section shall address all deficiencies accordingly and/or show a significant progression in the addressing of all outstanding deficiencies, or the application may be denied.

F. Standard Permit Applications Deemed Technically Complete

1. Applications that have been deemed technically complete ~~will~~shall be accepted for public review. When the permit is accepted for public review, the administrative authority ~~will~~shall request an additional ~~five~~six copies, or more if necessary. The copies will be distributed for public review as follows:

a. one copy to the local parish governing authority;

b. one copy to the parish public library;

c. one copy to the appropriate regional office; and

d. ~~two~~three copies to remain in the department's headquarters in Baton Rouge.

2. Each copy of the permit application shall be provided as a standard three-ring-bound document (8 1/2 by 11 inches). The application shall incorporate, in the appropriate sections, all required plans, narratives, and revisions made during the review process and shall include appropriate tabbing for all appendices, figures, etc. Permit applications that present revisions made during the review process as a separate supplement to the application will not be accepted.

3. After the ~~five~~six copies are submitted to the Office of Environmental Services, Permits Division, notices ~~will~~shall be placed in the department's bulletin (if one is available), the official journal of the state, and in a major local newspaper of general circulation. The Office of Environmental Services, Permits Division shall publish a notice of acceptance for review one time as a single classified advertisement measuring three columns by five inches in the legal or public notices section of the official journal of the state and one time as a classified advertisement in the legal or public notices section of a major local newspaper of general circulation. If the affected area is Baton Rouge, a single classified advertisement measuring three columns by five inches in the official journal of the state ~~will~~shall be the only public notice required. The notices will solicit comment from interested individuals and groups. Comments received by the administrative authority within 30 days after the date the notice is published in the local newspaper ~~will~~shall be reviewed by the Office of

Environmental Services, Permits Division. The notice shall be published in accordance with the sample public notice provided by the Office of Environmental Services, Permits Division. The applicant is responsible for providing the Office of Environmental Services, Permits Division, with proof of publication.

~~4. Public hearings will be held for all facilities when the administrative authority determines, on the basis of comments received and other information, that a hearing is necessary.~~

~~5. Public Opportunity to Request a Hearing. Any person may, within 30 days after the date of publication of the newspaper notice (LAC 33:III.513.F.3), request that the administrative authority consider whether a public hearing is necessary. If the administrative authority determines that the requests warrant it, a public hearing will be scheduled. If the administrative authority determines that the requests do not raise genuine and pertinent issues, the Office of Environmental Services, Permits Division, will send the person requesting the hearing written notification of the determination. The request for a hearing must be in writing and must contain the name and affiliation of the person making the request and the comments in support of or in objection to the issuance of a permit.~~

~~6. Public Notice of a Public Hearing. If the administrative authority determines that a hearing is necessary, notices will be published at least 20 days before a fact-finding hearing in the official journal of the state and in a major local newspaper of general circulation. The notice shall be published one time as a single classified advertisement measuring three columns by five inches in the legal or public notices section of the official journal of the state and one time as classified advertisement in the~~

~~legal or public notices section of a major local newspaper of general circulation. If the affected area is Baton Rouge, a single classified advertisement measuring three columns by five inches in the official journal of the state will be the only public notice required. Those persons on the Office of Environmental Services, Permits Division's mailing list for hearings shall be mailed notice of the hearing at least 20 days before a public hearing. A notice shall also be published in the departmental bulletin, if available.~~

~~7. Receipt of Comments Following a Public Hearing. Comments received by the Office of Environmental Services, Permits Division until the close of business 30 days after the date of a public hearing will be reviewed by the Office of Environmental Services, Permits Division.~~

G. Issuance or Denial of a Permit

1. The administrative authority ~~will~~shall issue a standard permit or ~~will~~shall issue a standard permit application denial, including reasons for the denial.

2. A temporary permit may be issued to allow closure activities to be accomplished at a facility ~~which~~that has been issued a standard permit application denial.

H. Public Notice of Permit Issuance. No later than 10 days following the issuance of a standard permit, the permit holder shall publish a notice of the issuance of the standard permit. This notice shall be published in the official journal of the state and in a major local newspaper of general circulation. The notice shall be published one time as a single classified advertisement measuring three columns by five inches in the legal or public notices section of the official journal of the state, and one time as a classified advertisement in the legal or public notices section of a major local newspaper of general circulation. If the affected area is Baton Rouge, a single classified advertisement

measuring three columns by five inches in the official journal of the state ~~will~~shall be the only public notice required. The notice shall be published in accordance with the sample public notice provided by the Office of Environmental Services, Permits Division. The applicant is responsible for providing the Office of Environmental Services, Permits Division, with proof of publication.

I. As a permit condition, the Department will establish a timeframe for the facility to submit the necessary construction certification.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter ~~B~~C. Permit System for Facilities Classified for Upgrade or Closure

§515. Permit Process for Existing Facilities Classified for Closure

A. Closure Plan Review and Evaluation. LAC 33:VII.~~505~~403 and ~~LAC 33:VII.~~Chapters 7 and 8 establish the evaluation criteria used by the Office of Environmental Services, Permits Division.

B. Submittal of Closure Plans

1. Permit holders for facilities classified for closure shall submit to the Office of Environmental Services, Permits Division, four bound copies of a closure plan within 60 days after issuance of the temporary permit for the facility. Each individual copy of the plan shall be a standard three-ring-bound document measuring 8 1/2 by 11 inches. All appendices, references, exhibits, tables, etc., shall be marked with appropriate tabs.

2. The following sections of the regulations ~~must~~shall be addressed and incorporated in the closure plan for all solid waste processing and disposal facilities. All responses and exhibits ~~must~~shall be identified in the following sequence to facilitate the evaluation. All applicable sections of LAC 33:VII.Chapters 5, 7, and 8 ~~must~~shall be addressed and incorporated into the closure plan~~.~~:

a. LAC 33:VII.519, Permit Application Form, Part I;

b. a map clearly delineating the location of the facility;

c. LAC 33:VII.709~~521~~.A.10~~2~~.a and b, Wells and Faults, respectively (only required for Type I and II facilities with on-site closure);

d. LAC 33:VII.521.C~~B.1.a~~, Facility Characteristics;

e. LAC 33:VII.521.D~~C.1.d~~, Facility Surface Hydrology;

f. LAC 33:VII.522~~1~~.A~~D.1.a-e~~, Facility Geology (only required for Type I and II facilities that have not undergone clean closure~~with on-site closure~~);

g. LAC 33:VII.522~~1~~.B~~E.1~~, Facility Subsurface Characterization~~Hydrology~~ (only required for Type I and II facilities that have not undergone clean~~with on-site~~ closure);

h. LAC 33:VII.522.C, Groundwater Monitoring~~typical cross-section and geologic cross-sections showing the water table and the groundwater conditions~~ (only required for Type I and II facilities that have not undergone clean~~with on-site~~ closure);

~~i. LAC 33:VII.521.F.5.a-f, Facility Plans and Specifications (only required for Type I and II facilities with on-site closure);~~

ij. LAC 33:VII.521.EF.6, Facility Plans and Specifications (only required for Type I and II facilities with on-site closure and with a potential to produce gases);

jk. types (including chemical and physical characteristics) and sources of waste processed or disposed of at the facility;

kl. LAC 33:VII.521.IJ.1.b and c, Facility Closure;

lm. LAC 33:VII.521. IJ.1-2, Facility Closure (only required for Type I and II facilities and Type III woodwaste and construction/demolition-debris landfills);

mn. LAC 33:VII.521.JK.1, Facility Post-Closure;

no. LAC 33:VII.521.K.2, Facility Post-Closure (only required for Type I and II facilities that have not undergone clean closure);

op. the name of the person who currently owns the land;

pq. LAC 33:VII.521.KL.4, Financial Responsibility; and

qr. a detailed implementation schedule for closure of the facility with built-in flexibility to coincide with the date of approval of the closure plan.

3. Each closure plan for which a closure fee is prescribed shall be accompanied by a remittance in the full amount of the closure plans review fee. No closure plans shall be accepted or processed prior to payment of the full amount specified.

C. Closure Plans Determined Unacceptable or Deficient

1. Closure plans that are determined unacceptable for a technical review will be rejected. The permit holder shallwill be required to resubmit the entire

application to the Office of Environmental Services, Permits Division, including the review fee, by a date set by the administrative authority.

2. Permit holders submitting closure plans that lack the information contained in Paragraph~~LAC 33:VII.515.~~ B.2 of this Section and the applicable standards of LAC 33:VII.Chapters 7 and 8 shall~~will~~ be informed of such in a closure plan deficiency letter; these ~~must~~shall be corrected by submission of supplementary information within 30 days after receipt of the closure plan deficiency letter.

D. Closure Plans Deemed Technically Complete. Closure plans that have been deemed technically complete shall~~will~~ be approved. Within 30 days after receipt of closure plan approval, the permit holder shall submit to the Office of Environmental Services, Permits Division three copies of the closure plan that~~which~~ incorporate all revisions made during the closure plan review process. Additional copies will be required if deemed necessary by the administrative authority. Each copy shall be provided as a standard three-ring-bound document measuring 8 1/2 by 11 inches, and shall include appropriate tabbing for all appendices, figures, etc. Closure plans ~~must~~shall incorporate revisions made during the review process. Closure plans that present revisions made during the review process as a separate supplement to the closure plan shall not be accepted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental

Planning Division, LR 26:2520 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§517. ~~Permit~~ Modifications of Permits and Other Authorizations to Operate

A. Modification ~~of Permits and Other Authorizations to Operate~~ Requests

~~1. Modification Requests~~

1. ~~a.~~ The permit holder shall notify the Office of Environmental Services, Permits Division, in advance, of any change in a facility or deviation from a permit. Such notification shall detail the proposed modification and shall include an assessment of the effects of the modification on the environment and/or the operation. Modification details shall include, but not be limited to, a summary detailing the modification request and all appropriate drawings, narratives, etc., which shall illustrate and describe the originally permitted representations and the proposed modifications thereto. New language requested in the permit narrative and existing language requested to be deleted from the permit narrative shall be identified therein.

a. ~~i.~~ Initially, ~~four~~six copies of all modification requests shall be provided to the Office of Environmental Services, Permits Division. Each individual copy of the document shall be 8 1/2" by 11" and shall be bound in standard three-ring binder~~(s)~~. The modification shall incorporate, in the appropriate sections, all required plans, narratives, and revisions made during the review process and shall include appropriate tabbing, if applicable, for all appendices, figures, etc.

b. ~~ii.~~ Each permit-modification request for which a permit-modification review fee is prescribed shall be accompanied by remittance of the fee. No permit modification requests shall be accepted or processed prior to payment in

full of the amount specified.

2.~~b.~~ All notifications of proposed changes in ownership of a permit for a facility are the responsibility of the permittee and shall include the following, to be submitted to the Office of Environmental Services, Permits Division:

a.~~i.~~ a statement from the proposed permit holder assuming liability for existing violations and conditions;

b.~~ii.~~ proof of financial responsibility by the proposed permit holder, as required by LAC 33:VII.~~727~~1301.A.~~1~~ and ~~2~~1303.A; and

c.~~iii.~~ information required in LAC 33:I.1701.

3. All major modification requests shall address the additional supplemental information required pursuant to LAC:33:VII.523 in relation to the proposed permit modification activity.

B.~~2.~~ Public Notice of Modifications

1.~~a.~~ Major Modifications Require Public Notice. ~~If not otherwise specified, the administrative authority shall determine whether or not a modification warrants public notice.~~ Modifications to a permit ~~which~~that require public notice include, but are not limited to, the following:

a.~~i.~~ change in the type(s) of waste to be received at a facility (modified to accept industrial waste);

b.~~ii.~~ increase in the volume or rate of waste to be received at a facility;

c.~~iii.~~ physical expansion of the service area;

d.~~iv.~~ increase~~change~~ in the capacity of a facility;

e.~~v.~~ decrease in the personnel or equipment of a facility without a reasonable reduction in waste acceptance;

f.~~vi.~~ ~~changes~~extending ~~in~~ the operating hours or days of operation;

~~g. vii. change in the type of cover material to be utilized at a facility;~~

g.~~viii.~~ change to the facility that may have an impact on traffic patterns;

h.~~ix.~~ reduction in the number of groundwater sampling parameters or the number of groundwater monitoring wells;

i.~~x.~~ lateral or vertical expansion of the permitted area(s) for waste disposal except for vertical expansion that would result in no net increase of in-place volume; or

j.~~xi.~~ other changes in the permit that tend to make the permit requirements less stringent.

2.~~b.~~ Permit modifications that~~which~~ require public notice and that have been determined by the Office of Environmental Services, Permits Division to be technically complete will be accepted for public review. When the permit modification is accepted for public review, the ~~permit holder must forward copies of the permit modification~~administrativeauthority shall request an additional six copies, or more if necessary. The copies will be distributed for public review as follows:

a.~~i.~~ three~~two~~ copies to the Office of Environmental Services, Permits Division ~~main office~~ in Baton Rouge;

b. ~~ii.~~ one copy to the appropriate regional office;

c. ~~iii.~~ one copy to the local parish public library; and

d. ~~iv.~~ one copy to the local parish governing authority.

~~c. The permit holder shall provide the Office of Environmental Services, Permits Division with evidence that copies of the permit modification have been forwarded to the local parish governing authority and the parish public library.~~

3. ~~d.~~ After distribution of the permit modification, ~~the permit holder is responsible for placing~~ a notice shall be published by the department in the official journal of the state and in the official journal of the parish where the facility is located~~a major local newspaper of general circulation~~. The notice shall be published one time as a single classified advertisement measuring three columns by five inches in the legal or public notices section of the official journal of the state, ~~and~~ one time as a classified advertisement in the legal or public notices section of the official journal of the parish where the facility is located,~~a major local newspaper of general circulation~~ and one time in the department's bulletin. The cost of the publication shall be borne by the applicant. If the affected area is Baton Rouge, a single classified advertisement measuring three columns by five inches in the official journal of the state shall~~will~~ be the only public notice required. The notice shall~~will~~ solicit comments from interested individuals and groups. Comments delivered or received within 30 days after the date the notices are published shall~~will~~ be reviewed by the Office of Environmental Services, Permits Division. The notice shall be published in accordance with a sample public notice provided by the Office of Environmental Services, Permits Division. ~~The permit holder is~~

~~responsible for providing the Office of Environmental Services, Permits Division with proof of publication of the notice.~~

4.~~e.~~ Mandatory modifications are considered to be enhancements and will require neither public notice nor public hearing.

C.~~3.~~ No modification shall~~may~~ be ~~effected~~instituted without the written approval of the administrative authority.

D.~~4.~~ Operation of a modified construction feature or unit of a standard permitted facility may commence after the provisions of LAC 33:VII.407~~509~~.F are met.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular Section 2014.2.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, LR 25:661 (April 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2520 (November 2000), amended by the Office of Environmental Assessment, LR 30:2033 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter ~~C~~D. Permit Application

§519. Part I: Permit Application Form

A. The applicant shall complete a standard permit application Part I Form obtained from the Office of Environmental Services, Permits Division, or through the department's website~~(LAC 33:VII.3003)~~. The following ~~subsections~~paragraphs refer to the items on the form requiring that information:

~~A.~~ 1. the name of the applicant (prospective permit holder) applying for a standard permit;

~~B.~~ 2. the facility name;

~~C.~~ 3. a description of the location of the facility (identify by street and number or by intersection of roads, or by mileage and direction from an intersection);

~~D.~~ 4. the geographic location (section, township, range, and parish where the facility is located, and the coordinates ~~[~~as defined by the longitude and latitude to the second~~]~~) of the centerpoint of the facility~~)~~;

~~E.~~ 5. the mailing address of the applicant;

~~F.~~ 6. the contact person for the applicant (the position or title of the contact person is acceptable);

~~G.~~ 7. the telephone number of the contact person;

~~H.~~ 8. the type and purpose of the operation (check each applicable box);

~~I.~~ 9. the status of the facility (if leased, state the number of years of the lease and provide a copy of the lease agreement);

~~J.~~ 10. the operational status of the facility;

~~K.~~ 11. the total site acreage and the amount of acreage that will be used for processing and/or disposal;

~~L.~~ 12. a list of all environmental permits that relate directly to the facility represented in this application;

~~M. a letter attached from the Louisiana Resource Recovery and Development Authority (LRRDA) stating that the operation conforms with the applicable statewide plan;~~

~~(Note: In accordance with R.S. 30:2307.B, this regulation does not apply to solid waste disposal activity occurring entirely within the boundaries of a plant, industry, or business which generates such solid waste);~~

~~N.~~ 13. the zoning of the facility (if ~~the facility~~ is zoned, note the zone classification and zoning authority, and include a zoning affidavit or other documentation stating that the proposed use does not violate existing land-use requirements);

~~O.~~ 14. the types, maximum quantities (wet tons/week), and sources (percentage of the on-site or off-site-generated waste to be received) of waste to be processed or disposed of by the facility;

~~P.~~ 15. ~~indicate~~ the specific geographic area(s) to be serviced by the solid waste facility;

~~Q.~~ 16. ~~attach~~ proof of publication of the notice regarding the submittal of the permit application as required in LAC 33:VII.51~~3~~4.A;

~~R.~~ 17. ~~provide~~ the signature, typed name, and title of the individual authorized to sign the application~~.~~ (provide p~~P~~roof of the legal authority of the signatory to sign for the applicant)~~ must be provided~~; and

~~S.~~ 18. any additional information required by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, Legal Affairs Division, LR

32:**.

§520. Compliance Information

A. All applicants for solid waste permits shall comply with the requirements of LAC 33:I.1701.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular Section 2014.2.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 25:661 (April 1999).

§521. Part II: Supplementary Information, All Processing and Disposal Facilities

A. The following information is required in the permit application for solid waste processing and disposal facilities. All responses and exhibits ~~must~~shall be identified in the following sequence to facilitate the evaluation. Additionally, all applicable sections of LAC 33:VII.Chapter 7 and 8 ~~must~~shall be addressed and incorporated into the application responses. If a section does not apply, the applicant ~~must~~shall state that it does not apply and explain why.

~~A~~B. Location Characteristics. Standards pertaining to location characteristics are contained in LAC 33:VII.709.A (Type I and II facilities), LAC 33:VII.717.A (Type I-A and II-A facilities), and LAC 33.719.A (Type III facilities). The following information is required for all facilities:

~~1. The following information on location characteristics is required for all facilities:~~

~~a. Area Master Plans. A location map showing the facility, road network, major drainage systems, drainage-flow patterns, location of closest~~

~~population center(s), location of the public-use airport(s) used by turbojet aircraft or piston-type aircraft, proof of notification of affected airport and Federal Aviation Administration as provided in LAC 33:VII.709.A.2, location of the l00-year flood plain, and other pertinent information. The scale of the maps and drawings must be legible, and engineering drawings are required.~~

~~b. A letter from the appropriate agency or agencies regarding those facilities receiving waste generated off-site, stating that the facility will not have a significant adverse impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles.~~

~~c. Existing Land Use. A description of the total existing land use within three miles of the facility (by approximate percentage) including, but not limited to:~~

~~i. residential;~~

~~ii. health-care facilities and schools;~~

~~iii. agricultural;~~

~~iv. industrial and manufacturing;~~

~~v. other commercial;~~

~~vi. recreational; and~~

~~vii. undeveloped.~~

~~d. Aerial Photograph. A current aerial photograph, representative of the current land use, of a one-mile radius surrounding the facility. The aerial photograph shall be of sufficient scale to depict all pertinent features. (The~~

~~administrative authority may waive the requirement for an aerial photograph for Type III facilities.)~~

~~e. Environmental Characteristics. The following information on environmental characteristics:~~

~~i. a list of all known historic sites, recreation areas, archaeologic sites, designated wildlife-management areas, swamps and marshes, wetlands, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility perimeter or as otherwise appropriate;~~

~~ii. documentation from the appropriate state and federal agencies substantiating the historic sites, recreation areas, archaeologic sites, designated wildlife-management areas, wetlands, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility; and~~

~~iii. a description of the measures planned to protect the areas listed from the adverse impact of operation at the facility;~~

~~f. A wetlands demonstration, if applicable, as provided in LAC 33:VII.709.A.4.~~

~~g. Demographic Information. The estimated population density within a three-mile radius of the facility boundary, based on the latest census figures.~~

~~2. The following information regarding wells, faults and utilities is required for Type I and II facilities:~~

~~a. Wells. Map showing the locations of all known or recorded shot holes and seismic lines, private water wells, oil and/or gas wells, operating or~~

~~abandoned, within the facility and within 2,000 feet of the facility perimeter and the locations of all public water systems, industrial water wells, and irrigation wells within one mile of the facility. A plan shall be provided to prevent adverse effects on the environment from the wells and shot holes located on the facility.~~

~~b. Faults~~

~~i. scaled map showing the locations of all recorded faults within the facility and within one mile of the perimeter of the facility; and~~

~~ii. demonstration, if applicable, of alternative fault set-back distance as provided in LAC 33:VII.709.A.5.~~

~~c. Utilities. Scale map showing the location of all pipelines, power lines, and right-of-ways within the site.~~

1. area master plans;

2. access facilities;

3. a letter concerning the traffic flow for facilities receiving waste generated off-site;

4. distance to airport runway and proof of notification to affected airport and Federal Aviation Administration;

5. existing land use;

6. aerial photograph;

7. environmental characteristics;

8. wetlands demonstration, if applicable, as provided in LAC 33:VII.709.A.8;

9. demographic information; and

10. information regarding wells, faults, seismic impact zones, unstable areas and utilities, which is required for Type I and II facilities.

~~B~~C. Facility Characteristics. Standards concerning facility characteristics are contained in LAC 33:VII.709.B (Type I and II facilities), LAC 33.VII.717.B (Type I-A and II-A facilities), and LAC 33:VII.719.B (Type III facilities). A facility plan, including drawings and a narrative, describing the information required below ~~must~~shall be provided.

1. The following information is required for all facilities:

a. elements of the process or disposal system employed~~, including, as applicable, property lines, original contours (shown at not greater than five-foot intervals), buildings, units of the facility, drainage, ditches and roads~~;

b. the perimeter barrier and other control measures;

c. a buffer zone;

d. fire-protection and medical care measures;

e. landscaping and other beautification efforts;

f. devices or methods to determine, record, and monitor incoming waste;

g. NPDES/LPDES discharge points (existing and proposed); and

h. other features, as appropriate.

2. The following information is required for Type I and II facilities:

a. areas for isolating nonputrescible waste or incinerator ash, and borrow areas; and

b. location of leachate collection/treatment/removal system.

~~C~~D. Facility Surface Hydrology. Standards governing facility surface hydrology are contained in LAC 33:VII.711.A (Type I and II landfills), LAC 33:VII.713.A (Type I and II surface impoundments), LAC 33:VII.715.A (Type I and II landfarms), LAC 33:VII.717.C. (Type I-A and II-A facilities), ~~and~~ LAC 33:VII.719.C (Type III facilities), and LAC 33:VII.723.B (composting facilities).

~~1.~~ The following information ~~regarding surface hydrology~~ is required for all facilities:

1. ~~a.~~ a description of the method to be used to prevent surface drainage through the operating areas of the facility;

2. ~~b.~~ a description of the facility runoff/run-on collection system;

3. ~~c.~~ the ~~maximum~~ rainfall amount from a 24-hour/25-year storm event;

4. ~~d.~~ the location of aquifer recharge areas in the site or within l,000 feet of the site perimeter, along with a description of the measures planned to protect those areas from the adverse impact of operations at the facility; and

5. ~~e.~~ if the facility is located in a flood plain, a plan to ensure that the facility does not restrict the flow of the 100-year base flood or significantly reduce the temporary water-storage capacity of the flood plain, and documentation indicating that the design of the facility is such that the flooding does not affect the integrity of the facility or result in the washout of solid waste.

~~D. Facility Geology. Standards governing facility geology are contained in LAC 33:VII.709.C (Type I and II facilities), LAC 33:VII.717.D (Type I-A and II-A~~

~~facilities), and LAC 33:VII.719.D (Type III facilities).~~

~~l. The following information regarding geology is required for Type I and Type II facilities:~~

~~a. isometric profile and cross-sections of soils, by type, thickness, and permeability;~~

~~b. logs of all known soil borings taken on the facility and a description of the methods used to seal abandoned soil borings;~~

~~c. results of tests for classifying soils (moisture contents, Atterberg limits, gradation, etc.), measuring soil strength, and determining the coefficients of permeability, and other applicable geotechnical tests;~~

~~d. geologic cross-section from available published information depicting the stratigraphy to a depth of at least 200 feet below the ground surface;~~

~~e. for faults mapped as existing through the facility, verification of their presence by geophysical mapping or stratigraphic correlation of boring logs. If the plane of the fault is verified within the facility's boundaries, a discussion of measures that will be taken to mitigate adverse effects on the facility and the environment;~~

~~f. for a facility located in a seismic impact zone, a report with calculations demonstrating that the facility will be designed and operated so that it can withstand the stresses caused by the maximum ground motion, as provided in LAC 33:VII.709.C.2; and~~

~~g. for a facility located in an unstable area, a demonstration of~~

~~facility design as provided in LAC 33:VII.709.C.3.~~

~~2. The following information regarding geology is required by Type III woodwaste, and construction/demolition-debris facilities:~~

~~a. general description of the soils provided by a qualified professional (a geotechnical engineer, soil scientist, or geologist) along with a description of the method used to determine soil characteristics; and~~

~~b. logs of all known soil borings taken on the facility and a description of the methods used to seal abandoned soil borings.~~

~~E. Facility Subsurface Hydrology. Standards governing facility subsurface hydrology are contained in LAC 33:VII.715.A (Type I and II landfarms).~~

~~1. The following information on subsurface hydrology is required for all Type I facilities and Type II landfills and surface impoundments:~~

~~a. delineation of the following information for the water table and all permeable zones from the ground surface to a depth of at least 30 feet below the base of excavation:~~

~~i. areal extent beneath the facility;~~

~~ii. thickness and depth of the permeable zones and fluctuations;~~

~~iii. direction(s) and rate(s) of groundwater flow based on information obtained from piezometers and shown on potentiometric maps; and~~

~~iv. any change in groundwater flow direction anticipated to result from any facility activities;~~

~~b. delineation of the following, from all available information,~~

~~for all recognized aquifers which have their upper surfaces within 200 feet of the ground surface:~~

~~i. areal extent;~~

~~ii. thickness and depth to the upper surface;~~

~~iii. any interconnection of aquifers; and~~

~~iv. direction(s) and rate(s) of groundwater flow shown on potentiometric maps.~~

~~2. The following information on subsurface hydrology is required for Type II landfarms. Delineation of the following information for the water table and all permeable zones from the ground surface to a depth of at least 30 feet below the zone of incorporation:~~

~~a. areal extent beneath the facility;~~

~~b. thickness and depth of the permeable zones and fluctuations;~~

~~c. direction(s) and rate (s) of groundwater flow based on information obtained from piezometers and shown on potentiometric maps); and~~

~~d. any change in groundwater flow direction anticipated to result from any facilities activities.~~

~~F~~E. Facility Plans and Specifications. Standards governing facility plans and specifications are contained in LAC 33:VII.711.B (Type I and II landfills), LAC 33:VII.713.B (Type I and II surface impoundments), LAC 33:VII.715.B (Type I and II landfarms), LAC 33:717.E (Type I-A and II-A facilities), LAC 33:VII.721.A (Type III construction and demolition debris and woodwaste landfills), LAC 33:VII.723.A (Type

III composting facilities), and LAC 33:VII.725.A (Type III separation and woodwaste processing facilities). ~~Standards for groundwater monitoring are contained in LAC 33:VII.709.E (Type I and II facilities).~~

l. Certification. The person who prepared the permit application ~~must~~shall provide the following certification:

"I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this permit application and that the facility as described in this permit application meets the requirements of the solid waste rules and regulations. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."

2. Geotechnical field tests and laboratory tests shall be conducted according to the standards of the American Society for Testing and Materials (ASTM) or the EPA or other applicable standards approved by the administrative authority. The results of these tests may be used for modeling and analysis purposes.

~~2~~3. The following information ~~on plans and specifications~~ is required for Type I and II facilities:

a. detailed plan-view drawing(s) showing original contours, proposed elevations of the base of units prior to installation of the liner system, and ~~boring locations~~proposed final contours (e.g., maximum height);

b. detailed drawings of slopes, levees, and other pertinent features; ~~and~~

c. the type of material and its source for levee construction. Calculations shall be performed to indicate the~~submitted demonstrating that an adequate~~

volume of material ~~is available for the~~ required for levee construction.

d. representative cross sections showing original and final grades, drainage, the location and type of liner, and other pertinent information;

e. a description of the liner system, which shall include calculations of anticipated leachate volumes, rationales for particular designs of such systems, and drawings; and

f. a description of the leachate collection and removal system, which shall include calculations of anticipated leachate volumes, rationales for particular designs of such systems, and drawings.

~~3~~4. The following information ~~on plans and specifications~~ is required for Type I, II, and III landfills:

a. approximate dimensions of daily fill and cover; and

b. the type of cover material and its source for daily, interim, and final cover. Calculations shall be performed to indicate the~~submitted demonstrating that an adequate~~ volume of material required~~is available~~ for daily, interim, and final cover.

~~4. The following information on plans and specifications for the prevention of groundwater contamination must be submitted for Type I and II facilities:~~

~~a. representative cross-sections and geologic cross-sections showing original and final grades, approximate dimensions of daily fill and cover, drainage, the water table, groundwater conditions, the location and type of liner, and other pertinent information;~~

~~b. a description of the liner system, which shall include:~~

~~calculations of anticipated leachate volumes, rationale for particular designs of such systems, and drawings; and~~

~~c. a description of the leachate collection and removal system, which shall include calculations of anticipated leachate volumes, rationale for particular designs of such systems, and drawings.~~

~~5. The following information on plans and specifications for groundwater monitoring must be provided for Type I and II facilities:~~

~~a. a minimum of three piezometers or monitoring wells in the same zone must be provided in order to determine groundwater flow direction;~~

~~b. for groundwater monitoring wells, cross-sections illustrating construction of wells, a scaled map indicating well locations and the relevant point of compliance, and pertinent data on each well, presented in tabular form, including drilled depth, the depth to which the well is cased, screen interval, slot size, elevations of the top and bottom of the screen, casing size, type of grout, ground surface elevation, etc.;~~

~~c. a groundwater monitoring program including a sampling and analysis plan that includes consistent sampling and analysis procedures that ensure that monitoring results provide reliable indications of groundwater quality;~~

~~d. for an existing facility, all data on samples taken from monitoring wells in place at the time of the permit application must be included. (If this data exists in the department records, the administrative authority may allow references to the data in the permit application.) For an existing facility with no wells, groundwater data shall be submitted within 90 days after the installation of monitoring wells. For a new facility, groundwater data (one sampling event) shall be submitted before waste is~~

~~accepted;~~

~~e. a plan for detecting, reporting, and verifying changes in groundwater; and~~

~~f. the method for plugging and abandonment of groundwater monitoring systems.~~

~~6~~5. ~~The facility plans and specifications for~~ Type I and II landfills and surface impoundments ~~(surface impoundments~~ with ~~on-site closure and~~ a potential to produce gases~~)~~ ~~must~~shall provide a gas collection ~~and~~ /treatment or removal system.

~~G~~F. Facility Administrative Procedures. Standards governing facility administrative procedures are contained in LAC 33:VII.711.C (Type I and II landfills), LAC 33:VII.713.C (Type I and II surface impoundments), LAC 33:VII.715.C (Type I and II landfarms), LAC 33:VII.717.F (Type I-A and II-A facilities), LAC 33:VII.721.B (Type III construction and demolition debris and woodwaste landfills), LAC 33:VII.723.~~B~~C (Type III composting facilities), and LAC 33:VII.725.B (Type III separation and woodwaste processing facilities).

l. The following information on administrative procedures is required for all facilities:

a. recordkeeping system~~;~~, types of records to be kept; and the use of records by management to control operations as required;

b. an estimate of the minimum personnel, listed by general job classification, required to operate the facility; ~~and~~

c. maximum days of operation per week and per facility operating day (maximum hours of operation within a 24-hour period)~~.~~;and

d. an annual report submitted to the administrative authority.

2. ~~Administrative procedures for~~ Type II and Type III facilities shall include the number of certified facility operators determined~~certified~~ by the Louisiana Solid Waste Operator Certification and Training Program Board (R.S. 37:3151 et seq. and LAC 46:XXIII)and the department.

~~H~~G. Facility Operational Plans. Standards governing facility operational plans are contained in LAC 33:VII.711.D (Type I and II landfills), LAC 33:VII.713.D (Type I and II surface impoundments), LAC 33:VII.715.D (Type I and II landfarms), LAC 33:VII.717.G. (Type I-A and II-A facilities), LAC 33:VII.721.C (Type III construction and demolition debris and woodwaste landfills), LAC 33:VII.723.D (Type III composting facilities), and LAC 33:VII.725.C (Type III separation and woodwaste processing facilities).

l. The following information ~~on operational plans~~ is required for all facilities:

a. types of waste (including chemical, physical, and biological characteristics of industrial wastes generated on-site), maximum quantities of wastes per year, and sources of waste to be processed or disposed of at the facility;

b. waste-handling procedures from entry to final disposition, which could include shipment of recovered materials to a user;

c. minimum equipment to be furnished at the facility;

d. plan to segregate wastes, if applicable;

e. procedures planned in case of breakdowns, inclement weather, and other abnormal conditions (including detailed plans for wet-weather access

and operations);

f. procedures, equipment, and contingency plans for protecting employees and the general public from accidents, fires, explosions, etc., and provisions for emergency response and care, should an accident occur (including proximity to a hospital, fire and emergency services, and training programs); and

g. provisions for controlling vectors, dust, litter, and odors.

2. The following information ~~on operational plans~~ is required for Type II, ~~and~~ II-A, and III facilities:

a. a comprehensive operational plan describing the total operation, including (but not limited to) inspection of incoming waste to ensure that only permitted wastes are accepted (Type II landfills ~~must~~shall provide a plan for random inspection of incoming waste loads to ensure that hazardous wastes or regulated PCB wastes are not disposed of in the facility.); traffic control; support facilities; equipment operation; personnel involvement; and day-to-day activities. A quality-assurance/quality-control [QA/QC] plan shall be provided for facilities receiving industrial waste; domestic-sewage sludge; incinerator ash; friable asbestos; nonhazardous petroleum-contaminated media; and debris generated from underground storage tanks [UST], corrective action, or other special wastes as determined by the administrative authority. The QA/QC plan shall include (but shall not be limited to) the necessary methodologies; analytical personnel; preacceptance and delivery restrictions; and appropriate responsibilities of the generator, transporter, processor, and disposer. The QA/QC plan shall ensure that only permitted, nonhazardous wastes are accepted;

b. salvaging procedures and control, if applicable; ~~and~~

c. scavenging control~~.~~; and

d. a comprehensive air monitoring plan for facilities receiving waste with a potential to produce methane gases.

3. The following information ~~on operational plans~~ is required for Type I and II landfarms~~:~~.

a. ~~i~~Items to be submitted regardless of land use include:

i. a detailed analysis of waste, including (but not limited to) pH, phosphorus, nitrogen, potassium, sodium, calcium, magnesium, sodium-adsorption ratio, and total metals (as listed in LAC 33:VII.715.D.3.b);

ii. soil classification, cation-exchange capacity, organic matter, content in soil, soil pH, nitrogen, phosphorus, metals (as listed in LAC 33:VII.715.D.3.b), salts, sodium, calcium, magnesium, sodium-adsorption ratio, and PCB concentrations of the treatment zone; and

iii. annual application rate (dry tons per acre) and weekly hydraulic loading (inches per acre); ~~and~~

~~iv. an evaluation of the potential for nitrogen to enter the groundwater;~~

b. ~~i~~Items to be submitted in order for landfarms to be used for food-chain cropland include:

i. a description of the pathogen-reduction method for septage, domestic sewage sludges, and other sludges subject to pathogen production;

ii. crops to be grown and the dates for planting;

iii. PCB concentrations in waste;

iv. annual application rates of cadmium and PCBs; and

v. cumulative applications of cadmium and PCBs;

c. ~~i~~Items to be submitted for landfarms to be used for nonfood-chain purposes include:

i. a description of the pathogen-reduction method in septage, domestic sewage sludges, and other sludges subject to pathogen production; and

ii. a description of control of public and livestock access.

4. The following information ~~on operational plans~~ is required for Type I-A and II-A incinerator waste-handling facilities and refuse-derived energy facilities:

a. a description of the method used to handle process waters and other water discharges which are subject to NPDES/LPDES permit and state water discharge permit requirements and regulations; and

b. a plan for the disposal and periodic testing of ash (~~a~~All ash and residue ~~must~~shall be disposed of in a permitted facility.).

5. The following information ~~on operational plans~~ is required for Type I-A and II-A refuse-derived fuel facilities and Type III separation and composting facilities:

a. a description of the testing to be performed on the fuel or compost; and

b. a description of the uses for and the types of fuel/compost to be produced.

6. ~~The operational plans for~~ Type I-A and II-A refuse-derived fuel facilities and Type III separation and composting facilities ~~must~~shall include a description of marketing procedures and control.

~~7. The operational plans for Type I and II facilities receiving waste with a potential to produce gases must include a comprehensive air monitoring plan.~~

~~I~~H. Implementation Plan. ~~Standards governing implementation plans are contained in~~All facilities shall have implementation plans in accordance with standards in LAC 33:VII.709.D (Type I and II facilities), LAC 33:VII.717.H (Type I-A and II-A facilities), and LAC 33:VII.719.E (Type III facilities).

~~1. The implementation plans for all facilities must include the following:~~

~~a. a construction schedule for existing facilities which shall include beginning and ending time-frames and time-frames for the installation of all major features such as monitoring wells and liners. (Time-frames must be specified in days, with day one being the date of standard permit issuance); and~~

~~b. details on phased implementation if any proposed facility is to be constructed in phases.~~

~~2. The implementation plans for Type I and II facilities must include a plan for closing and upgrading existing operating areas if the application is for expansion of a facility or construction of a replacement facility.~~

~~J~~I. Facility Closure. Standards governing facility closure are contained in LAC 33:VII.711.E (Type I and II landfills), LAC 33:VII.713.E (Type I and II surface impoundments), LAC 33:VII.715.E (Type I and II landfarms), LAC 33:VII.717.I (Type

I-A and II-A facilities), LAC 33:VII.721.D (construction and demolition debris and woodwaste landfills), LAC 33:VII.723.~~D~~E (Type III composting facilities), and LAC 33:VII.725.D (Type III separation and woodwaste processing facilities).

l. The closure plan for all facilities ~~must~~shall include the following:

a. the date of final closure;

b. the method to be used and steps necessary for closing the facility; and

c. ~~the estimated~~an itemized cost of closure of the facility, based on the cost of hiring a third party to close the facility at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive.

2. The closure plan for Type I and II landfills and surface impoundments ~~must~~shall include:

a. a description of the final cover and the methods and procedures used to install the cover;

b. an estimate of the largest area of the facility ever requiring a final cover at any time during the active life;

c. an estimate of the maximum inventory of solid waste ever on-site over the active life of the facility; and

d. a schedule for completing all activities necessary for closure.

3. The closure plan for all Type I and II facilities and Type III woodwaste and construction/demolition debris facilities shall include the following:

a. the sequence of final closure of each unit of the facility, as applicable;

b. a drawing showing final contours of the facility; and

c. a copy of the document that will be filed upon closure of the facility with the official parish recordkeeper indicating the location and use of the property for solid waste disposal, unless the closure plan specifies a clean closure.

~~K~~J. Facility Post-Closure. Standards governing post-closure requirements are contained in LAC 33:VII.711.F (Type I and II landfills), LAC 33:VII.713.F (Type I and II surface impoundments), LAC 33:VII.715.F (Type I and II landfarms), and LAC 33:VII.721.E (Type III construction and demolition debris and woodwaste landfills).

l. The post-closure plan for all facilities ~~must~~shall include the following:

a. ~~specification~~discussion of the long-term use of the facility after closure, as anticipated; and

b. an itemized~~the~~ cost of conducting post-closure of the facility, based on the estimated cost of hiring a third party to conduct post-closure activities in accordance with the closure plan.

2. The post-closure plan for Type I and II facilities ~~must~~shall include the following:

a. the method for conducting post-closure activities, including a description of the monitoring and maintenance activities and the frequency at which they will be performed;

b. the method for abandonment of monitoring systems,

leachate collection systems, gas-collection systems, etc.;

c. measures planned to ensure public safety, including access control and gas control; and

d. a description of the planned uses of the facility during the post-closure period.

~~L~~K. Financial Responsibility. Standards governing financial responsibility are contained in LAC 33:VII.~~727~~Chapter 13. A section documenting financial responsibility according to LAC 33:VII.~~727~~Chapter 13 ~~which~~that contains the following information~~,~~ ~~must~~shall be included for all facilities:

1. the name and address of the person who currently owns the land and the name and address of the person who will own the land if the standard permit is granted (if different from the permit holder, provide a copy of the lease or document which evidences the permit holder's authority to occupy the property); or

2. the name of the agency or other public body that is requesting the standard permit; or, if the agency is a public corporation, its published annual report; or, if otherwise, the names of the principal owners, stockholders, general partners, or officers;

3. evidence of liability coverage, including:

a. personal injury, employees, and the public (coverage, carriers, and any exclusions or limitations);

b. property damage (coverage and carrier);

c. environmental risks; and

4. evidence of a financial assurance mechanism for closure and/or

post-closure care and corrective action for known releases when needed.

L. Solid Waste Fees. Standards governing solid waste fees are contained in LAC 33:VII.Chapter 15. A section documenting compliance with applicable fees according to LAC 33:VII.Chapter 15 shall be included for all facilities.

M. Special Requirements. The administrative authority may require additional information for special processes or systems and for supplementary environmental analysis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 19:1143 (September 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2521 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§522. General Facility Geology, Subsurface Characterization, and Facility Groundwater Monitoring

A. General Facility Geology. Standards governing facility geology are contained in LAC 33:VII.801. The following information is required for Type I, Type I-A, Type II, Type II-A, and Type III facilities:

1. a demonstration that the person who characterized the subsurface soil and groundwater conditions at the facility is qualified; and

2. a demonstration that the facility has natural soils of low permeability as provided in LAC 33:VII.801.A.2; or

3. a design for surfacing natural soils that do not meet the low permeability standard as provided in LAC 33:801.A.3.

B. Subsurface Characterization. Standards governing subsurface characterization are contained in LAC 33:VII.803.

1. Type I, II, and III facilities shall demonstrate that the facility meets the boring requirements provided in LAC 33:VII.803.A.

2. Type I and II facilities shall demonstrate that:

a. the facility meets the piezometer or monitoring well requirements as provided in LAC 33:VII.803.B; and

b. the facility meets the geology and underground flow characterization requirements provided in LAC 33:VII.803.C.

C. Facility Groundwater Monitoring. Standards governing facility groundwater monitoring are contained in LAC 33:VII.805. The following information is required for Type I and II facilities:

1. a designation of each zone that will be monitored;

2. a map for each groundwater monitoring zone that depicts the locations of all monitoring wells (including any proposed monitoring wells) that are screened in a particular zone and each zone's relevant point of compliance, along with information that demonstrates that monitoring wells meet the standards in LAC 33:VII.805.A.1.and 2. If monitoring wells are being proposed, the response to this requirement shall provide an implementation schedule for submitting a revised well location map showing all existing monitoring wells that are screened in each particular zone;

3. a geologic cross section along the perimeter of the facility showing screen intervals for existing and proposed monitoring wells, along with other applicable information required in LAC 33:VII.803.C.2.a. If monitoring wells are being proposed, the response to this requirement shall include an implementation schedule for revising applicable geologic cross sections to include the screen interval of the newly installed monitoring wells and other applicable information required in LAC 33:VII.803.C.2.a;

4. a designation of each monitoring well (including any proposed monitoring wells) as either background or down gradient, for each zone that will be monitored;

5. a table displaying pertinent well construction details for each monitoring well, including the elevation of the reference point for measuring water levels (msl), the elevation of the ground surface (msl), the drilled depth (feet), the depth to which the well is cased (feet), the depth to the top and bottom of the bentonite seal (feet), the depth to the top and bottom of the screen (feet), the slot size, the casing size, and the type of grout; and as-built diagrams (cross sections) of each well providing the aforementioned well construction details. If monitoring wells are being proposed, the response to this requirement shall provide an implementation schedule for submitting the information specified in this requirement;

6. a demonstration that the monitoring wells are constructed according to the standards in LAC 33:VII.805.A.3. If monitoring wells are being proposed, the response to this requirement shall provide an implementation schedule for submitting the information specified in this requirement;

7. for an existing facility, all data on samples taken from monitoring wells in place at the time of the permit application. If this data exists in the department records, the administrative authority may allow references to the data in the permit application. For an existing facility with no wells, groundwater data shall be submitted within 90 days after the installation of monitoring wells. For a new facility, groundwater data (one sampling event) shall be submitted before waste is accepted;

8. a sampling and analysis plan that meets the standards in LAC 33:VII.805.B and includes a table that specifies each parameter, analytical method, practical quantitation limit, and Chemical Abstracts Service registry number (CAS RN); and

9. a plan for detecting, reporting, and verifying changes in groundwater.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§523. Part III: Additional Supplementary Information

A. The following supplementary information is required for all solid waste processing and disposal facilities. All responses and exhibits ~~must~~shall be identified in the following sequence to facilitate the evaluation:

~~A.~~ 1. a discussion demonstrating that the potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible;

~~B.~~ 2. a cost-benefit analysis demonstrating that the social and economic

benefits of the facility outweigh the environmental-impact costs;

~~C.~~ 3. a discussion and description of possible alternative projects ~~which~~that would offer more protection to the environment without unduly curtailing nonenvironmental benefits;

~~D.~~ 4. a discussion of possible alternative sites that would offer more protection to the environment without unduly curtailing nonenvironmental benefits; and

~~E.~~ 5. a discussion and description of the mitigating measures which would offer more protection to the environment than the facility, as proposed, without unduly curtailing nonenvironmental benefits.

B. An application for renewal or extension of existing permits shall not be subject to submittal of the additional supplementary information as provided in LAC 33:VII.523.A., unless said renewal or extension encompasses changes that need to be addressed as major applications.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Waste Services, Solid Waste Division, LR 23:1685 (December 1997), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter D. Solid Waste Fees (Editor's note: new Chapter 15)

§525. Standard Permit Application Review Fee (Editor's note: moved to §1501)

§527. Closure Plan Review Fee (Editor's note: moved to §1503)

§529. Annual Monitoring and Maintenance Fee (Editor's note: moved to §1505)

Chapter 7. Solid Waste Standards

Subchapter A. ~~General Standards~~ Landfills, Surface Impoundments, Landfarms

§701. Standards Governing Industrial Solid Waste Generators

(Editor's note: moved to §501)

§703. Standards Governing Solid Waste Accumulation and Storage

(Editor's note: moved to §503)

§705. Standards Governing Collectors and Off-Site Transporters of Solid Waste

(Editor's Note: moved to §505)

§707. Standards Governing Pickup Stations for Solid Waste

(Editor's note: moved to §507)

~~Subchapter B. Landfills, Surface Impoundments, Landfarms~~

§709. Standards Governing ~~All~~Type I and II Solid Waste Disposal Facilities ~~(Type I and II)~~ (Editor's note: much of the language in Subsections A & B of this Section is moved from §521)

A. Location Characteristics. The information on location characteristics listed in this Subsection is required and shall be provided for all Type I and II solid waste disposal facilities, as outlined in LAC 33:VII.521.

1. Area master plans shall include location maps and/or engineering drawings. The scale of the maps and engineering drawings must be legible. Area master plans shall show:

a. the facility;

b. the road network;

c. major drainage systems;

d. drainage-flow patterns;

e. the location of the closest population centers;

f. if putrescible the location of any public-use airport(s) used by turbojet aircraft or piston-type aircraft (if within a 5 mile radius);

g. the location of the 100-year flood plain based on the most recent data; and

h. other pertinent information.

~~1~~2. Access to facilities by land or water transportation shall be by all-weather roads or waterways that can meet the demands of the facility and are designed to avoid, to the extent practicable, congestion, sharp turns, obstructions, or other hazards conducive to accidents.~~; and t~~The surface roadways shall be adequate to withstand the weight of transportation vehicles.

3. A letter shall be acquired from the appropriate agency or agencies regarding those facilities receiving waste generated off-site, stating that the facility will not have a significant adverse impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles.

~~2~~4. Facilities that dispose of putrescible solid waste shall not be

located within 10,000 feet of any public-use airport runway end used by turbojet aircraft or within 5,000 feet of any public-use airport runway end used by only piston-type aircraft. Permit applicants for proposed Type II landfills to be located within a five-mile radius of any airport runway must notify the affected airport and the Federal Aviation Administration.

5. A description shall be included of the total existing land use within three miles of the facility (by approximate percentage) including, but not limited to:

a. residential;

b. health-care facilities and schools;

c. agricultural;

d. industrial and manufacturing;

e. other commercial;

f. recreational; and

g. undeveloped.

6. A current aerial photograph, representative of the current land use, of a one-mile radius surrounding the facility is required. The aerial photograph shall be of sufficient scale and depict all pertinent information.

~~3~~7. ~~Environmental Characteristics.~~ Facilities located in~~,~~ or within 1,000 feet of, swamps, marshes, wetlands, estuaries, wildlife-hatchery areas, habitat of endangered species, archaeological sites, historic sites, publicly owned recreation areas, and similar critical environmental areas shall be isolated from such areas by effective

barriers that eliminate probable adverse impacts from facility operations. The following information on environmental characteristics shall be provided:

a. a list of all known historic sites, recreation areas, archaeological sites, designated wildlife-management areas, swamps, marshes, wetlands, habitats for endangered species, and other sensitive ecological areas within 1,000 feet of the facility perimeter or as otherwise appropriate;

b. documentation from the appropriate state and federal agencies substantiating the historic sites, recreation areas, archaeological sites, designated wildlife-management areas, swamps, marshes, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility; and

c. description of the measures planned to protect the areas listed from the adverse impact of operation at the facility.

~~4~~8. Units of a disposal facility ~~which~~that have not received waste prior to October 9, 1993, shall not be located in wetlands, unless the permit holder or applicant can make the following demonstrations to the administrative authority:

a. where applicable under Section 404 of the Clean Water Act or applicable state wetlands laws, the presumption that a practicable alternative to the proposed landfill is available ~~which~~that does not involve wetlands is clearly rebutted;

b. the construction and operation of the facility ~~will~~shall not:

i. cause or contribute to violations of any applicable state water-quality standard;

ii. violate any applicable toxic effluent standard or

prohibition under Section 307 of the Clean Water Act;

iii. jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973; and

iv. violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

c. the facility ~~will~~shall not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate the integrity of the facility and its ability to protect ecological resources by addressing the following factors:

i. erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the facility;

ii. erosion, stability, and migration potential of dredged and fill materials used to support the facility;

iii. the volume and chemical nature of the waste managed in the facility;

iv. impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

v. the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

vi. any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;

d. to the extent required under Section 404 of the Clean Water Act or applicable state wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by Paragraph A.~~4~~8. of this Section; then, minimizing unavoidable impacts to the maximum extent practicable; and, finally, offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands); and

e. sufficient information is available to make a reasonable determination with respect to these demonstrations.

~~5. Units of a facility which have not received waste prior to October 9, 1993, shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the permit holder or applicant demonstrates to the administrative authority that an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the unit and will be protective of human health and the environment.~~

9. A statement of estimated population, the source of the estimation, and density within a three-mile radius of the facility boundary is required of all facilities.

10. Well, Fault and Utility Requirements for Type I and II Facilities

a. Wells. A ~~M~~map is required showing the locations of all known or recorded shot holes and seismic lines, private water wells, oil and/or gas wells, operating or abandoned, within the facility and within 2,000 feet of the facility perimeter

and the locations of all public water systems, industrial water wells, and irrigation wells within one mile of the facility. A plan shall be provided to prevent adverse effects on the environment from the wells and shot holes located on the facility.

b. Faults

i. A scaled map is required showing the locations of all recorded faults within the facility and within one mile of the perimeter of the facility.

ii. For faults mapped as existing through the facility, verification of their presence by geophysical mapping or stratigraphic correlation of boring logs is required. If the plane of the fault is verified within the facility's boundaries, a discussion of measures that will be taken to mitigate adverse effects on the facility and the environment is required.

iii. A demonstration, if applicable, is required of alternative fault setback distance ~~as provided in LAC 33:VII.709.A.5~~. Units of a disposal facility that have not received waste prior to October 9, 1993, shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the permit holder or applicant demonstrates to the administrative authority that an alternate setback distance of less than 200 feet will prevent damage to the structural integrity of the unit and will be protective of human health and the environment.

c. Seismic Impact Zone

i. For a facility located in a seismic impact zone, a report is required with calculations demonstrating that the facility shall be designed and operated so that it can withstand the stresses caused by the maximum ground motion, as

provided in Clause A.10.c.ii of this Section; and

ii. Units of a facility located in a seismic impact zone, which have not received waste prior to October 9, 1993, shall be designed and operated so that all containment structures, including liners, leachate collection systems, and surface water control systems, can withstand the stresses caused by the maximum horizontal acceleration in lithified earth material for the site.

d. Unstable Areas

i. A f~~F~~acility~~ies~~ shall not be located in an unstable area unless the permit holder or applicant can demonstrate that the facility is designed to ensure the integrity of structural components, such as liners;~~,~~ leak-detection systems;~~,~~ leachate collection, treatment, and removal systems;~~,~~ final covers;~~,~~ run-on/runoff systems; ~~(~~or any other component used in the construction and operation of the facility that is necessary for the protection of human health or the environment~~)~~.

ii. In determining whether an area is unstable, the permit holder or applicant must consider, at a minimum, the following factors:

~~a.~~ (a) on-site or local soil conditions that may result in significant differential settling;

~~b.~~ (b) on-site or local geologic or geomorphological features; and

~~c.~~ (c) on-site or local human-made features or events (both surface and subsurface).

e. Utilities. A scaled map showing the location of all

pipelines, power lines, and rights-of-way within the site is required.

~~6~~11. ~~Disposal f~~Facilities may be subject to a comprehensive land-use or zoning plan established by local regulations or ordinances.

B. Facility Characteristics

1. ~~Perimeter Barriers, Security, and Signs~~The following facility characteristics are required for Type I and II solid waste facilities, as outlined in LAC 33:VII.521.C

a. ~~e~~Elements of the ~~process or~~ disposal system employed shall be provided, including, as applicable, property lines, original contours (shown at not greater than five-foot intervals), buildings, units of the facility, drainage, ditches, and roads.

b. ~~the p~~Perimeter barriers and other control measures~~;~~, such as security and signs shall be provided as follows.

~~a.~~ i. Facilities must have a perimeter barrier around the facility that prevents unauthorized ingress or egress, except by willful entry.

~~b.~~ ii. During operating hours, each facility entry point shall be continuously monitored, manned, or locked.

~~c.~~ iii. During non-operating hours, each facility entry point shall be locked.

~~d.~~ iv. Facilities that receive wastes from off-site sources shall post readable signs that list the types of wastes that can be received at the facility.

~~2. Buffer Zones~~

c~~a~~. Buffer zones of not less than 200 feet shall be provided between the facility and the property line. A reduction in this requirement shall be allowed only with the permission, in the form of a notarized affidavit, of the adjoining landowner~~ and occupants~~. A copy of the notarized affidavit waiving the ~~200-foot~~ buffer zone requirement shall be entered in the mortgage and conveyance records of the parish for the adjoining landowner's property. Buffer zone requirements may be waived or modified by the administrative authority for areas of landfills which have been closed in accordance with these regulations and for existing facilities.~~, or in accordance with LAC 33:VII.307.~~

~~b.~~ No storage, processing, or disposal of solid waste shall occur within the buffer zone.

~~3.~~ d. ~~Fire Protection and Medical Care.~~ Facilities shall have access to required fire protection and medical care, or such services shall be provided internally.

~~4.~~ e. ~~Landscaping.~~ All ~~proposed~~ facilities, other than those ~~which~~that are located within the boundaries of a plant, industry, or business which generates the waste to be processed or disposed of, must provide landscaping to improve the aesthetics of the facility.

~~5.~~ f. Devices or Methods for Receiving and Monitoring Incoming Wastes

~~a.~~ i. ~~Each~~All disposal facilities~~y~~ shall be equipped with a

device or method to determine quantity (by wet-weight tonnage); sources (whether the waste was generated in-state or out-of-state and, if it is industrial solid waste, where it was generated); and types of incoming waste (i.e., commercial, residential, infectious). The facility shall also be equipped with a device or method to control entry of the waste and prevent entry of unrecorded or unauthorized deliverables (i.e., hazardous waste, PCB waste, and unauthorized or unpermitted solid waste). At Type II landfills, this method shall include random inspections of incoming waste loads at a frequency to reasonably ensure exclusion of such prohibited wastes.

~~b.~~ ii. ~~Each~~All facilities~~y~~ shall be equipped with a central control and recordkeeping system for tabulating the information required in Subparagraph B.5.a of this Section.

~~6~~2. Discharges from operating units of all facilities must be controlled and must conform to applicable state and federal laws, including the federal Clean Water Act and Louisiana Water Pollution Control Law. Applications for applicable state and federal discharge permits must be filed before a standard permit may be issued.

3. ~~The following information is required for Type I and II facilities~~Additional information for facilities is required as follows:

a. areas for isolating nonputrescible waste or incinerator ash, and borrow areas; and

b. location of leachate collection/treatment/removal system.

C. Facility Geology standards are located in LAC 33:VII.Chapter 8.

~~1. Soils~~

~~a. Except as provided in Subparagraph C.1.b of this Section, facilities shall have natural soils of low permeability for the area occupied by the solid waste facility, including vehicle parking and turnaround areas, that should provide a barrier to prevent any penetration of surface spills into groundwater aquifers underlying the area or to a sand or other water-bearing strata that would provide a conduit to such aquifers.~~

~~b. A design for surfacing natural soils that do not meet the requirement in Subparagraph C.1.a of this Section shall be prepared and installed under the supervision of a registered engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology. Written certification by the engineer that the surface satisfies the requirements of Subparagraph C.1.a of this Section shall be provided.~~

~~c. The subsurface soils and groundwater conditions at Type I facilities and at Type II surface impoundments and landfills shall be characterized by a registered engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology or by a geologist with expertise in these fields. The characterization shall meet the following guidelines:~~

~~i. geotechnical borehole spacing shall be no greater than 450 feet (minimum of four borings required);~~

~~ii. all boreholes shall extend to a depth of at least 30 feet below the lowest point of the excavation. At least 10 percent of the borings (minimum of three borings) shall extend to 100 feet below grade level to characterize the shallow geology;~~

~~iii. all borings shall be continuously sampled to at least 30 feet below the base of excavation, with the use of thin-wall and/or split-spoon devices or similar coring devices. After 30 feet, samples shall be at five-foot intervals;~~

~~iv. borings, geotechnical field tests, and laboratory tests shall be conducted according to the standards of the American Society for Testing and Materials (ASTM) or the Environmental Protection Agency (EPA), or other applicable standards approved by the administrative authority.~~

~~d. The subsurface soils and groundwater conditions at Type II landfarms shall be characterized by a licensed engineer with expertise in geotechnical engineering and geohydrology or by a geologist with expertise in these fields. The characterization shall meet the following guidelines:~~

~~i. the number of borings shall be sufficient to reflect the subsurface soils and groundwater conditions for the facility;~~

~~ii. all boreholes shall extend to a depth of at least 30 feet below the lowest point of the zone of incorporation;~~

~~iii. all borings shall be continuously sampled to at least 30 feet below the base of the zone of incorporation with the use of thin wall and/or split spoon devices or similar devices;~~

~~iv. borings, geotechnical field tests, and laboratory tests shall be conducted according to the standards of the American Society for Testing and Materials (ASTM) or the Environmental Protection Agency (EPA) or other applicable standards approved by the administrative authority.~~

~~2. Units of a facility located in a seismic impact zone which have not received waste prior to October 9, 1993, shall be designed and operated so that all containment structures, including liners, leachate collection systems, and surface water control systems, can withstand the stresses caused by the maximum horizontal acceleration in lithified earth material for the site.~~

~~3. Facilities shall not be located in an unstable area unless the permit holder or applicant can demonstrate that the facility is designed to ensure the integrity of structural components, such as liners, leak-detection systems, leachate collection, treatment and removal systems, final covers, run-on/runoff systems (or any other component used in the construction and operation of the facility that is necessary for the protection of human health or the environment). In determining whether an area is unstable, the permit holder or applicant must consider, at a minimum, the following factors:~~

~~a. on-site or local soil conditions that may result in significant differential settling;~~

~~b. on-site or local geologic or geomorphological features; and~~

~~c. on-site or local human-made features or events (both surface and subsurface).~~

D. Implementation Plans. The implementation plans for all facilities shall include the following:

1. ~~All facilities shall have implementation plans~~a construction schedule for existing facilities which shall include beginning and ending time-frames and

time-frames for the installation of all major features such as monitoring wells and liners. Time-frames shall be specified in days, with day one being the date of standard permit issuance.

2. ~~The implementation plan must include a plan for closing and upgrading existing operating areas if the application is for expansion of a facility or construction of a replacement facility~~details on phased implementation if any proposed facility is to be constructed in phases; and.

3. a plan for closing and upgrading existing operating areas if the application is for expansion of a facility or construction of a replacement facility.

E. Groundwater ~~M~~monitoring requirements shall be in accordance with LAC 33:V.Chapter 8.

~~1. Groundwater Monitoring System~~

~~a. At each facility, a groundwater-monitoring system must be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer (and the uppermost water-bearing permeable zone which will yield sufficient quantities of water for sampling if different from the uppermost aquifer and if deemed necessary by the administrative authority for adequate groundwater monitoring at the facility) that:~~

~~i. represent the quality of the background groundwater that has not been affected by leakage from a unit; and~~

~~ii. represent the quality of groundwater passing the relevant point of compliance. For the purposes of these regulations, the relevant point of~~

~~compliance is the vertical surface which is located no more than 150 meters downgradient from the unit(s) being monitored and extends down into the uppermost aquifer underlying the facility and any other permeable zones being monitored. The relevant point of compliance must be on property owned or controlled by the permit holder and must be selected and subject to the approval of the administrative authority based on at least the following factors:~~

~~(a). hydrological characteristics of the facility and the surrounding land;~~

~~(b). volume and physical and chemical characteristics of the leachate;~~

~~(c). quantity, quality, and direction of flow of groundwater;~~

~~(d). proximity and withdrawal rate of the groundwater users;~~

~~(e). availability of alternative drinking water supplies;~~

~~(f). existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater, and whether the groundwater is currently used or reasonably expected to be used for drinking water;~~

~~(g). public health, safety, and welfare effects; and~~

~~(h). practicable capability of the owner or operator.~~

~~b. Location of Wells~~

~~i. Enough monitoring wells must be located hydraulically upgradient of the facility to yield samples that represent background groundwater quality as required in Subparagraph E.1.a of this Section.~~

~~ii. A minimum of one upgradient well per zone monitored is required.~~

~~iii. Monitoring wells other than upgradient of the facility may be sampled for background groundwater quality if:~~

~~(a). hydrologic conditions do not allow the permit holder to determine which wells are hydraulically upgradient; or~~

~~(b). sampling at other wells will provide an indication of background groundwater quality that is more representative than sampling of upgradient wells.~~

~~iv. Enough monitoring wells must be located hydraulically downgradient from the facility to yield samples that are representative of the groundwater passing the relevant point of compliance. At least two downgradient wells per zone monitored must be provided. The downgradient wells must be screened in the same zone as the upgradient wells. Spacing between downgradient wells shall not exceed 800 feet.~~

~~v. The number, spacing, and depths of monitoring~~

~~wells shall be determined based upon site-specific technical information that must include thorough characterization of:~~

~~(a). aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and~~

~~(b). saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer; including, but not limited to: thickness, stratigraphy, lithology, hydraulic conductivities, porosities, and effective porosities.~~

~~vi. The administrative authority will consider for approval multi-unit groundwater monitoring systems, provided these systems meet the requirements of Paragraph E.1 of this Section and will be as protective of human health and the environment as groundwater monitoring systems for individual units.~~

~~vii. The administrative authority may modify the requirements of Subparagraph E.l.b of this Section for site-specific considerations in approving groundwater monitoring systems for ditches.~~

~~c. Well Construction~~

~~i. Well construction shall be in accordance with the "Water Wells Rules, Regulations, and Standards, State of Louisiana" (LAC 70:XIII) as adopted by the Louisiana Department of Transportation and Development, Water Resources Section.~~

~~ii. Construction of monitoring wells for facilities regulated by the department shall require approval of the administrative authority prior to construction.~~

~~iii. In addition to the construction standards set forth in the "Water Wells Rules and Regulations," the following is required:~~

~~(a). all wells must have protective casing with locking covers and a secure locking device in place;~~

~~(b). all wells must have guard posts firmly anchored outside the well slab, but not in contact with the slab;~~

~~(c). the maximum allowable screen length must not exceed 10 feet;~~

~~(d). the borehole diameter must allow at least three inches between the well casing and the borehole wall;~~

~~(e). a sign or plate must be permanently affixed to the protective well casing and must prominently display:~~

~~(i). well identification number;~~

~~(ii). identification of well as upgradient or downgradient;~~

~~(iii). elevation of top of well casing in relation to mean sea level;~~

~~(iv). screen depth in relation to mean sea~~

~~level; and~~

~~(v). date of well installation and any subsequent repairs.~~

~~d. Post Construction. Within 90 days after construction of the wells, the permit holder or applicant must submit to the Office of Environmental Services, Permits Division well-completion details to verify that the wells were constructed according to the approved specifications and to document construction procedures. A permit modification fee will not be required. Well-completion details should include, but are not limited to:~~

~~i. daily field notes documenting construction procedures and any unusual occurrences such as grout loss, etc.;~~

~~ii. boring log for each well including surface elevation(s) with respect to mean sea level or comparable reference points;~~

~~iii. as-built diagrams for each well showing all pertinent features such as elevation of reference point for measuring groundwater levels, screen interval, and ground surface. If features change from the approved plans, then a permit-modification request must be submitted in accordance with LAC 33:VII.517.~~

~~e. Plugging and Abandonment of Monitoring Wells and Geotechnical Borings~~

~~i. The "Water Wells Rules and Regulations, State of Louisiana" (LAC 70:XIII), as adopted by the Louisiana Department of Transportation and Development, Water Resource Section, shall apply to all plugging and abandonment~~

~~of wells and holes including, but not limited to, observation wells, monitoring wells, piezometer wells, leak-detection wells, assessment wells, recovery wells, abandoned pilot holes, test holes, and geotechnical boreholes.~~

~~ii. In addition to the standards in LAC 70:XIII, the following standards shall apply to plugging and abandonment:~~

~~(a). For any well, the primary method of plugging and abandonment shall be removal of the well's casing and other components of the well including but not limited to the screen, grout, bentonite seal, filter pack, concrete slab, protective casing, guard posts, and native soil in immediate contact with the grout and subsequent installation of cement-bentonite grout, from the bottom of the resulting borehole to the ground surface using the tremie method.~~

~~(b). In areas where all or a part of the well's casing and other components of the well cannot be plugged and abandoned in accordance with the procedure stated in Subclause E.1.e.ii.(a) of this Section, the well shall be plugged and abandoned by installation of cement-bentonite grout inside the well's casing, from the bottom of the well to the ground surface, provided that the annular seal is demonstrated to be adequately sealed and the following items are submitted:~~

~~(i). supporting documentation, prior to plugging the well that demonstrates that removal of all or part of the well's casing and other components of the well in accordance with the procedure stated in Subparagraph E.1.e of this Section, will be detrimental to the environment; and/or~~

~~(ii). certification and supporting~~

~~documentation by a qualified professional that shows that removal of the well's casing was attempted and that continued attempts to remove all or a part of the well's casing and other components of the well as stated in Subparagraph E.1.e of this Section, would have been detrimental to the environment.~~

~~(c). After plugging and abandoning a well, all surface features of the well including but not limited to the concrete slab, guard posts and protective casing, shall be dismantled and disposed of in an environmentally sound manner and the surface shall be restored to its original condition.~~

~~(d). The permit holder must notify the Office of Environmental Services, Permits Division of the plugging and abandonment of monitoring wells or geotechnical borings and keep records of such abandonments.~~

~~f. Monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.~~

~~2. Groundwater Sampling and Analysis Requirements~~

~~a. A groundwater monitoring program must be implemented at each facility which includes consistent sampling and analysis procedures that ensure monitoring results are representative of groundwater quality at the background and downgradient well locations.~~

~~b. A groundwater sampling and analysis plan must be prepared which meets the requirements of Subparagraph E.2.a of this Section as well as the requirements of LAC 33:VII.3005, and which includes procedures and techniques for:~~

~~i. sample collection which ensures that collected samples are representative of the zone(s) being monitored and prevents cross-contamination of or tampering with samples;~~

~~ii. sample preservation and shipment which ensure the integrity and reliability of the sample collected for analysis;~~

~~iii. chain of custody control; and~~

~~iv. quality-assurance/quality-control, including detection limits, precision and accuracy of analyses, field blanks, and laboratory spikes and blanks.~~

~~c. The sampling and analysis plan must also include the:~~

~~i. selection of parameters or constituents to be sampled and analyzed during detection monitoring and justification for parameters or constituents where applicable;~~

~~ii. identification of analytical procedures to be followed (reference source of analytical method);~~

~~iii. sampling frequency during the detection monitoring program;~~

~~iv. statistical method to be used in evaluating the groundwater-monitoring data for each groundwater parameter or constituent sampled at each monitoring well; and~~

~~v. practical quantitation limit for each parameter or constituent.~~

~~d. Background groundwater quality must be established for the facility in a hydraulically upgradient well(s), or other well(s) as provided in Clause E.1.b.iii of this Section, for each groundwater parameter or constituent.~~

~~e. Statistical Methods~~

~~i. The number of samples collected to establish groundwater quality data must be consistent with the appropriate statistical procedures used.~~

~~ii. One of the following statistical methods to be used in evaluating groundwater data must be specified in the sampling and analysis plan for each parameter or constituent to be monitored. The statistical test chosen shall be conducted separately for each parameter or constituent in each well:~~

~~(a). a parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each parameter or constituent;~~

~~(b). an analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each parameter or constituent;~~

~~(c). a tolerance or prediction interval procedure~~

~~in which an interval for each parameter or constituent is established from the distribution of the background data, and the level of each parameter or constituent in each compliance well is compared to the upper tolerance or prediction limit;~~

~~(d). a control chart approach that gives control limits for each parameter or constituent;~~

~~(e). another statistical test method that meets the performance standards of Clause E.2.e.iii of this Section. The permit holder must place a justification for this alternative in the operating record and notify the administrative authority of the use of this alternative test. The justification must demonstrate that the alternative method meets the performance standards of Clause E.2.e.iii of this Section.~~

~~iii. Any statistical method chosen under Clause E.2.e.ii of this Section shall comply with the following performance standards, as appropriate.~~

~~(a). The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of the parameters or constituents. If the distribution of the chemical parameters or constituents or hazardous parameters or constituents is shown by the permit holder to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the parameters or constituents differ, more than one statistical method may be needed.~~

~~(b). If an individual well comparison procedure is used to compare an individual compliance well parameter or constituent concentration with background parameters or constituent concentrations or a groundwater protection~~

~~standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experimentwide error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.~~

~~(c). If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter or constituent values shall be protective of human health and the environment. The parameters or constituents shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each parameter or constituent of concern.~~

~~(d). If a tolerance interval or a predictional interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be protective of human health and the environment. These parameters or constituents shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each parameter or constituent of concern.~~

~~(e). The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating~~

~~conditions that are available to the facility.~~

~~(f). If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.~~

~~iv. The permit holder must determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular groundwater monitoring program that applies to the facility, as determined under Paragraph E.3, 4, or 8 of this Section.~~

~~(a). In determining whether a statistically significant increase has occurred, the permit holder must compare the groundwater quality of each parameter or constituent at each monitoring well designated pursuant to Clause E.1.a.ii of this Section to the background value of that parameter or constituent, according to the statistical procedures and performance standards specified under Clauses E.2.e.ii and iii of this Section.~~

~~(b). Within 90 days after the date of sampling, the permit holder must determine whether there has been a statistically significant increase over background at each monitoring well.~~

~~3. Detection Monitoring Program~~

~~a. All Type I and II facilities must conduct a detection monitoring program as described in Paragraph E.3 of this Section.~~

~~b. Initial Sampling~~

~~i. For a new facility, monitoring wells must be~~

~~sampled and the analytical data for a sampling event must be submitted to the Office of Environmental Assessment, Environmental Technology Division before waste is accepted.~~

~~ii. For an existing facility with no wells in place at the time of the application submittal or at the time at which the facility becomes subject to these regulations, the analytical data shall be submitted to the Office of Environmental Assessment, Environmental Technology Division within 90 days after installation of the monitoring wells.~~

~~iii. A minimum of four independent samples from each well (upgradient and downgradient) must be collected and analyzed during the first sampling event for a facility. Thereafter, at least one sample must be collected and analyzed at each well for each sampling event.~~

~~c. For the first year of monitoring and thereafter, sampling and analysis of all wells must be conducted every six months.~~

~~d. The groundwater monitoring program must be conducted for the life of the facility and for the duration of the post-closure care period of the facility which is specified in LAC 33:VII.711.F, 713.F, or 715.F. Groundwater monitoring may be extended beyond the period specified if deemed necessary by the administrative authority.~~

~~e. The permit holder or applicant must submit four bound copies (8 1/2 by 11 inches) of a report of all groundwater sampling results to the Office of Environmental Assessment, Environmental Technology Division no later than 90 days~~

~~after each sampling event. The reports must be submitted on forms provided by the administrative authority and shall include at a minimum:~~

~~i. documentation of the chain of custody of all sampling and analyses;~~

~~ii. scaled potentiometric surface maps showing monitoring-well locations, groundwater elevations with respect to mean sea level for each stratum monitored;~~

~~iii. isopleth map for each well of all parameters or constituents or plots by well of concentration of parameters or constituents versus time;~~

~~iv. for the initial sampling only, a boring log for each well showing the screened interval and ground surface elevation with respect to mean sea level; and~~

~~v. a statement of whether a statistically significant difference in concentration over background concentrations is detected.~~

~~f. If a statistically significant increase over background concentrations is determined for one or more parameters or constituents required to be monitored, the permit holder must:~~

~~i. notify the administrative authority in accordance with the Notification Regulations and Procedures for Unauthorized Discharge (LAC 33:I.Subpart 2);~~

~~ii. submit to the Office of Environmental Assessment, Environmental Technology Division, within 14 days after the determination is made, a~~

~~report that identifies which parameters or constituents were determined to have shown statistically significant changes from background levels; and~~

~~iii. within 90 days after the determination is made:~~

~~(a). initiate an assessment monitoring program for the facility meeting the requirements of Paragraph E.4 or 8 of this Section; or~~

~~(b). submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating that a source other than the facility being sampled caused the contamination or that the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.~~

~~iv. If the administrative authority approves this demonstration in Subclause E.3.f.iii.(b) of this Section in writing, the permit holder may continue the detection monitoring program. If the administrative authority does not approve the demonstration in writing, the permit holder must establish an assessment monitoring program meeting the requirements of Paragraph E.4 of this Section within 90 days after the determination in Subparagraph E.3.f of this Section is made.~~

~~g. Detection Monitoring Parameters or Constituents~~

~~i. During detection monitoring, Type I landfills and Type I surface impoundments (except Type I landfills that are also Type II landfills and Type I surface impoundments that are associated with such Type I landfills) shall monitor for at least 10 chemical parameters or constituents, both inorganic and organic, which are indicator parameters or constituents or reaction products of the waste and that provide a~~

~~reliable indication of the presence of contaminants in the groundwater. The administrative authority may reduce the number of parameters if appropriate based on site-specific and waste-specific consideration. Selection of these parameters or constituents is subject to the approval of the administrative authority and must be based on the following factors:~~

~~(a). types, quantities, and concentrations of constituents in the wastes disposed of at the facility;~~

~~(b). mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the facility;~~

~~(c). detectability of indicator parameters, waste constituents, or their reaction products in the groundwater; and~~

~~(d). concentrations or values and coefficients of variation of the proposed monitoring parameters or constituents in the background groundwater at the facility.~~

~~ii. During detection monitoring, Type II landfills, including Type II surface impoundments associated with Type II landfills, shall be monitored for all the parameters or constituents listed in LAC 33:VII.3005.Table 1.~~

~~iii. During detection monitoring, Type I landfarms, including runoff and containment areas (ROCAs) or surface impoundments associated with Type I landfarms, shall be monitored for the same parameters or constituents as provided for Type II landfarms in Clause E.3.g.iv of this Section and also for at least six parameters or constituents, both organic and inorganic, which are intrinsic to the wastes being disposed at the facility. The intrinsic parameters or constituents shall be selected on~~

~~the basis of the factors in Subclauses E.3.g.i.(a)-(d) of this Section and shall be subject to the approval of the administrative authority.~~

~~iv. During detection monitoring, Type II landfarms which receive domestic sewage sludge and any runoff and containment areas (ROCAs) or surface impoundments associated with such landfarms shall be monitored for five-day biochemical oxygen demand (BOD_5), fecal coliform, total dissolved solids (TDS), nitrate, total Kjeldahl nitrogen, and polychlorinated biphenyls (PCBs), if applicable.~~

~~v. Type II surface impoundments which receive domestic sewage sludge shall be monitored for the same parameters or constituents as provided for Type II landfarms in Clause E.3.g.iv of this Section.~~

~~vi. The administrative authority may waive or require additional parameters or constituents, based on site-specific or waste-specific information.~~

~~4. Assessment Monitoring Program for Type II Landfills and Associated Type II Surface Impoundments~~

~~a. An assessment monitoring program as described in Paragraph E.4 of this Section is required to be conducted at Type II landfills and associated Type II surface impoundments whenever a statistically significant increase over background concentrations is detected for one or more of the parameters or constituents sampled and analyzed during the detection monitoring program.~~

~~b. Within 90 days of triggering an assessment monitoring program, and annually thereafter, the permit holder must sample and analyze the~~

~~groundwater for all the parameters or constituents identified in LAC 33:VII.3005.Table 2. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any parameter or constituent detected in the downgradient wells as a result of the complete LAC 33:VII.3005.Table 2 analysis, a minimum of four independent samples from each well (background and downgradient) must be collected and analyzed to establish background for the parameters or constituents. The administrative authority:~~

~~i. may specify an appropriate subset of the wells to be sampled and analyzed for LAC 33:VII.3005.Table 2 parameters or constituents during assessment monitoring; and~~

~~ii. may delete any of the LAC 33:VII.3005.Table 2 parameters or constituents for a facility if it can be shown that the omitted parameters or constituents are not reasonably expected to be in or derived from the waste contained in the unit.~~

~~c. No later than 90 days after the completion of the initial or subsequent sampling events for all LAC 33:VII.3005.Table 2 parameters or constituents required in Subparagraph E.4.b of this Section, the permit holder must submit a report to the Office of Environmental Assessment, Environmental Technology Division identifying the LAC 33:VII.3005.Table 2 parameters or constituents that have been detected. No later than 180 days after completion of the initial or subsequent sampling events for all LAC 33:VII.3005.Table 2 parameters or constituents required in Subparagraph E.4.b of this Section, the permit holder must:~~

~~i. resample all wells and analyze for all parameters or~~

~~constituents in LAC 33:VII.3005.Table 1 and for those parameters or constituents in LAC 33:VII.3005.Table 2 that are detected in response to Subparagraph E.4.b of this Section. At least one sample must be collected from each well (background and downgradient) during these sampling events. This sampling must be repeated semiannually thereafter;~~

~~ii. establish background groundwater concentrations for any parameter or constituent detected pursuant to Subparagraph E.4.b or c of this Section; and~~

~~iii. establish groundwater protection standards for all parameters or constituents detected pursuant to Subparagraph E.4.b or c of this Section. The groundwater protection standards shall be established in accordance with Subparagraph E.4.g of this Section.~~

~~d. If the concentrations of all LAC 33:VII.3005.Table 2 parameters or constituents are shown to be at or below background values, using the statistical procedures in Subparagraph E.2.e of this Section, for two consecutive sampling events, the permit holder must notify the Office of Environmental Assessment, Environmental Technology Division, and upon written approval of the administrative authority, may return to detection monitoring.~~

~~e. If the concentrations of any LAC 33:VII.3005.Table 2 parameters or constituents are above background values, but all concentrations are below the groundwater protection standard established under Subparagraph E.4.g of this Section, using the statistical procedures in Subparagraph E.2.e of this Section, the permit holder must continue assessment monitoring.~~

~~f. If one or more LAC 33:VII.3005.Table 2 parameters or constituents are detected at statistically significant levels above the groundwater protection standard established under Subparagraph E.4.g of this Section, in any sampling event, using the statistical procedures in Subparagraph E.2.e of this Section, the permit holder must, within 14 days of the determination, notify all appropriate local government officials and submit a report to the Office of Environmental Assessment, Environmental Technology Division identifying the LAC 33:VII.3005.Table 2 parameters or constituents which have exceeded the groundwater protection standard. The permit holder must also:~~

~~i. within 90 days after the determination is made, submit four bound copies (8 1/2 x 11 inches) of an assessment plan to the Office of Environmental Assessment, Environmental Technology Division, as well as any necessary permit modification, to the Office of Environmental Services, Permits Division that provides for:~~

~~(a). characterization of the nature and extent of the release by installing and sampling additional monitoring wells as necessary;~~

~~(b). installation of at least one additional monitoring well at the facility boundary in the direction of the contaminant migration and sampling of this well in accordance with Clause E.4.c.ii of this Section; and~~

~~(c). a schedule for implementing the plan;~~

~~ii. notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off site as indicated by the sampling of the wells in accordance with Clause~~

~~E.4.f.i of this Section; and~~

~~iii. upon consultation with and approval of the administrative authority, implement any interim measures necessary to ensure the protection of human health and the environment. Interim measures should, to the greatest extent practicable, be in accordance with LAC 33:I.Chapter 13 and be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to Paragraph E.6 of this Section. The following factors must be considered by a permit holder in determining whether interim measures are necessary:~~

~~(a). time required to develop and implement a final remedy;~~

~~(b). actual or potential exposure of nearby populations or environmental receptors to hazardous parameters or constituents;~~

~~(c). actual or potential contamination of drinking water supplies or sensitive ecosystems;~~

~~(d). further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;~~

~~(e). weather conditions that may cause hazardous parameters or constituents to migrate or be released;~~

~~(f). risk of fire or explosion, or potential for exposure to hazardous parameters or constituents as a result of an accident or failure of a container or handling system; and~~

~~(g). other situations that may pose threats to~~

~~human health and the environment.~~

~~iv. initiate an assessment of corrective measures as required by Paragraph E.5 of this Section; or~~

~~v. may submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating that a source other than the facility being sampled caused the contamination, or the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. If the administrative authority approves this demonstration in writing, the permit holder must continue assessment monitoring at the facility in accordance with Paragraph E.4 of this Section, or may return to detection monitoring if the LAC 33:VII.3005.Table 2 parameters or constituents are below background as specified in Subparagraph E.4.d of this Section. Until such a written approval is given, the permit holder must comply with Subparagraph E.4.f of this Section, including initiating an assessment of corrective action measures.~~

~~g. The permit holder must establish a groundwater protection standard for each LAC 33:VII.3005.Table 2 parameter or constituent detected in the groundwater. The groundwater protection standard shall be in accordance with LAC 33:I.Chapter 13 and shall be:~~

~~i. for parameters or constituents for which a maximum contaminant level (MCL) has been promulgated under the federal Safe Drinking Water Act, (the MCL for that parameter or constituent);~~

~~ii. for parameters or constituents for which the state of~~

~~Louisiana has promulgated a MCL, the MCL for that parameter or constituent;~~

~~iii. for parameters or constituents for which MCLs have not been promulgated, the background concentration for the parameter or constituent established from wells in accordance with Paragraph E.4 of this Section, or the administrative authority may allow the standard to be set in accordance with LAC 33:I.Chapter 13 on a case-by-case basis;~~

~~iv. for Type I facilities, the administrative authority may allow the standard for all parameters or constituents to be set in accordance with LAC 33:I.Chapter 13 on a case-by-case basis;~~

~~v. for parameters or constituents for which the background level is higher than the MCL identified under Clause E.4.g.i or ii of this Section, the background concentration for the parameter or constituent established from wells in accordance with Paragraph E.4 of this Section; or~~

~~vi. the administrative authority may establish a more stringent groundwater protection standard if necessary to protect human health or the environment.~~

~~5. Assessment of Corrective Measures at Type II Landfills and Associated Surface Impoundments~~

~~a. Within 90 days of finding that any of the parameters or constituents listed in LAC 33:VII.3005.Table 2 have been detected at a statistically significant level exceeding the groundwater protection standards defined under Subparagraph E.4.g of this Section, the permit holder must initiate an assessment of~~

~~corrective measures.~~

~~b. The permit holder must continue to monitor in accordance with the assessment monitoring program throughout the period of corrective action, as specified in Paragraph E.4 of this Section.~~

~~c. The assessment shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under Paragraph E.6 of this Section addressing at least the following:~~

~~i. performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;~~

~~ii. time required to begin and complete the remedy;~~

~~iii. costs of remedy implementation; and~~

~~iv. institutional requirements such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy.~~

~~d. The results of the corrective measures assessment must be discussed by the permit holder, in a public meeting prior to the selection of remedy, with interested and affected parties.~~

~~6. Selection of Remedy and Corrective Action Plan at Type II Landfills and Associated Surface Impoundments~~

~~a. Based on the results of the corrective measures assessment~~

~~conducted under Paragraph E.5 of this Section, the permit holder must select a remedy that, at a minimum, meets the standards of Subparagraph E.6.b of this Section. Within 180 days after initiation of the corrective measures assessment required in Paragraph E.5 of this Section, the permit holder must submit four bound copies (8 1/2 by 11 inches) of a corrective-action plan to the Office of Environmental Assessment, Environmental Technology Division, describing the selected remedy, which will meet the requirements of Subparagraphs E.6.b-d of this Section and be in accordance with LAC 33:I.Chapter 13. The corrective-action plan must also provide for a corrective-action groundwater monitoring program as described in Clause E.7.a.i of this Section.~~

~~b. Remedies must:~~

~~i. be protective of human health and the environment;~~

~~ii. attain the groundwater protection standard as specified pursuant to Subparagraph E.4.g of this Section;~~

~~iii. control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of LAC 33:VII.3005.Table 2 parameters or constituents into the environment that may pose a threat to human health or the environment; and~~

~~iv. comply with standards for management of wastes as specified in Subparagraph E.7.g of this Section;~~

~~c. In selecting a remedy that meets the standards of Subparagraph E.6.b of this Section, the permit holder shall consider the following evaluation factors:~~

~~i. long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:~~

~~(a). magnitude of reduction of existing risks;~~

~~(b). magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;~~

~~(c). type and degree of long-term management required, including monitoring, operation, and maintenance;~~

~~(d). short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and redisposal of containment;~~

~~(e). time until full protection is achieved;~~

~~(f). potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;~~

~~(g). long-term reliability of the engineering and institutional controls; and~~

~~(h). potential need for replacement of the remedy.~~

~~ii. effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:~~

~~(a). extent to which containment practices will reduce further releases;~~

~~(b). extent to which treatment technologies may be used.~~

~~iii. ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:~~

~~(a). degree of difficulty associated with constructing the technology;~~

~~(b). expected operational reliability of the technologies;~~

~~(c). need to coordinate with and obtain necessary approvals and permits from other agencies;~~

~~(d). availability of necessary equipment and specialists; and~~

~~(e). available capacity and location of needed treatment, storage, and disposal services.~~

~~iv. practicable capability of the permit holder, including a consideration of the technical and economic capability; and~~

~~v. degree to which community concerns are addressed~~

~~by a potential remedy(s).~~

~~d. The permit holder shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. Such a schedule must require the initiation of remedial activities within a reasonable period of time. The permit holder must consider the following factors in determining the schedule of remedial activities:~~

~~i. extent and nature of contamination;~~

~~ii. practical capabilities of remedial technologies in achieving compliance with groundwater protection standards established under Subparagraph E.4.g of this Section and other objectives of the remedy;~~

~~iii. availability of treatment or disposal capacity for wastes managed during implementation of the remedy;~~

~~iv. desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;~~

~~v. potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;~~

~~vi. resource value of the aquifer including:~~

~~(a). current and future uses;~~

~~(b). proximity and withdrawal rate of users;~~

~~(c). groundwater quantity and quality;~~

~~(d). potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to parameters or constituents;~~

~~(e). hydrogeologic characteristic of the facility and surrounding land;~~

~~(f). groundwater removal and treatment costs; and~~

~~(g). cost and availability of alternative water supplies;~~

~~vii. practicable capability of the permit holder; and~~

~~viii. other relevant factors.~~

~~e. The administrative authority may determine that remediation of a release of an LAC 33:VII.3005.Table 2 parameter or constituent from a facility is not necessary if the permit holder demonstrates to the satisfaction of the administrative authority that:~~

~~i. the groundwater is additionally contaminated by substances that have originated from a source other than a facility and those substances are present in such concentrations that cleanup of the release from the facility would provide no significant reduction in risk to actual or potential receptors; or~~

~~ii. parameter or constituent is present in groundwater that:~~

~~(a). is not currently or reasonably expected to be a source of drinking water; and~~

~~(b). is not hydraulically connected with waters to which the parameters or constituents are migrating or are likely to migrate in a concentration that would exceed the groundwater protection standards established under Subparagraph E.4.g of this Section; or~~

~~iii. remediation of the release(s) is technically impracticable; or~~

~~iv. remediation results in unacceptable cross-media impacts.~~

~~f. A determination by the administrative authority pursuant to Subparagraph E.6.e of this Section shall not affect the authority of the administrative authority to require the permit holder to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the groundwater, to prevent exposure to the groundwater, or to remediate the groundwater to concentrations that are technically practicable and that significantly reduce threats to human health or the environment.~~

~~7. Implementation of the Corrective Action Programs at Type II Landfills and Associated Type II Surface Impoundments~~

~~a. After the corrective action plan has been approved by the administrative authority and, based on the corrective action plan schedule established under Subparagraph E.6.d of this Section for initiation and completion of remedial~~

~~activities, the permit holder must:~~

~~i. implement a corrective-action groundwater monitoring program as described in the approved corrective-action plan that:~~

~~(a). at a minimum, meets the requirements of an assessment monitoring program under Paragraph E.4 of this Section;~~

~~(b). indicates the effectiveness of the corrective action remedy; and~~

~~(c). demonstrates compliance with the groundwater protection standard pursuant to Subparagraph E.4.g of this Section;~~

~~ii. implement the corrective-action plan established under Paragraph E.6 of this Section.~~

~~b. A permit holder may submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating, based on information developed after implementation of the corrective action plan has begun or other information, that compliance with requirements of Subparagraph E.6.b of this Section are not being achieved through the remedy selected. A revised corrective-action plan providing other methods or techniques that could practically achieve compliance with the requirements of Subparagraph E.6.b of this Section must accompany the demonstration.~~

~~c. If the administrative authority approves, in writing, the demonstration and revised corrective action plan submitted pursuant to Subparagraph E.7.b of this Section, the permit holder must implement the revised corrective-action~~

~~plan.~~

~~d. The permit holder may submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating that compliance with the requirements under Subparagraph E.6.b of this Section cannot be achieved with any currently available methods.~~

~~e. If the administrative authority approves, in writing, the demonstration submitted pursuant to Subparagraph E.7.d of this Section, the permit holder must, within 30 days of the approval, submit a plan to the Office of Environmental Assessment, Environmental Technology Division (which includes an implementation schedule) to implement alternate measures in accordance with LAC 33:I.Chapter 13:~~

~~i. to control exposure of humans and the environment to residual contamination as necessary to protect human health and the environment; and~~

~~ii. for the control of the sources of contamination, or for the removal or decontamination of equipment, devices, or structures, that are technically practicable and consistent with the overall objective of the remedy.~~

~~f. If the administrative authority approves the plan for alternate measures submitted pursuant to Subparagraph E.7.e of this Section, the permit holder must implement the plan.~~

~~g. All solid wastes that are managed pursuant to a remedy required under Paragraph E.6 of this Section, or an interim measure required under Clause E.4.f.iii of this Section, shall be managed in a manner:~~

~~i. that is protective of human health and the~~

~~environment; and~~

~~ii. that complies with applicable RCRA requirements.~~

~~h. Remedies selected pursuant to Paragraph E.6 of this Section shall be considered complete when:~~

~~i. the permit holder complies with the groundwater protection standards established under Subparagraph E.4.g of this Section at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under Paragraph E.1 of this Section; and~~

~~ii. compliance with the groundwater protection standards established under Subparagraph E.4.g of this Section has been achieved by demonstrating that concentrations of LAC 33:VII.3005.Table 2 parameters or constituents have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in Subparagraph E.2.e of this Section. The administrative authority may specify an alternative length of time during which the permit holder must demonstrate that concentrations of LAC 33:VII.3005.Table 2 parameters or constituents have not exceeded the groundwater protection standard(s) taking into consideration:~~

~~(a). extent and concentration of the release(s);~~

~~(b). behavior characteristics of the hazardous parameters or constituents in the groundwater;~~

~~(c). accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities~~

~~that may affect the accuracy; and~~

~~(d). characteristics of the groundwater;~~

~~iii. all actions required to complete the remedy have been satisfied.~~

~~(a). Upon completion of the remedy, the permit holder must submit to the administrative authority within 14 days a certification that the remedy has been completed in compliance with the requirements of Subparagraph E.7.h of this Section. The certification must be signed by the permit holder and approved by the administrative authority.~~

~~(b). When, upon completion of the certification, the administrative authority determines that the corrective action remedy has been completed in accordance with the requirements under Subparagraph E.7.h of this Section, the permit holder shall be released from the requirements for financial assurance for corrective action under LAC 33:VII.727.B.~~

~~8. Assessment Monitoring Program for Solid Waste Disposal Facilities Other than Type II Landfills and Associated Type II Surface Impoundments~~

~~a. An assessment monitoring program as described in Paragraph E.8 of this Section is required to be conducted at solid waste disposal facilities other than Type II landfills and associated Type II surface impoundments whenever a statistically significant increase over background concentrations is detected for one or more of the parameters or constituents sampled and analyzed during the detection monitoring program. The assessment monitoring parameters or constituents shall consist~~

~~of the detection monitoring parameters or constituents, although the administrative authority may add additional parameters or constituents on a site-specific and waste-specific basis.~~

~~b. Within 90 days after triggering an assessment monitoring program, the permit holder must sample and analyze the groundwater at all wells for all the assessment monitoring parameters or constituents.~~

~~c. If assessment monitoring parameters or constituents are detected at concentrations significantly different from background in the resampling event in Subparagraph E.4.b of this Section, the permit holder must, within 14 days of the determination, submit a report to the Office of Environmental Assessment, Environmental Technology Division identifying the assessment monitoring parameters or constituents which are statistically different from background concentrations. The permit holder must also:~~

~~i. within 90 days after the determination is made, submit four bound copies (8 1/2 by 11 inches) of an assessment plan to the Office of Environmental Assessment, Environmental Technology Division, as well as any necessary permit modification, to the Office of Environmental Services, Permits Division that provides for:~~

~~(a). characterization of the nature and extent of the release by installing and sampling additional monitoring wells as necessary;~~

~~(b). installation of at least one additional monitoring well in the direction of the contaminant migration and sampling of this well in~~

~~accordance with Subclause E.8.c.i.(c) of this Section;~~

~~(c). sampling, analysis, and reporting of results of all wells for all assessment monitoring parameters or constituents at least once every 90 days; and~~

~~(d). a schedule for implementing the plan.~~

~~ii. notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off site as indicated by the sampling of the wells in accordance with Clause E.8.c.i of this Section;~~

~~iii. upon consultation with and approval of the administrative authority, must implement any interim measures necessary to ensure the protection of human health and the environment. Interim measures should be in accordance with LAC 33:I.Chapter 13 and, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to Paragraph E.6 of this Section. The following factors must be considered by a permit holder in determining whether interim measures are necessary:~~

~~(a). time required to develop and implement a final remedy;~~

~~(b). actual or potential exposure of nearby populations or environmental receptors to hazardous parameters or constituents;~~

~~(c). actual or potential contamination of drinking water supplies or sensitive ecosystems;~~

~~(d). further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;~~

~~(e). weather conditions that may cause hazardous parameters or constituents to migrate or be released;~~

~~(f). risk of fire or explosion, or potential for exposure to hazardous parameters or constituents as a result of an accident or failure of a container or handling system; and~~

~~(g). other situations that may pose threats to human health and the environment.~~

~~9. Corrective Action for Solid Waste Disposal Facilities Other than Type II Landfills and Associated Type II Surface Impoundments~~

~~a. Corrective action at solid waste disposal facilities other than Type II landfills and associated Type II surface impoundments must be performed in accordance with Paragraph E.9 of this Section and LAC 33:I.Chapter 13.~~

~~b. Within 270 days after the submission of the assessment plan, the permit holder must submit four bound copies (8 1/2 by 11 inches) of a corrective-action plan to remediate the groundwater to the Office of Environmental Assessment, Environmental Technology Division, describing the selected remedy, which shall also include:~~

~~i. a corrective-action groundwater monitoring program which, at a minimum, meets the requirements of an assessment monitoring program under Paragraph E.8 of this Section, and which indicates the effectiveness of the~~

~~corrective action remedy;~~

~~ii. a schedule for initiating and completing remedial activities.~~

~~c. After the corrective-action plan has been approved by the administrative authority and based on the schedule established in Clause E.9.b.ii of this Section, the permit holder must implement a corrective-action program to remediate the groundwater.~~

~~d. Upon completion of the remedy, the permit holder must submit to the administrative authority within 14 days a certification that the remedy has been completed in compliance with the requirements of Subparagraph E.7.h of this Section. The certification must be signed by the permit holder and approved by the administrative authority.~~

~~10. Applicability to Type II Landfills and Associated Surface Impoundments which are also Type I Landfills and Surface Impoundments. Assessment monitoring, assessment of corrective measures, selection of remedies and corrective action plans, and implementation of corrective action plans at landfills and their associated surface impoundments which are both Type I and Type II (i.e., receive both nonindustrial and industrial solid wastes) are governed by Paragraphs E.4-7 of this Section. These facilities are not governed by Paragraphs E.8 and 9 of this Section, which govern all other solid waste disposal facilities. All solid waste disposal facilities are governed by Paragraphs E.1-3 of this Section.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et

seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), repromulgated LR 19:1315 (October 1993), amended by the Office of the Secretary, LR 24:2250 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2521 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§711. Standards Governing Landfills (Type I and II)

A. ~~Facility~~ Surface Hydrology

1. Facilities located in ~~the~~a 100-year flood plain must be filled to bring site elevation above flood levels, or perimeter levees or other measures must be provided to maintain adequate protection against the 100-year flood ~~elevation~~.

2. Facilities located in or within 1,000 feet of an aquifer recharge zone shall be designed to protect the areas from adverse impacts of operations at the facility.

3. Surface-runoff-diversion levees, canals, or devices shall be installed to prevent drainage from the units of the facility ~~which~~that have not received final cover. ~~to adjoining areas during a 24-hour/25-year storm event. When maximum rainfall records are not available, the design standard shall be 12 inches of rainfall below 31 degrees north latitude and nine inches of rainfall above 31 degrees north latitude. If the 24-hour/25-year storm-event level is lower, the design standard shall be required.~~ The proposed system must be designed for a 24 hour/25-year storm event.

4. Facilities located in ~~the~~a 100-year flood plain shall not restrict the flow of the 100-year flood or significantly reduce the temporary water-storage capacity of the floodplain, and the design shall ensure that the flooding does not affect the integrity of the facility or result in the washout of solid waste so as to pose a threat to human health and the environment.

5. Runoff from operating areas or areas which contain solid waste and have not yet received interim compacted cover or final cover shall be considered contaminated and shall not be allowed to mix with noncontaminated surface runoff.

6. A run-on control system shall be installed to prevent run-on during the peak discharge from a 24-hour/25-year storm event.

~~7. Trenches or areas used for waste disposal shall be graded to facilitate drainage.~~

B. ~~Facility~~ Plans and Specifications

1. Facility p~~P~~lans, specifications, and operations represented and described in the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana.

2. Daily and Interim Cover Requirements

a. Cover material ~~must~~shall:

i. minimize vector-breeding areas and animal attraction by controlling:

(a). fly, mosquito, and other insect emergence

and entrance;

(b). rodent burrowing for food and harborage;

and

(c). bird and animal attraction;

ii. control leachate generation by:

(a). minimizing external-moisture infiltration;

(b). minimizing erosion; and

(c). utilizing materials with minimum free-liquid content. ~~and minimum concentrations of constituents monitored in leachate;~~

iii. reduce fire-hazard potential ~~by minimizing inward movement of atmospheric oxygen~~;

iv. minimize blowing paper and litter;

v. reduce noxious odors by minimizing outward movement of methane and other gases;

vi. provide an aesthetic appearance to the landfill operation; and

vii. allow accessibility regardless of weather.

b. Silty or sandy clays applied a minimum of six inches thick at the end of each operating day are satisfactory for daily cover, and silty clays applied a minimum of one foot thick are satisfactory for interim cover.

c. Alternative daily cover, interim cover, or interim

compacted cover materials may be approved by the administrative authority provided the standards of Subparagraph B.2.a of this Section are met. The administrative authority reserves the right to require testing to confirm acceptability. The administrative authority may waive the requirements for daily cover, for Type I landfills only, if the permit holder or applicant can demonstrate that the nature of the waste is such that daily cover is not necessary. Daily cover requirements may not be waived for Type II landfills.

d. Alternative daily cover, interim cover, and interim compacted cover materials submitted for approval ~~should~~shall be available on a regular basis and demonstrate reasonably consistent composition and performance characteristics.

e. Interim cover or interim compacted cover shall be applied on all operating areas of a facility ~~which~~that will not receive solid waste for a period longer than 60 days. Interim cover or interim compacted cover must be applied within 48 hours of the last receipt of solid waste in the operating area. Facilities that provide interim cover or interim compacted cover shall also implement an erosion control plan.

f. Daily and interim cover must be applied and maintained in a condition that ~~will~~shall meet the purposes of Subparagraph B.2.a of this Section.

g. The source of daily and interim cover must be accessible regardless of weather.

3. Levee Construction

a. Levees or other protective measures ~~must~~shall be provided in order to protect the facility against the 100-year flood~~ so as to prevent the washout of~~

~~solid waste~~.

b. If levees are required to protect the facility against the 100-year flood, such perimeter levees shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity and shall ~~provide adequate freeboard above~~protect the facility against the 100-year flood ~~elevation~~.

4. Leachate Control, Collection, Treatment, and Removal Systems.

~~a. The standards in Paragraph B.4 of this Section apply to~~

~~l~~Leachate control, collection, treatment, and removal systems for proposed landfills and units of existing landfills ~~which~~that receive waste on or after the required upgrade date specified in LAC 33:VII.~~31~~513.~~G~~B must comply with these standards. These standards also apply to units of Type II landfills ~~which~~that have not received waste prior to October 9, 1993.

~~a~~b. ~~Leachate Control, Collection, Treatment and Removal Standards~~

a. ~~i.~~ Leachate shall not be managed by allowing the leachate to be absorbed in the waste, unless it is a part of leachate recirculation or other approved technology.

b. ~~ii.~~ Infiltration of water into the waste shall be minimized by daily, interim, and final cover, as required by these regulations.

c. ~~iii.~~ The impact of leachate on the environment shall be minimized by a leachate collection and removal system and a leachate treatment system

designed to ensure positive removal and treatment of generated leachate.

d. ~~iv.~~ Leachate removed shall be handled in such a manner that it does not adversely affect the environment.

e. ~~v.~~ Migration of leachate shall be prevented by liners or other barriers.

~~vi. Representative samples of raw leachate shall be collected and analyzed annually for the same parameters which are required for the facility groundwater monitoring wells in LAC 33:VII.709.E.4.~~

f. ~~vii.~~ The following minimum standards apply to leachate collection and removal systems.

i. ~~(a).~~ The leachate collection system shall be located above the primary liner.

ii. ~~(b).~~ All leachate collection pipes shall be perforated, a minimum of six inches in diameter, and constructed of materials resistant to the leachate.

iii. ~~(c).~~ Leachate cleanout risers or manholes must be provided for each leachate collection line. The maximum length of leachate collection lines shall not exceed the capabilities of the cleanout device.

iv. ~~(d).~~ A granular leachate collection drainage blanket, consisting of a natural or a synthetic material with permeability of $1x10^{-3}$ cm/sec or higher,~~drainage blanket~~ must be provided to trap fines and prevent waste from entering the drainage layer while allowing the passage of leachate. If natural material is used for

the drainage blanket, the thickness of the material shall be at least 12 inches, unless otherwise approved by the administrative authority. If synthetic material is used, sufficient thickness of buffer material shall be placed over the synthetic material to provide protection for the liner system.

v. ~~(e).~~ The flow path of leachate on the liner surface shall be no greater than 100 feet to the point of collection. (For the purpose of determining this distance, the permit holder or applicant may assume that the leachate flow path is perpendicular to the leachate collection pipe.)

vi. ~~(f).~~ The slope on the surface of the liner toward the leachate collection lines shall be a minimum of 2 percent.

vii. ~~(g).~~ The slope of all leachate collection pipes shall be a minimum of 1 percent.

viii. ~~(h).~~ The leachate head shall be maintained in a pumped-down condition such that not more than 1 foot of head shall exist above the lowest ~~bottom~~ elevation of the leachate collection lines.

ix. ~~(i).~~ The equipment used to remove leachate from the collection system shall be adequately sized to accommodate normal facility operations.

x. ~~(j).~~ Trenches or swales shall be provided to protect the leachate collection pipes.

xi. ~~(k).~~ The leachate collection lines shall be sloped down toward the perimeter of the unit. However, other designs may be approved

depending on site specific conditions.

xii. ~~(l).~~ An adequate thickness of gravel shall be placed on all sides of the leachate pipes.

xiii. ~~(m).~~ Gravel size shall be selected ~~carefully~~ to ensure that it is larger than the perforations in the collection pipe.

xiv. ~~(n).~~ ~~A geotextile shall be used to line the base and sidewalls of all leachate collection trenches or swales.~~ The migration of fines into the tops of the trenches shall be minimized by a properly designed, graded soil filter or geotextile.

xv. ~~(o).~~ Materials such as limestone and dolomite shall not be used in the leachate collection system. However, the administrative authority may allow alternate materials to be used in construction of the leachate collection system if the permit holder or applicant can demonstrate that the materials can provide equivalent or superior performance.

xvi. ~~(p).~~ Leachate lines (and other engineering structures) ~~shall~~may not penetrate the liner~~.~~, unless ~~The administrative authority may waive this requirement to allow horizontal penetration of the liner only if~~ the permit holder or applicant can demonstrate that special or unusual circumstances warrant ~~such a waiver and that liner integrity can be protected~~liner penetration.

xvii. ~~(q).~~ An antiseep collar ~~should~~shall be placed around the leachate line that penetrates the liner. A minimum of three feet of recompacted clay or equivalent material shall be placed around the collar.

xviii. ~~(r).~~ All leachate transfer (force-main) lines shall be pressure tested prior to their use.

xix. ~~(s).~~ All control systems for pumps, valves, and meters shall be designed to be operated from the ground level.

5. Liners.

~~a. The standards in Paragraph B.5 of this Section apply to~~ ~~l~~Liners for proposed landfills and units of existing landfills ~~which~~that receive waste on or after the required upgrade date in LAC 33:VII.~~31~~513.~~G~~ must comply with these standards. These standards also apply to units of Type II landfills ~~which~~that did not receive waste before October 9, 1993, as provided in LAC 33:VII.~~31~~513.~~G~~.

~~b~~a. The permit holder or applicant must provide and implement a quality-control and quality-assurance plan for liner construction and maintenance that will ensure that liners are designed, constructed, installed, and maintained properly. All facilities must have quality-control plans for the excavations. All excavations and liners shall be inspected and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana, with the appropriate expertise.

~~c~~b. The permit holder or applicant must demonstrate that the liner is placed upon a base that provides the following:

i. adequate support for the contents;

ii. maximum resistance to settlement of a magnitude sufficient to affect the integrity of the liner or the proper positioning of the leachate collection or leak-detection system;

iii. maximum resistance to hydrostatic heave on the sides or bottom of the excavation; and

iv. maximum resistance to desiccation.

~~d~~c. Units of landfills shall be lined along the sides and bottom with a liner system installed under the supervision of a ~~registered~~professional engineer, licensed in the state of Louisiana and with the appropriate expertise, which consists of the following, in descending order:

i. a leachate collection system designed and constructed in accordance with Paragraph B.4 of this Section; and

ii. a composite liner which consists of a geomembrane liner at least 30-mil thick installed directly above and in uniform contact with a three-foot recompacted clay liner having a hydraulic conductivity no greater than 1 x 10^{-7} cm/sec (If the geomembrane component is high-density polyethylene, then the geomembrane component must be at least 60-mil thick. Any geomembrane liner used must be compatible with the solid waste and leachate in the unit); or

iii. ~~subject to the approval of the administrative authority, an alternative liner successfully make the following demonstration to the administrative authority:~~

~~(a). the unit receives and will receive only industrial solid waste generated on site; and~~

~~(b). the~~an alternative liner system ~~will~~that provides equivalent or greater groundwater protection at the site as compared to the

composite liner design in Clause B.5.~~d~~e.ii of this Section, as demonstrated by generally accepted modeling techniques and based on factors specific to the site and to the solid wastes received. The burden of proof of adequacy of the alternate liner design shall be on the permit holder or applicant.

~~e. Secondary liners may be constructed below and in addition to the required composite liner. The specifications of secondary liners must be approved by the administrative authority on an individual basis.~~

~~f. A leak-detection system may be constructed between the required composite liner and any secondary liner.~~

~~g~~d. Special design conditions may be required in areas ~~where the groundwater table is high~~ or where ~~other~~ circumstances warrant such conditions as determined by the administrative authority. These special design standards may include more protective or stringent standards~~,~~. ~~such as secondary liners (described in Subparagraph B.5.e of this Section) or leak-detection systems, or other conditions.~~

6. Gas Collection ~~and~~/Treatment or Removal System

a. Each unit of the facility with a potential for methane gas production and a migration ~~shall be~~ may be required to provide~~d with~~ a ~~methane~~ gas collection ~~and~~ /treatment or removal system.

b. ~~The collection system shall be vented to the atmosphere or connected to a dispersal system or resource recovery system in accordance with accepted practices.~~ If the facility is subject ot 40 CFR Part 60 Subpart WWW, then installation of a collection and control system that captures generated gas within the landfill is required.

~~e~~b. If the facility is not subject to 40 CFR Part 60 Subpart WWW, a ~~The~~ gas collection~~ and~~ /treatment or removal system shall be such that it limits methane gas to lower-explosive limits at the facility boundary and to 25 percent of the lower explosive limits in facility buildings.

~~d~~c. Sampling protocol, chain of custody, and test methods shall be established for all gas collection~~ and~~ /treatment or removal systems.

C. Facility Administrative Procedures

1. ~~Recordkeeping and~~ Reports

~~a. Reports~~

a. ~~i.~~ The permit holder shall submit annual reports to the Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in wet-weight tons per year, or for landfarms, expressed in both wet and dry-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. The annual disposer's report shall also indicate the estimated remaining permitted capacity at the facility as of the end of the reporting period (expressed in wet-weight tons). All calculations used to determine the amounts of solid waste received for disposal during the annual-reporting period and to determine remaining capacity shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division. A form to be used for this purpose ~~must~~shall be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

b. ~~ii.~~ The reporting period for the disposer annual report

shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c. ~~iii.~~ Annual reports shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

d. ~~iv.~~ The annual report is to be provided for each individual permitted facility on a separate annual reporting form.

e. ~~v.~~ A facility ~~which~~that receives industrial solid waste shall utilize, in its annual report, the ~~seven-digit~~appropriate industrial waste code number. ~~that has been assigned by the administrative authority to the industrial solid waste generator.~~

2. ~~b.~~ Recordkeeping

a. ~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b. ~~ii.~~ The permit holder shall maintain records of transporters transporting waste for processing or disposal at the facility. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the administrative authority.

c. ~~iii.~~ Records kept on site for all facilities shall include but not be limited to:

i. ~~(a).~~ copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application;

iv. ~~(d).~~ permit modifications;

v. ~~(e).~~ certified field notes for construction;

vi. ~~(f).~~ operator training programs;

vii. ~~(g).~~ daily log;

viii. ~~(h).~~ quality-assurance/quality-control records;

ix. ~~(i).~~ inspections by the permit holder or operator including but not limited to inspections to detect incoming hazardous waste loads;

x. ~~(j).~~ operator certificates from the Board of Certification and Training for Solid Waste Disposal System Operators ~~Certificates~~ (if applicable);

xi. ~~(k).~~ records demonstrating that liners, leachate-control systems, and leak-detection and cover systems are constructed or installed in accordance with appropriate quality assurance procedures;

xii. ~~(l).~~ records on the leachate volume and results of the leachate sampling;

xiii. ~~(m).~~ monitoring, testing, or analytical data;

xiv. ~~(n).~~ any other applicable or required data

deemed necessary by the administrative authority;

xv. ~~(o).~~ records on groundwater sampling results;

xvi. ~~(p).~~ post-closure monitoring reports; and

xvii. ~~(q).~~ copies of all documents received from and submitted to the department.

~~2~~3. Personnel

a. Facilities shall have the personnel necessary to achieve the operational requirements of the facility. All personnel involved in waste handling at the facility must be trained adequately in procedures to recognize and exclude receipt or disposal of hazardous wastes and PCB wastes.

b. Facilities receiving residential and commercial solid waste shall have the numbers and levels of certified operators employed at the facility, as required by the department in accordance with~~*Louisiana Administrative Code*, Title~~ LAC 46~~,~~: Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

D. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste and PCB waste shall be strictly prohibited and prevented. Permit holders of Type II landfills must implement a program of random inspections of incoming loads to detect and prevent the disposal of

hazardous waste or PCB waste and must keep records of these inspections. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

b. Open burning of solid waste shall not be practiced at Type I or II landfills.

c. Salvaging shall be prevented unless approved by the administrative authority.

d. Scavenging shall be prevented.

e. ~~Only i~~Infectious waste from hospitals or clinics ~~which has been properly packaged and identified and is certified noninfectious by the Department of Health and Hospitals~~ may be deposited in Type I or II landfills only if it has been properly packaged and identified and is certified noninfectious by the Department of Health and Hospitals.

f. Grazing of domestic livestock shall not be allowed ~~on operating areas~~in the vicinity of active landfill units or units under closure or post closure.

g. Except as provided in Clauses D.1.g.i and ii of this Section, liquid wastes shall not be disposed of in a landfill, and facilities that plan to accept liquid wastes shall provide a means for solidifying them and an appropriate quality assurance/quality-control program.

i. Bulk or non-containerized liquid ~~may~~shall not be placed in a landfill unless the waste is ~~household~~residential waste, other than septic

waste, leachate and gas condensate that is derived from the landfill, and liquid from leachate recirculation operation.

~~ii. Containers holding liquid waste may not be placed in a landfill unless:~~

~~(a). the container is a small container similar to that normally found in household waste;~~

~~(b). the container is designed to hold liquids for use other than storage; or~~

~~(c). the waste is household~~residential ~~waste.~~

h. Residential, commercial, and other wastes deemed acceptable by the administrative authority on a site-specific basis may be disposed of in Type I and II landfills. A comprehensive quality-assurance/quality-control plan shall be provided for facilities receiving friable asbestos and dewatered domestic wastewater treatment plant sludge.

i. No solid waste shall be deposited in standing water.

j. ~~The following limitations apply to Type I landfills:~~

~~i.~~ Industrial solid waste, incinerator ash, and nonhazardous petroleum-contaminated media and debris generated by underground storage tanks (UST) corrective action ~~may~~shall be disposed of only in Type I facilities. A comprehensive quality-assurance/quality-control plan shall be in place before the receipt of these wastes.

~~ii. Incinerator ash may be disposed of only in a Type I~~

~~facility. A comprehensive quality-assurance/quality-control program shall be in place before the receipt of this waste.~~

2. Facility Operational Plans. Operational plans shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of disposal operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used during wet weather (~~p~~Particular attention ~~should~~shall be given to maintenance of access roads and to water management.);

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented;

e. the sampling protocol, chain of custody, and test methods that will be used in the gas-monitoring systems;

f. the ~~engineering protocols and testing frequencies~~method(s) that will be used to ensure that the grade and slope of both the on-site drainage system and the run-on diversion system are maintained and serve their intended functions;

g. the ~~engineering protocols and testing frequencies~~method(s) that will be used to ensure that the leachate collection~~ and~~ /treatment system is functioning as designed; and

h. the measuring protocol to be used and the frequency with

which the depth of leachate within the collection system will be checked, as well as how the leachate will be removed and transported to the treatment facility.

3. Facility Operational Standards

a. Air-Monitoring Standards

i. Facilities receiving waste with a potential to produce methane gas shall be subject to the air-monitoring requirements.

ii. The permit holder or applicant subject to air-monitoring requirements shall submit to the Office of Environmental Services, Permits Division a comprehensive air-monitoring plan that will limit methane gas levels to less than the lower-explosive limits at the facility boundary and to 25 percent of the lower-explosive limits in facility buildings.

(a). The type and frequency of monitoring must be determined based on the following factors:

(i). soil conditions;

(ii). hydrogeologic conditions surrounding the facility;

(iii). hydraulic conditions surrounding the facility; and

(iv). the location of facility structures and property boundaries.

(b). The minimum frequency of monitoring shall

be quarterly.

iii. If methane gas levels exceeding the limits specified in Clause D.3.a.ii of this Section are detected, the permit holder must:

(a). immediately take all necessary steps to ensure protection of human health and notify the Office of Environmental Compliance in the manner provided in LAC 33:I.3923;

(b). within 30 days of detection, submit a remediation plan to the Office of Environmental Assessment, Environmental Technology Division for the methane gas releases. The plan shall describe the nature and extent of the problems and the proposed remedy and shall include an implementation schedule. The plan must be implemented within 60 days of detection.

iv. The permit holder shall make prompt notification to the Office of Environmental Compliance in accordance with LAC 33:I.3923 when strong odors occur at facility boundaries.

v. Records of inspections, surveys, and all gas monitoring results shall be maintained at the facility.

vi. Odors shall be controlled by the best means practicable.

vii. Facilities must ensure that the units do not violate any applicable requirements developed under a state implementation plan (SIP) approved or promulgated ~~pursuant to~~in accordance with Section 110 of the Clean Air Act, as amended.

b. Waste shall be deposited under facility supervision in the smallest practicable area, spread in layers, and compacted to approximately two feet thick or, if baled, stacked and daily cover applied.

c. Vector Control

i. Food or harborage shall be denied to rats, insects, and birds to the extent possible by using proper cover or other means acceptable on a site-specific basis. Where necessary, an approved pesticide shall be applied in accordance with applicable state and federal laws.

ii. A schedule of the type and frequency of vector control measures to be used shall be submitted to the Office of Environmental Services, Permits Division for approval in the operational plan.

d. Waste ~~Testing~~Characterization. Hazardous waste determination, in accordance with LAC 33:V.1103, shall be performed on all solid waste going to disposal facilities, prior to acceptance of the solid waste and annually for two years following acceptance. Every year thereafter, the generator shall certify that the waste remains unchanged. ~~The following operational standards apply to waste testing for facilities receiving domestic sewage sludge, industrial solid waste, incinerator ash, or nonhazardous petroleum contaminated media and debris generated by underground storage tanks (UST) corrective action:~~

~~i. Facilities which receive domestic septage or sewage sludge from publicly owned treatment works shall require the waste be tested for toxicity characteristics leachate procedure (TCLP) analysis and priority pollutants prior to~~

~~acceptance of the waste and annually for two years following acceptance. Every year thereafter, the generator must certify that the waste remains unchanged.~~

~~ii. Facilities which receive industrial waste (Type I) shall require testing for TCLP constituents prior to acceptance of the waste and annually thereafter, or documented process knowledge which confirms that the waste is not a characteristic or listed hazardous waste as defined in LAC 33:V.Subpart 1, or by federal regulations. Nonhazardous petroleum-contaminated media and debris generated from underground storage tanks (UST) corrective action will require testing for the appropriate constituents of TCLP prior to acceptance of the waste.~~

~~iii. Type I facilities which receive incinerator ash shall require testing of the ash for TCLP metals and dioxins prior to acceptance and thereafter quarterly for TCLP metals and annually for dioxins.~~

4. Sufficient equipment shall be provided and maintained at all facilities to meet the facilities' operational needs.

5. Segregation of Wastes

a. White goods may be stored in a unit separate from other solid wastes and shall be removed every 30 days. The facility shall maintain a log of dates and volumes of white goods removed from the facility.

b. Tree limbs, leaves, clippings, and similar residues may be segregated and deposited in a permitted unit separate from other solid waste and shall be covered every 30 days, or more often if necessary to control blowing and prevent rodent harborage.

c. Construction material and woodwastes may be deposited in a permitted unit separate from other solid wastes and covered every 30 days. This unit must meet the standards provided in LAC 33:VII.719 and 721.

6. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the Office of Environmental Services, Permits Division and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph D.6.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of Environmental Services, Permits Division.

c. Applicants for Type I facilities shall obtain certification from the local:

i. fire department as to whether or not that department has the ability to meet the response requirements of Section 472 of the Life Safety code of the National Fire Protection association.

ii. emergency medical services as to whether or not that agency has the ability to meet the response requirements of Section 473 of the Life Safety

Code of the National fire Protection association.

iii. hospital as to whether they are able to accept and treat patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type I facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 711.D.6.c above.

e. The requirements of 711.D.6.c and d shall not apply if the applicant for a Type I facility has the ability to meet the response requirements of Section 472 of the Life Safety Code of the National Fire Protection Association.

f. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

g. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 711.D.6.f above.

h. Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR

1910.120.

i. The provisions of 711.D.6.f-h shall not apply to a Type I facility that is also a Type II or III facility.

E. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

2. Preclosure Requirements

a. Final cover installation shall be initiated no later than 30 days after and shall be completed no later than 90 days after final grades are reached in each unit of a facility or the date of known final receipt of solid waste in the unit, whichever comes first. These deadlines may be extended by the administrative authority if necessary due to inclement weather or other circumstances to a maximum of 60 days for initiation and a maximum of 180 days for completion.

b. Standing water shall be solidified or removed.

c. The runoff-diversion system shall be maintained until the

final cover is installed.

d. The runoff-diversion system shall be maintained and modified to prevent overflow of the landfill to adjoining areas.

e. Insect and rodent inspection is required to be documented before installation of final cover, and extermination measures must be provided if required as a result of the facility inspection.

f. Final ~~machine~~ compacti~~ng~~on and grading shall be completed before capping.

g. All facilities with a potential for gas production or migration shall provide a gas collection ~~and~~ /treatment or removal system.

3. Closure Requirements

a. Final Cover

i. Final cover shall be placed on top of the daily or intermediate cover that is used as the grading layer to provide a stable base for subsequent layers.

ii. Final cover shall be a minimum of 24 inches of recompacted clay with a permeability of less than 1×10^{-7} cm/sec ~~or shall be at least as impermeable as the liner system beneath the cover, whichever is less~~over lain with an approved geomembrane covering entire area. Areas that are steeper than 4:1 slope do not require geomembrane.

iii. The Office of Environmental Compliance, Surveillance Division shall be notified after the final cover is applied.

iv~~iii~~. A minimum of six inches of topsoil shall be ~~installed~~placed on top of the soil cover to support vegetative growth to prevent erosion.

v~~iv~~. Other covers that satisfy the purposes of minimizing infiltration of precipitation, fire hazards, odors, vector food and harborage, as well as discouraging scavenging and limiting erosion, may be submitted for consideration by the administrative authority.

~~v. Synthetic material or a combination of clay and synthetic material approved by the administrative authority may also be used as a final cover.~~

vi. Alternate final cover used ~~pursuant to~~in accordance with Clauses E.3.a.~~i~~v ~~and vi~~ of this Section must provide performance equivalent to or better than the final cover requirements in Clauses E.3.a.ii and iii of this Section.

vii. ~~For effective drainage, t~~The side slopes shall be no steeper than 3(H):1(V) and the top of the final cap shall be at minimum a four percent slope for proper maintenance and drainage.

b. After a closure inspection and approval, the permit holder shall plant a ground cover to prevent erosion and to return the facility location to a more natural appearance.

c. Landfills must be closed in a manner that minimizes the need for further maintenance and minimizes the post-closure release of leachate to ground or surface waters to the extent necessary to protect human health and the environment. Quality-control procedures ~~must~~shall be developed and implemented to

ensure that the final cover is designed, constructed, and installed properly.

d. The permit holder shall update the parish mortgage and conveyance records by entering the specific location of the facility and specifying that the property was used for the disposal of solid waste. The document shall identify the name and address of the person with knowledge of the contents of the facility. An example of the form to be used for this purpose is provided in LAC 33:VII.3011. The facility shall provide the Office of Environmental Services, Permits Division with a true copy of the document filed and certified by the parish clerk of court.

4. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder. The permit holder must submit a request for the release of this fund to the Office of Management and Finance, Financial Services Division.

F. Facility Post-Closure Requirements

1. The post-closure period begins when the Office of Environmental Services, Permits Division approves closure. The length of the post-closure care period for landfills may be:

a. decreased by the administrative authority if the permit holder demonstrates that the reduced period is sufficient to protect human health and the environment in accordance with LAC 33:I.Chapter 13, and this demonstration is approved by the administrative authority (Any demonstration must provide supporting data, including adequate groundwater monitoring data.); or

b. increased by the administrative authority if the administrative authority determines that the lengthened period is necessary to protect human health and the environment in accordance with LAC 33:I.Chapter 13.

2. Post-Closure Care Length

a. Facilities ~~which~~that receive solid waste on or after October 9, 1993, must remain in post-closure care for 30 years after closure of the facility.

b. Existing facilities ~~which~~that do not receive waste on or after October 9, 1993, must remain in post-closure care for three years after closure of the facility.

c. However, if the facility received waste on or after October 9, 1991, the final cover must be maintained as specified in Subparagraph F.3.a of this Section for 30 years after closure.

3. The post-closure care, except as otherwise specified above, must consist of at least the following:

a. maintaining the integrity and effectiveness of the final cover (including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events), preventing run-on and runoff from eroding or otherwise damaging the final cover; and providing annual reports to the Office of Environmental ~~Compliance, Surveillance~~Services, Permits Division on the integrity of the final cap~~;~~. The Office of Environmental Compliance shall be notified of any problems and corrective action measures associated with the integrity and effectiveness of the final cover;

b. maintaining and operating the leachate collection and removal system, until leachate is no longer generated or until the permit holder can demonstrate that the leachate no longer poses a threat to human health or the environment in accordance with LAC 33:I.Chapter 13;

c. maintaining and operating the gas collection~~ and ~~/treatment or removal system and the gas monitoring system; and

d. maintaining the groundwater-monitoring system and monitoring the groundwater in accordance with LAC 33:VII.~~709.E~~805.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 19:1143 (September 1993), repromulgated LR 19:1316 (October 1993), amended by the Office of the Secretary, LR 24:2251 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2523 (November 2000), repromulgated LR 27:704 (May 2001), amended LR 30:1676 (August 2004), amended by the Office of Environmental Assessment, LR 30:2024 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§713. Standards Governing Surface Impoundments (Type I and II)

A. ~~Facility~~ Surface Hydrology

1. Facilities located in a~~ the~~ 100-year flood plain must be filled to

bring site elevation above flood levels, or perimeter levees or other measures must be provided to maintain adequate protection against the 100-year flood~~ elevation~~.

2. Facilities located in or within 1,000 feet of an aquifer recharge zone shall be designed to protect the areas from adverse impacts of operations at the facility.

3. Surface-runoff-diversion levees, canals, or devices shall be installed to prevent drainage from the units of the facility ~~which~~that have not received final cover. ~~to adjoining areas during a 24-hour/25-year storm event. When rainfall records are not available, the design standard shall be 12 inches of rainfall below 31 degrees north latitude and nine inches of rainfall above 31 degrees north latitude. If the 24-hour/25-year storm event level is lower, the design standard shall be required.~~ The proposed system must be designed for a 24-hour/25-year storm event. Adequate freeboard shall be provided to prevent over-topping by wave action.

4. Facilities located in ~~the~~a 100-year floodplain shall not restrict the flow of the 100-year flood or significantly reduce the temporary water-storage capacity of the floodplain, and the design ~~should~~shall ensure that the flooding does not affect the integrity of the facility or result in the washout of solid waste so as to pose a threat to human health and the environment.

5. Surface run-on from outside the facility shall be diverted and prevented from entering the facility, with provisions for maintaining adequate freeboard above the requirements of Paragraph A.1~~.~~ of this Section. A run-on control system shall be installed to prevent run-on during the peak discharge from a 24 hour/25-year storm event.

6. Existing surface impoundments, including existing ditches ~~which~~that receive solid waste, ~~which~~that are designed to collect or transport run-on (e.g., stormwater) are not required to comply with any of the requirements of LAC 33:VII.713.A.3, 4, and 5. This Subsection does not relieve such facilities from compliance with the Louisiana Water Quality regulations (LAC 33:Part IX).

B. ~~Facility~~ Plans and Specifications

1. Plans, specifications, and operations represented and described in the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana.

2. Levee Construction

a. Levees or other protective measures must be provided in order to protect the facility against the 100-year flood ~~so as to prevent the washout of solid waste~~.

b. If levees are required to protect the facility against the 100-year flood, such perimeter levees shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity and shall ~~provide adequate freeboard above~~protect the facility against the 100-year flood ~~elevation~~.

3. Liners

a. The standards in Paragraph B.3 of this Section apply to liners for Type I and II proposed surface impoundments and for surface impoundments

constructed subsequent to the required upgrade date specified in LAC 33:VII.~~31~~513~~.G~~. (Units of surface impoundments on which construction is completed prior to the upgrade date specified in LAC 33:VII.~~31~~513~~.G~~ and which have received a temporary permit or standard permit prior to February 1, 1993, are not governed by these liner standards.)

b. The permit holder or applicant must provide and implement a quality-control ~~and~~ /quality-assurance plan for liner construction and maintenance that will ensure that liners are designed, constructed, installed, and maintained properly. All facilities must have quality-control/quality assurance plans for the excavations. All excavations and liners shall be inspected and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana, with the appropriate expertise.

c. The permit holder or applicant must demonstrate that the liner is placed upon a base that provides the following:

i. adequate support for the contents;

ii. maximum resistance to settlement of a magnitude sufficient to affect the integrity of the liner or the proper positioning of the leachate-collection or leak-detection system;

iii. maximum resistance to hydrostatic heave on the sides or bottom of the excavation; and

iv. maximum resistance to desiccation.

d. Units of surface impoundments shall be lined along the sides and bottom with a composite liner consisting of a geomembrane liner at least 30-mil thick installed directly above and in uniform contact with a three-foot recompacted clay

liner having a hydraulic conductivity no greater than 1 x 10^{-7} cm/sec ~~which~~that has been installed under the supervision of a ~~registered~~professional engineer, licensed in the state of Louisiana and with the appropriate expertise. (If the geomembrane component is high-density polyethylene, then the geomembrane component must be at least 60-mil thick. Any geomembrane liner used must be compatible with the solid waste and leachate in the unit.) An alternative liner system ~~which~~that ~~will~~shall provide equivalent or greater groundwater protection at the site as compared to the composite liner, as demonstrated by generally accepted modeling techniques and based on factors specific to the site and to the solid wastes received, may be used. The burden of proof of adequacy of the alternate liner design shall be on the permit holder or applicant.

~~e. Secondary liners may be constructed below and in addition to the required composite liner. The specifications of secondary liners must be approved by the administrative authority on an individual basis.~~

~~f. A leak-detection system may be constructed between the required composite liner and any secondary liner. The specifications of the leak-detection system must be approved by the administrative authority on an individual basis.~~

~~g~~e. Special design conditions may be required in areas ~~where the~~with a high groundwater condition~~table is high~~ or where other circumstances warrant such conditions as determined by the administrative authority. These special design standards may include more protective or stringent standards such as secondary liners ~~(described in Subparagraph B.3.e of this Section)~~ or leak-detection systems, or other conditions.

4. Gas Collection~~ and~~ /Treatment or Removal System. The following

standards apply to Type I and II surface impoundments not performing clean closure~~:~~.

a. Each unit of the facility with a potential for methane gas production and migration shall be provided with a methane gas collection~~ and~~ /treatment or removal system.

b. The collection system shall be vented to the atmosphere or connected to a dispersal system or resource recovery system in accordance with accepted practices.

c. The gas collection~~ and~~ /treatment or removal system shall be such that it limits methane gas to lower-explosive limits at the facility boundary and to 25 percent of the lower-explosive limits in facility buildings.

d. Sampling protocol, chain of custody, and test methods shall be established for all gas collection~~ and~~ /treatment or removal systems.

C. Facility Administrative Procedures

1. ~~Recordkeeping and~~ Reports

a. ~~Reports~~

~~i.~~ The permit holder shall submit annual reports to the Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. If applicable, the annual disposer's report shall also indicate the estimated remaining permitted capacity at the facility as of the end of the reporting period (expressed in wet-weight tons). All calculations used to determine the amounts of solid waste received for disposal and to

determine remaining capacity during the annual-reporting period shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division. A form to be used for this purpose must be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

b. ~~ii.~~ The reporting period for the processor and/or disposer annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c. ~~iii.~~ Annual reports shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

d. ~~iv.~~ The annual report is to be provided for each individual permitted facility on a separate annual-reporting form.

e. ~~v.~~ A facility which receives industrial solid waste shall utilize, in its annual report, the ~~seven-digit~~appropriate industrial waste code number ~~that has been assigned by the administrative authority to the industrial solid waste generator~~.

2. ~~b.~~ Recordkeeping

a. ~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b. ~~ii.~~ The permit holder shall maintain records of transporters transporting waste for processing or disposal at the facility. The records shall

include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the administrative authority.

c. ~~iii.~~ Records kept on site for all facilities shall include, but not be limited to:

i. (a). copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application;

iv. ~~(d).~~ permit modifications;

v. ~~(e).~~ certified field notes for construction;

vi. ~~(f).~~ operator training programs;

vii. ~~(g).~~ daily log;

viii. ~~(h).~~ quality-assurance/quality-control records;

ix. ~~(i).~~ inspections by the permit holder or operator;

x. ~~(j).~~ operator certificates from the Board of Certification and Training for Solid Waste Disposal System Operators ~~Certificates~~ (if applicable);

xi. ~~(k).~~ records demonstrating that liners and leak-detection and cover systems are constructed or installed in accordance with appropriate assurance procedures;

xii. ~~(l).~~ monitoring, testing, or analytical data;

xiii. ~~(m).~~ any other applicable or required data deemed necessary by the administrative authority;

xiv. ~~(n).~~ records on groundwater sampling results;

xv. ~~(o).~~ post-closure monitoring reports; and

xvi. ~~(p).~~ copies of all documents received from or submitted to the department.

~~2~~3. Personnel

a. Facilities shall have the personnel necessary to achieve the operational requirements of the facility.

b. Facilities receiving residential and commercial solid waste shall have the numbers and levels of certified operators employed at the facility~~,~~ as required by the department in accordance with ~~*Louisiana Administrative Code*, Title~~LAC 46:~~,~~ Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

D. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

b. Open burning shall not be practiced unless authorization is first obtained from the administrative authority and any other applicable federal, state, and local authorities.

c. Salvaging shall be prevented unless approved by the administrative authority.

d. Scavenging shall be prevented.

~~e. The following limitations apply to Type I surface impoundments.~~

~~i. Industrial solid waste, and nonhazardous petroleum-contaminated media and debris generated by underground storage tanks (UST) corrective action may be processed or disposed of only in Type I facilities. A comprehensive quality-assurance/quality-control plan shall be in place before the receipt of these wastes.~~

~~ii. Incinerator ash may be disposed of only in a Type I facility. A comprehensive quality-assurance/quality-control program shall be in place before the receipt of this waste.~~

2. Facility Operational Plans. Operational plans shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of disposal operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used

during wet weather (particular attention ~~should~~shall be given to maintenance of access roads and to water management);

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented;

e. the sampling protocol, chain of custody, and test methods that will be used in the gas-monitoring systems;

f. the ~~engineering protocols and testing frequencies~~method(s) that will be used to ensure that the grade and slope of both the on-site drainage system and the run-on diversion system are maintained and serve their intended functions;

g. the ~~engineering protocols and testing frequencies~~method(s) that will be used to ensure that the designed capacity of the impoundment remains unchanged; and

h. the methods and inspection frequencies that will be used to establish that the levees and required freeboards are maintained.

3. Facility Operational Standards

a. Air-Monitoring Standards

i. Facilities receiving waste with a potential to produce methane gas shall be subject to the air-monitoring requirements.

ii. The permit holder or applicant subject to air-monitoring requirements shall submit to the Office of Environmental Services, Permits Division a comprehensive air-monitoring plan that will limit methane gas levels to less than the lower-explosive limits at the facility boundary and to 25 percent of the lower-

explosive limits in facility buildings.

(a). The type and frequency of monitoring ~~must~~shall be determined based on the following factors:

(i). soil conditions;

(ii). hydrogeologic conditions surrounding the facility;

(iii). hydraulic conditions surrounding the facility; and

(iv). the locations of the facility structures and property boundaries.

(b). The minimum frequency of monitoring shall be quarterly.

iii. If methane gas levels exceeding the limits specified in Clause D.3.a.ii of this Section are detected, the owner or operator ~~must~~shall:

(a). immediately take all necessary steps to ensure protection of human health and notify the Office of Environmental Compliance in the manner provided in LAC 33:I.3923; and

(b). within 30 days of detection, submit a remediation plan for the methane gas releases to the Office of Environmental Assessment, Environmental Technology Division. The plan shall describe the nature and extent of the problem and the proposed remedy, and shall include an implementation schedule. The plan ~~must~~shall be implemented within 60 days of detection.

iv. The permit holder shall make prompt notification to the Office of Environmental Compliance in accordance with LAC 33:I.3923 when strong odors occur at facility boundaries or when methane gas levels exceed the limit specified in Clause D.3.a.ii of this Section.

v. Records of inspections, surveys, and gas monitoring results shall be maintained at the facility.

vi. Odors shall be controlled by the best means practicable.

vii. Facilities ~~must~~shall ensure that the units not violate any applicable requirements developed under a state implementation plan (SIP) approved or promulgated ~~pursuant to~~in accordance with Section 110 of the Clean Air Act, as amended.

b. Surface impoundments shall be designed, constructed, maintained, and operated to prevent overtopping by overfilling, wave action, or action of storms.

c. Surface impoundments shall be inspected daily and after storms to detect evidence of deterioration of the dikes and levees, overtopping, malfunctions, or improper operation. Excessive vegetative growth that prevents proper access, inspection, or operation, or may provide a conduit for groundwater contamination shall be removed.

d. If a leak in an impoundment is found, the administrative authority shall be notified in accordance with LAC 33:I.Chapter 39.

e. Waste ~~Testing~~Characterization. Hazardous waste determination, in accordance with LAC 33:V.1103, shall be performed on all solid waste going to disposal facilities, prior to acceptance of the solid waste and annually for two years following acceptance. Every year thereafter, the generator shall certify that the waste remains unchanged. ~~The following operational standards apply to waste testing for facilities receiving domestic sewage sludge, industrial solid waste, incinerator ash, or nonhazardous petroleum-contaminated media and debris generated by underground storage tanks (UST) corrective action.~~

~~i. Facilities which receive domestic septage or sewage sludge from publicly owned treatment works shall require the waste be tested for toxicity characteristics leachate procedure (TCLP) analysis and priority pollutants prior to acceptance of the waste and annually for two years following acceptance. Each year thereafter, the generator must certify that the waste remains unchanged.~~

~~ii. Facilities which receive industrial waste (Type I) shall require testing for TCLP constituents prior to acceptance of the waste and annually thereafter, or documented process knowledge which confirms that the waste is not a characteristic or listed hazardous waste as defined in LAC 33:V.Subpart 1, or by federal regulations. Nonhazardous petroleum-contaminated media and debris generated from underground storage tanks (UST) corrective action will require testing for the appropriate constituents of TCLP prior to acceptance of the waste.~~

~~iii. Type I facilities which receive incinerator ash shall require testing of the ash for TCLP metals and dioxins prior to acceptance and thereafter quarterly for TCLP metals and annually for dioxins.~~

4. Sufficient equipment shall be provided and maintained at all facilities to meet the facilities' operational needs.

5. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the Office of Environmental Services, Permits Division and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph D.5.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of Environmental Services, Permits Division.

c. Applicants for Type I facilities shall obtain certification from the local:

i. fire department as to whether or not that department has the ability to meet the response requirements of Section 472 of the Life Safety code of the National Fire Protection association.

ii. emergency medical services as to whether or not that agency has the ability to meet the response requirements of Section 473 of the Life Safety Code of the National fire Protection association.

iii. hospital as to whether they are able to accept and treat

patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type I facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 713.D.5.c above.

e. The requirements of 713.D.5.c and d shall not apply if the applicant for a Type I facility has the ability to meet the response requirements of Section 472 of the Life Safety Code of the National Fire Protection Association.

f. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

g. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 713.D.5.f above.

h. Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR 1910.120.

i. The provisions of 713.D.5.f-h shall not apply to a Type I

facility that is also a Type II or III facility.

E. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

2. Preclosure Requirements. The following standards apply to preclosure requirements for surface impoundments with on-site closure~~:~~.

a. All facilities with a potential for gas production or migration shall provide a gas collection~~ and~~ /treatment or removal system.

b. The runoff-diversion system shall be maintained and modified to prevent overflow of the facility to adjoining areas.

3. Closure Requirements

a. Surface liquids and sludges containing free liquids shall be dewatered or removed.

b. If a clean closure is achieved, there are no further post-closure requirements. The closure plan ~~must~~shall reflect a method for determining that all waste has been removed and such a plan shall, at a minimum, include the following:

i. identification (waste analysis) of the wastes that have entered the facility;

ii. selection of the indicator parameters to be sampled ~~which~~that are intrinsic to the waste that have entered the facility in order to establish clean-closure criteria. Justification of the parameters selected shall be provided in the closure plan;

iii. sampling and analyses of the uncontaminated soils in the general area of the facility for a determination of background levels using the indicator parameters selected. A diagram showing the location of the area proposed for the background sampling, along with a description of the sampling and testing methods, shall be provided and the Office of Environmental Compliance, Surveillance Division shall be notified at least five days prior to any sampling event;

iv. a discussion of the sampling and analyses of the "clean" soils for the selected parameters after the waste and contaminated soils have been excavated. Documentation regarding the sampling and testing methods (i.e., including a plan view of the facility, sampling locations, and sampling quality-assurance/quality-control programs) shall be provided;

v. a discussion of a comparison of the sample(s) from the area of the excavated facility to the background samples, or applicable RECAP standards. Concentrations of the selected parameter(s) of the bottom and side soil samples of the facility ~~must~~shall be equal to or less than the background sample or applicable RECAP nonindustrial standards to meet clean closure criteria;

vi. analyses to be sent to the Office of Environmental Services, Permits Division confirming that clean closure has been achieved;

vii. identification of the facility to be used for the disposal of the excavated waste; and

viii. a statement from the permit holder indicating that, after the closure requirements have been met, the permit holder ~~will~~shall file a request for a closure inspection with the Office of Environmental Services, Permits Division before backfilling takes place. The administrative authority ~~will~~shall determine whether the facility has been closed properly.

c. If solid waste remains at the facility~~, the closure and post-closure requirements for industrial (Type I) solid waste landfills or non-industrial landfill (Type II) shall apply~~ a final cover shall be required that meets the following standards.

i. Final cover shall be a minimum of 24 inches of recompacted clay with a permeability of less than 1 x 10^{-7} cm/sec overlain with an approved geomembrane covering entire area. Areas that are steeper than 4:1 do not require geomembrane.

ii. The Office of Environmental Compliance, Surveillance Division shall be notified after the final cover is applied.

iii. A minimum of six inches of topsoil shall be placed on top of the soil cover to support vegetative growth to prevent erosion.

iv. Other covers that satisfy the purposes of minimizing infiltration of precipitation, fire hazards, odors, vector food and harborage, as well as

discouraging scavenging and limiting erosion, may be submitted for consideration by administrative authority.

v. Alternate final cover used in accordance with Clause E.5.c.iv. of this Section shall provide performance equivalent to or better than the final cover requirements in Clauses E.5.c.i. and iii. of this Section.

vi. The finished grade shall be sufficiently sloped for proper maintenance and drainage.

vii. All facilities with a potential for gas production or migration shall provide a gas collection/treatment or removal system. (moved from 713.E.3.a)

d. After a closure inspection and approval, the permit holder shall plant a ground cover to prevent erosion and to return the facility location to a more natural appearance.

e. Surface impoundments shall be closed in a manner that minimizes the need for further maintenance and minimizes the post-closure release of leachate to ground or surface waters to the extent necessary to protect human health and the environment. Quality-control procedures shall be developed and implemented to ensure that the final cover is designed, constructed, and installed properly.

4. ~~If the permit holder demonstrates that removal of most of the solid waste to achieve an alternate level of contaminants based on indicator parameters in the contaminated soil will be adequately protective of human health and the environment (including groundwater) in accordance with LAC 33:I.Chapter 13, the administrative~~

~~authority may decrease or eliminate the post-closure period.~~Alternate Closure Standards. The administrative authority may allow alternative closure under the following conditions:

a. If levels of contamination at the time of closure meet ~~residential~~nonindustrial standards as specified in LAC 33:I.Chapter 13 and approval of the administrative authority is granted, the requirements of Subparagraphs E.4.b and F of this Section shall not apply. ~~The requirements of Subsection F of this Section, "Facility Post-Closure Requirements," shall apply.~~

b. If levels of contamination at the time of closure meet industrial standards as specified in LAC 33:I.Chapter 13 and approval of the administrative authority is granted, the requirements of Subparagraphs E.4.b and F of this Section shall apply.

5~~b~~. ~~Excepting~~With the exception of those sites closed in accordance with Subparagraph E.4.a of this Section, within 90 days after a closure is completed, the permit holder ~~must~~shall have entered in the mortgage and conveyance records of the parish ~~for~~in which the property is located, a notation stating that solid waste remains at the site and providing the indicator levels obtained during closure.

~~5~~6. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder. The permit holder shall submit a request for the release of this fund to the Office of Management and Finance, Financial Services Division.

F. Facility Post-Closure Requirements

1. The post-closure period begins when the Office of Environmental Services, Permits Division approves closure. The length of the post-closure care period for surface impoundments may be:

a. decreased by the administrative authority if the permit holder demonstrates that the reduced period is sufficient to protect human health and the environment in accordance with LAC 33:I.Chapter 13 and this demonstration is approved by the administrative authority (Any demonstration ~~must~~shall provide supporting data, including adequate groundwater monitoring data.); or

b. increased by the administrative authority if the administrative authority determines that the lengthened period is necessary to protect human health and the environment in accordance with LAC 33:I.Chapter 13.

2. The following standards regarding post-closure requirements apply to surface impoundments with on-site closure and alternative closure standards~~:~~.

a. Post-Closure Care Length

i. Facilities ~~which~~that receive solid waste on or after October 9, 1993, ~~must~~shall remain in post-closure care for 30 years after closure of the facility.

ii. Existing facilities ~~which~~that do not receive waste on or after October 9, 1993, ~~must~~shall remain in post-closure care for three years after closure of the facility.

iii. However, if the facility received waste on or after

October 9, 1991, the final cover ~~must~~shall be maintained as specified in Subparagraph F.2.b of this Section for 30 years after closure.

b. The post-closure care, except as otherwise specified above, ~~must~~shall consist of at least the following:

i. maintaining the integrity and effectiveness of the final cover (including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events), preventing run-on and runoff from eroding or otherwise damaging the final cover; and providing annual reports to the Office of Environmental Compliance, Surveillance Division on the integrity of the final cap;

ii. maintaining and operating, if applicable, the leak-detection system;

iii. maintaining and operating the gas collection, and treatment or~~,~~ removal system and the gas-monitoring system; and

iv. maintaining the groundwater monitoring system and monitoring the groundwater~~ monitoring system~~ in accordance with LAC 33:VII.805.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), repromulgated LR 19:1316 (October 1993), amended by the Office of the Secretary, LR 24:2251 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2524 (November 2000),

repromulgated LR 27:704 (May 2001), amended LR 30:1676 (August 2004), amended by the Office of Environmental Assessment, LR 30:2025 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§715. Standards Governing Landfarms (Type I and II)

A. Facility Surface ~~and Subsurface~~ Hydrology

1. ~~Surface Hydrology~~

~~a.~~ Facilities located in ~~the~~a 100-year flood plain ~~must~~shall be filled to bring site elevation above flood levels, or perimeter levees or other measures ~~must~~shall be provided to maintain adequate protection against the 100-year flood ~~elevation~~.

2. ~~b.~~ Facilities located in or within 1,000 feet of an aquifer recharge zone shall be designed to protect the areas from adverse impacts of operations at the facility.

3. ~~c.~~ Surface-runoff-diversion levees, canals, or devices shall be installed to prevent drainage from the units of the facility ~~which~~that have which have not completed the post-closure period to adjoining areas during a 24-hour/25-year storm event. ~~When rainfall records are not available, the design standard shall be 12 inches of rainfall below 31 degrees north latitude and nine inches of rainfall above 31 degrees north latitude. If the 24-hour/25-year storm-event level is lower, the design standard shall be required.~~

4. ~~d.~~ Facilities located in the 100-year floodplain shall not restrict the flow of the 100-year flood or significantly reduce the temporary water-storage

capacity of the floodplain, and the design ~~should~~shall ensure that the flooding does not affect the integrity of the facility or result in the washout of solid waste so as to pose a threat to human health and the environment.

5. ~~e.~~ A run-on control system shall be installed to prevent run-on during the peak discharge from a 25-year storm event.

6. ~~f.~~ Land slope shall be controlled to prevent erosion.

7. ~~g.~~ The topography of the facility shall provide for drainage to prevent standing water and shall allow for drainage away from the facility.

~~2. Facility Subsurface Hydrology. Landfarms shall be located in a hydrologic section where the historic high-water table is at a minimum three-foot depth below the zone of incorporation, or the water table at the facility shall be controlled to a minimum of a three-foot depth below this zone.~~

B. Facility Plans and Specifications

1. Plans, specifications, and operations represented and described in the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana.

2. Levee Construction

a. Levees or other protective measures ~~must~~shall be provided in order to protect the facility against the 100-year flood~~ so as to prevent the washout of solid waste~~.

b. If levees are required to protect the facility against the 100-

year flood, such perimeter levees of all facilities shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity and shall ~~provide adequate freeboard above~~protect the facility against the 100-year flood ~~elevation.~~

C. Facility Administrative Procedures

1. ~~Recordkeeping and~~ Reports

a. ~~Reports~~

~~i.~~ The permit holder shall submit annual reports to the Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in wet-weight and dry-weight tons per year), for landfarms received from in-state generators and from out-of-state generators during the reporting period. The annual disposer's report shall also indicate the estimated remaining permitted capacity at the facility as of the end of the reporting period (expressed in wet-weight tons). All calculations used to determine the amounts of solid waste received for disposal during the annual-reporting period shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division. A form to be used for this purpose ~~must~~shall be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

b. ~~ii.~~ The reporting period for the disposer annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c. ~~iii.~~ Annual reports shall be submitted to the

~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

d.~~iv.~~ The annual report is to be provided for each individual permitted facility on a separate annual-reporting form.

e.~~v.~~ A facility ~~which~~that receives industrial solid waste shall utilize, in its annual report, the ~~seven-digit~~appropriate industrial waste code number ~~that has been assigned by the administrative authority to the industrial solid waste generator~~.

f.~~vi.~~ The following r~~R~~eports shall be submitted ~~as provided in Subclauses C.1.b.iii.(o)-(r) of this Section~~to the Office of Environmental Assessment, Environmental Technology Division.

i.~~(p).~~ a copy of the semiannual soil waste mixtures tests and analyses of the results with conclusions shall be submitted semiannually to the Office of Environmental Assessment, Environmental Technology Division or more frequently if deemed necessary by the administrative authority;

ii.~~(q).~~ test parameters shall consist of cation-exchange capacity, soil pH, total nitrogen, phosphorus, organic matter, salts (intrinsic to the waste), cumulative metals, and others as deemed necessary on a site and waste specific basis;

iii.~~(r).~~ annual reports of the analysis of all tests results on the soils; land-use; and crop information, calculated amounts of waste applied per acre; total amounts of nitrogen applied per acre; and cumulative-metals loading; and

iv.~~(s).~~ annual reports shall be submitted to the Office of

Environmental Assessment, Environmental Technology Division for a minimum of three years (Type II landfarms) and 10 years (Type I landfarms) after closure and shall contain analyses of all test results of the soils. The post-closure monitoring annual reporting may be reduced for certain types of landfarms if the permit-holder demonstrates to the administrative authority satisfaction that such is warranted.

2. ~~b.~~ Recordkeeping

a. ~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b. ~~ii.~~ The permit holder shall maintain records of transporters transporting waste for processing or disposal at the facility. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the administrative authority.

c. ~~iii.~~ Records kept on site for all facilities shall include, but not be limited to:

i. ~~(a).~~ copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application;

iv. ~~(d).~~ permit modifications;

v. ~~(e).~~ certified field notes for construction;

vi. ~~(f).~~ operator training programs;

vii. ~~(g).~~ daily log;

viii. ~~(h).~~ quality-assurance/quality-control records;

ix. ~~(i).~~ inspections by the permit holder or operator;

x. ~~(j).~~ operator certificates from the Board of Certification and Training for Solid Waste Disposal System Operators ~~Certificates~~ (if applicable);

xi. ~~(k).~~ monitoring, testing, or analytical data;

xii. ~~(l).~~ any other applicable or required data deemed necessary by the administrative authority;

xiii. ~~(m).~~ records on groundwater sampling results;

xiv. ~~(n).~~ post-closure monitoring reports;

xv. ~~(o).~~ copies of all documents received from or submitted to the department; and

~~(p). a copy of the semiannual soil waste mixtures tests and analyses of the results with conclusions shall be submitted semiannually to the Office of Environmental Assessment, Environmental Technology Division or more frequently if deemed necessary by the administrative authority;~~

~~(q). test parameters shall consist of cation-exchange capacity, soil pH, total nitrogen, phosphorus, organic matter, salts (intrinsic to the waste), cumulative metals, and others as deemed necessary on a site and waste~~

~~specific basis;~~

xvi. ~~(r).~~ annual reports ~~of the analysis of all tests results on the soils; land-use; and crop information, calculated amounts of waste applied per acre; total amounts of nitrogen applied per acre; and cumulative metals loading; and~~specified in C.1.f.~~iv~~ of this Section.

~~(s). annual reports shall be submitted to the Office of Environmental Assessment, Environmental Technology Division for a minimum of three years (Type II landfarms) and 10 years (Type I landfarms) after closure and shall contain analyses of all test results of the soils. The post-closure monitoring annual reporting may be reduced for certain types of landfarms if the permit-holder demonstrates to the administrative authority satisfaction that such is warranted.~~

~~2~~3. Personnel

a. Facilities shall have the personnel necessary to achieve the operational requirements of the facility.

b. Facilities receiving residential and commercial solid waste shall have the numbers and levels of certified operators employed at the facility~~,~~ as required by the ~~*Louisiana Administrative Code*, Title~~department in accordance with LAC 46~~,~~: Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

D. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

~~b. Open burning shall not be practiced unless authorization is first obtained from the administrative authority and any other applicable federal, state, and local authorities.~~

~~c. Salvaging shall be prevented unless approved by the administrative authority.~~

~~d. Scavenging shall be prevented.~~

~~e. The following limitations apply to Type I landfarms.~~

b. ~~i.~~ Industrial solid waste and nonhazardous petroleum-contaminated media and debris generated by ~~underground storage tanks (~~UST~~)~~ corrective action ~~may~~shall be disposed of or processed only in Type I or Type I-A facilities. A comprehensive quality-assurance/quality-control plan shall be in place before the receipt of these wastes.

ii. Incinerator ash may be disposed of only in a Type I facility. A comprehensive quality-assurance/quality-control program shall be in place before the receipt of this waste.

f. ~~iii.~~ Grazing by animals whose products are consumed by humans shall be prevented.

~~f~~g. Only waste ~~which~~that is demonstrated to be biodegradable

will be considered for disposal in a landfarm.

~~g~~h. A comprehensive quality-assurance/quality-control plan shall be provided to ensure that incoming wastes are in conformance with the facility permit.

i. Solid waste with concentrations of polychlorinated biphenyls (PCBs) of 10 mg/kg or more shall not be disposed of in landfarm.

2. Facility ~~O~~operational ~~P~~plans~~. Operational plans~~ shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of processing or disposal operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used during wet weather (particular attention ~~should~~shall be given to maintenance of access roads and to water management);

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented;

e. the sampling protocol, chain of custody, and test methods that will be used in the gas-monitoring systems;

f. the ~~engineering protocols and testing frequencies~~method(s) that will be used to ensure that the grade and slope of both the on-site drainage system and the run-on diversion system are maintained and serve their intended functions;

g. a comprehensive operational management plan for the facility that indicates with calculations that the acreages and methods are adequate for treating the type and volume of wastes anticipated. The plan shall include contingencies for variations.

3. Facility Operational Standards

a. Air-Monitoring Standards

i. Facilities receiving waste with a potential to produce gases shall be subject to the air-monitoring requirements (LAC 33:III, Air).

~~ii. The permit holder or applicant subject to air-monitoring requirements shall submit to the Office of Environmental Services, Permits Division a comprehensive air-monitoring plan that will limit methane gas levels to less than the lower-explosive limits at the facility boundary and to 25 percent of the lower-explosive limits in facility buildings.~~

~~(a). The type and frequency of monitoring must be determined based on the following factors:~~

~~(i). soil conditions;~~

~~(ii). hydrogeologic conditions surrounding the facility; and~~

~~(iii). location of facility structures and property boundaries.~~

~~(b). The minimum frequency of monitoring shall be quarterly.~~

~~iii. If methane gas levels exceeding the limits specified in Clause D.3.a.ii of this Section are detected, the owner or operator must:~~

~~(a). immediately take all necessary steps to ensure protection of human health and notify the Office of Environmental Compliance in the manner provided in LAC 33:I.3923;~~

~~(b). within 60 days of detection, submit a remediation plan for the methane gas releases to the Office of Environmental Assessment, Environmental Technology Division. The plan shall describe the nature and extent of the problem and the proposed remedy, and shall include an implementation schedule.~~

ii~~v~~. The permit holder shall make prompt notification to the Office of Environmental Compliance in accordance with LAC 33:I.3923 when strong odors occur at facility boundaries.

iii~~v~~. Records of inspections, surveys, and gas-monitoring (if applicable) results shall be maintained at the facility.

iv~~i~~. Odors shall be controlled by the best means practicable.

v~~ii~~. Facilities ~~must~~shall ensure that the units not violate any applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated ~~pursuant to~~in accordance with Section 110 of the Clean Air Act, as amended.

b. The maximum allowable lifetime-metals loading for soils at facilities shall be restricted to the limits specified in the following table. For organic

waste, the application rate shall be in accordance with LAC 33:I.Chapter 13 (RECAP criteria, (soil protective of groundwater)). The requirements could be modified if the unit is constructed with an underdrain system that captures liquid infiltrating the treatment zone.

Maximum Allowable Metal Loading (lb/acre)*			
Soil Cation-Exchange Capacity (meq/l00 g)			
Metal	**~~<5~~**	**~~5-15~~>5**	**~~>15~~**
Lead (Pb)	~~500~~	~~1000~~300	~~2000~~
Zinc (Zn)	~~250~~	500	~~1000~~
Copper (Cu)	~~125~~	~~250~~500	~~500~~
Nickel (Ni)	~~125~~	250	~~500~~
Cadmium (Cd)	~~5~~	1~~0~~5	~~20~~

*Other metals not listed may be subject to restrictions based upon the metal content of the waste

c. Surface application of liquid waste shall not exceed two inches per week.

d. Soils shall maintain a sufficiently high cation-exchange capacity (CEC) to absorb metallic elements in the solid waste by natural (pH range of soil) or artificial (additives) means. Soil in the zone of incorporation ~~must~~shall be

monitored to assess the effectiveness of ongoing treatment, management needs, and soil integrity.

e. Nitrogen concentrations in the waste ~~must~~shall be within the limits deemed acceptable, as determined by plant-nitrogen uptake and soil and waste analyses (which shall indicate the movement of all forms of nitrogen). The potential for nitrogen to enter the groundwater shall be addressed.

f. Waste shall be applied to the land surface or incorporated into the soil within ~~three~~3 feet of the surface.

g. A comprehensive quality-assurance/quality-control plan shall be provided to ensure that all incoming wastes are in conformance with the facility permit and these regulations.

h. Tests of soil/waste mixtures and analyses of the results, with conclusions, shall be conducted semiannually, or more frequently if deemed necessary by the administrative authority. Test parameters shall consist of cation-exchange capacity, soil pH, total nitrogen, phosphorus, salts intrinsic to waste, cumulative metals, organic matter, and others deemed necessary by the administrative authority.

i. The administrative authority may provide additional requirements necessary on a site-specific basis depending on waste type and method of application.

j. Landfarms that ~~R~~receive ~~D~~domestic ~~S~~sewage ~~S~~sludge and ~~S~~septic ~~T~~tank ~~P~~pumpings shall be in accordance with LAC 33:IX.Chapter 69.

~~i. If spread or incorporated in non-food-chain~~

~~cropland, waste shall be treated by a process to significantly reduce pathogens (LAC 33:VII.3007) prior to application or incorporation, and public access shall be controlled for 12 months following the final application. Grazing by animals whose products are consumed by humans shall be prevented for at least 30 days.~~

~~ii. If spread on or incorporated into land used to grow crops for human consumption, the waste must be treated by a process to further reduce pathogens (LAC 33:VII.3005) before application or incorporation. If there is no contact between the waste and edible portions of the crop, or if crops are grown more than 18 months after application or incorporation, the conditions specified in Clause D.3.j.i of this Section apply.~~

~~iii. The administrative authority may provide additional requirements necessary on a site-specific basis, depending upon waste type, land use, and methods of application.~~

~~k. Land-Use Requirements~~

~~i. Food-Chain Cropland~~

~~(a). The pH of the solid waste and soil mixture shall be maintained at or above 6.5.~~

~~(b). The annual application of cadmium from the waste shall not exceed 0.5 lb/acre.~~

~~(c). Cumulative application of cadmium from sewage sludge for soils with a background pH of less than 6.5 shall not exceed five lb/acre unless the pH of the sludge and soil mixture is adjusted and maintained at 6.5 or~~

~~greater whenever food-chain crops are grown.~~

~~ii. Land Used for Animal Feed Only~~

~~(a). The pH of the waste-soil mixture must be 6.5 or greater at the time of solid waste application or when the crop is planted, whichever occurs later, and this pH level must be maintained whenever food-chain crops are grown. Crops requiring a lower pH will be considered on a site-specific basis.~~

~~(b). An operating plan for the facility shall be filed with the Office of Environmental Services, Permits Division that demonstrates how the animal feed will be distributed to preclude ingestion by humans and that describes the measures to be taken to safeguard against possible health hazards from the entry of cadmium or other heavy metals into the food chain, as may result from alternative land use.~~

~~(c). Solid waste with concentrations of polychlorinated biphenyls (PCBs) of l0 mg/kg or more shall not be allowed.~~

4. ~~l.~~ Waste ~~Testing~~Characterization. Hazardous waste determination, in accordance with LAC 33:V.1103, shall be performed on all solid waste going to disposal facilities, prior to acceptance of the solid waste and annually for two years following acceptance. Every year thereafter, the generator shall certify that the waste remains unchanged.~~The following operational standards apply to waste testing for facilities receiving domestic sewage sludge, industrial solid waste, incinerator ash, or nonhazardous petroleum-contaminated media and debris generated by underground storage tanks (UST) corrective action.~~

~~i. Facilities which receive domestic septage or sewage sludge from publicly owned treatment works shall require the waste be tested for toxicity characteristics leachate procedure (TCLP) analysis and priority pollutants prior to acceptance of the waste and annually for two years following acceptance. Each year thereafter, the generator must certify that the waste remains unchanged.~~

~~ii. Facilities which receive industrial waste (Type I) shall require testing for TCLP constituents prior to acceptance of the waste and annually thereafter, or documented process knowledge which confirms that the waste is not a characteristic or listed hazardous waste as defined in LAC 33:V.Subpart 1 or by federal regulations. Nonhazardous petroleum-contaminated media and debris generated from underground storage tanks (UST) corrective action will require testing for the appropriate constituents of TCLP prior to acceptance of the waste.~~

~~iii. Facilities which receive incinerator ash shall require testing of the ash for TCLP metals and dioxins prior to acceptance and thereafter quarterly for TCLP metals and annually for dioxins.~~

~~4~~5. Sufficient equipment shall be provided and maintained at all facilities to meet the facility's operational needs.

~~5~~6. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the Office of Environmental Services, Permits Division and

with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph D.~~5~~6.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of Environmental Services, Permits Division.

c. Applicants for Type I facilities shall obtain certification from the local:

i. fire department as to whether or not that department has the ability to meet the response requirements of Section 472 of the Life Safety code of the National Fire Protection association.

ii. emergency medical services as to whether or not that agency has the ability to meet the response requirements of Section 473 of the Life Safety Code of the National fire Protection association.

iii. hospital as to whether they are able to accept and treat patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type I facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 715.D.6.c above.

e. The requirements of 715.D.6.c and d shall not apply if the applicant for a Type I facility has the ability to meet the response requirements of Section

472 of the Life Safety Code of the National Fire Protection Association.

f. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

g. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 715.D.6.f above.

h. Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR 1910.120.

i. The provisions of 715.D.6.f-h shall not apply to a Type I facility that is also a Type II or III facility.

E. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

~~3~~2. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder. The permit holder shall submit a request for the release of this fund to the Office of Management and Finance, Financial Services Division.

~~2~~3. ~~Closure Requirements.~~ During the closure period the permit holder ~~must~~shall:

a. continue with all operations (including pH control) necessary to continue normal waste treatment within the treatment zone;

b. maintain the run-on control system;

c. maintain the runoff management system;

d. control wind dispersal of odors and/or waste; and

e. continue to comply with any prohibitions or conditions concerning growth of food-chain crops.

F. Facility Post-Closure Requirements

1. The post-closure period begins when the Office of Environmental Services, Permits Division approves closure. The length of the post-closure care period for landfarms may be:

a. decreased by the administrative authority if the permit holder demonstrates that the reduced period is sufficient to protect human health and the environment in accordance with LAC 33:I.Chapter 13 and this demonstration is approved by the administrative authority (Any demonstration ~~must~~shall provide supporting data, including adequate groundwater monitoring data.); or

b. increased by the administrative authority if the administrative authority determines that the lengthened period is necessary to protect human health and the environment in accordance with LAC 33:I.Chapter 13.

2. Type I Landfarms. For facilities ~~which~~that receive waste on or after October 9, 1993, the permit holder shall continue to comply with any prohibitions or conditions under LAC 33:VII.715 for 10 years after closure. For facilities ~~which~~that did not receive waste on or after October 9, 1993, the permit holder shall continue to comply with any prohibitions or conditions under LAC 33:VII.715 for three years after closure.

3. Post-Closure Requirements Type II Landfarms

a. The permit holder shall continue to comply with any prohibitions or conditions under LAC 33:VII.715 for three years after closure.

b. Annual reports shall be submitted to the Office of Environmental Compliance, Surveillance Division for a period of three years after closure and shall contain results of analysis of all soil/waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental

Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), repromulgated LR 19:1316 (October 1993), amended by the Office of the Secretary, LR 24:2251 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2525 (November 2000), repromulgated LR 27:704 (May 2001), amended LR 30:1676 (August 2004), amended by the Office of Environmental Assessment, LR 30:2025 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter ~~C~~B. Solid Waste Processors

§717. Standards Governing All Type I-A and II-A Solid Waste Processors ~~(Type I-A and II-A)~~

A. Location Characteristics. The information on location characteristics listed in this Subsection is required and shall be provided for all Type I-A and II-A solid waste processing and disposal facilities, as outlined in LAC 33:VII.521.

1. Area master plans shall include location maps and/or engineering drawings. The scale of the maps and engineering drawings shall be legible. Area master plans shall show:

a. the facility;

b. the road network;

c. major drainage systems;

d. drainage-flow patterns;

e. the location of the closest population center(s);

f. if putrescible the location of any public-use airport(s) used by turbojet aircraft or piston-type aircraft (if within a 5 mile radius);

g. the location of the 100-year flood plain; and

h. other pertinent information.

~~1~~2. Access to facilities by ~~surface~~land or water transportation shall be by all-weather roads or waterways that can meet the demands of the facility and are designed to avoid, to the extent practicable, congestion, sharp turns, obstructions, or other hazards conducive to accidents~~; and~~. ~~t~~The surface roadways shall be adequate to withstand the weight of transportation vehicles.

3. A letter shall be acquired from the appropriate agency or agencies regarding those facilities receiving waste generated off-site, stating that the facility will not have a significant adverse impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles.

4. Facilities that process or dispose of putrescible solid waste shall not be located within 10,000 feet of any public-use airport runway end used by turbojet aircraft or within 5,000 feet of any public-use airport runway used only by piston-type aircraft.

5. A description shall be included of the total existing land use within three miles of the facility (by approximate percentage) including, but not limited to:

a. residential;

b. health-care facilities and schools;

c. agriculture;

d. industrial and manufacturing;

e. other commercial;

f. recreational; and

g. undeveloped.

6. A current aerial photograph, representative of the current land use, of a one-mile radius surrounding the facility is required. The aerial photograph shall be of sufficient scale to depict all pertinent features.

~~2~~7. ~~Environmental Characteristics.~~ Facilities located in or within 1,000 feet of swamps, marshes, wetlands, estuaries, wildlife-hatchery areas, habitat of endangered species, archaeological sites, historic sites, publicly owned recreation areas, and similar critical environmental areas shall be isolated from such areas by effective barriers that eliminate probable adverse impacts from facility operations. The following information on environmental characteristics shall be provided:

a. a list of all known historic sites, recreation areas, archeological sites, designated wildlife-management areas, swamps and marshes, wetlands, habitats for endangered species, and other sensitive ecological areas within 1,000 feet of the facility perimeter or as otherwise appropriate;

b. documentation from the appropriate state and federal agencies substantiating the historic sites, recreation areas, archaeological sites, designated wildlife-management areas, wetlands, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility; and

c. a description of the measures planned to protect the areas listed from the adverse impact of operation at the facility.

~~3~~8. Processing facilities may be subject to a comprehensive land-use or zoning plan established by local regulations or ordinances.

9. A statement of estimated population, the source of the estimation, and density within a three-mile radius of the facility boundary is required of all facilities.

10. A wetlands demonstration, if applicable, is required in accordance with LAC 33:VII.709.A.8

B. Facility Characteristics

1. ~~Perimeter Barriers, Security, and Signs~~The following facility characteristics are required for Type I-A and Type II-A Solid Waste Processors, as outlined in LAC 33:521.C.

a. Elements of the process or disposal system employed shall be provided including, as applicable, property lines, original contours (shown as not greater than five-foot intervals), buildings, units of the facility, drainage, ditches, and roads.

b. Perimeter barriers and other control measures, such as security and signs, shall be provided as follows.

~~a.~~ i. Facilities ~~must~~shall have a perimeter barrier around the facility that prevents unauthorized ingress or egress, except by willful entry.

~~b.~~ ii. During operating hours, each facility entry point

shall be continuously monitored, manned, or locked.

~~c.~~ iii. During nonoperating hours, each facility entry point shall be locked.

~~d.~~ iv. Facilities that receive wastes from off-site sources shall post readable signs that list the types of waste that can be received at the facility.

~~2. Buffer Zones~~

~~a~~c. Buffer zones of not less than 200 feet shall be provided between the facility and the property line. A reduction in this requirement shall be allowed only with the permission, in the form of a notarized affidavit, of the adjoining landowner~~ and occupants~~. A copy of the notarized affidavit waiving the 200-foot buffer zone shall be entered in the mortgage and conveyance records of the parish for the adjoining landowner's property. Buffer-zone requirements may be waived or modified by the administrative authority for areas of landfills which have been closed in accordance with these regulations and for existing facilities, or in accordance with LAC 33:VII.307.

~~b.~~ No storage, processing, or disposal of solid waste shall occur within the buffer zone.

~~3~~2. ~~Fire Protection and Medical Care.~~ All facilities shall have access to required fire protection and medical care, or such services shall be provided internally and in accordance with Paragraph G.5 of this Section.

~~4~~3. ~~Landscaping.~~ All ~~proposed~~ facilities, other than those ~~which~~that are located within the boundaries of a plant, industry, or business which generates the waste to be processed or disposed of, ~~must~~shall provide landscaping to improve the aesthetics

of the facility.

~~5~~4. Devices or Methods for Receiving and Monitoring Incoming Wastes

a. ~~Each~~All processing facilit~~y~~ies shall be equipped with a device or method to determine quantity (by wet-weight tonnage); sources (whether the waste was generated in-state or out-of-state and, if it is industrial solid waste, where it was generated); and types of incoming waste (i.e., commercial, residential, infectious). The facility shall also be equipped with a device or method to control entry of the waste and prevent entry of unrecorded or unauthorized deliverables (i.e., hazardous, unauthorized, or unpermitted solid waste).

b. ~~Each~~All processing facilit~~y~~ies shall be equipped with a central control and recordkeeping system for tabulating the information required in Subparagraph B.~~5~~4.a of this Section.

~~6~~5. Discharges from operating units of all facilities ~~must~~shall be controlled and ~~must~~shall conform to applicable state and federal laws. Applications for applicable state and federal discharge permits ~~must~~shall be filed before a standard permit may be issued.

C. Facility Surface Hydrology

1. Facilities located in a floodplain, wetlands, or areas historically subject to overflow from floods ~~must~~shall be filled to bring site elevation above flood levels or otherwise protected by measures approved on a site-specific basis. Perimeter levees or other measures ~~must~~shall provide and maintain adequate protection against the

100-year flood~~ elevation~~.

2. Surface-runoff-diversion levees, canals, or devices shall be installed to prevent drainage from the units of the facility which have not received final cover.~~ to adjoining areas during a 24-hour/25-year storm event. When rainfall records are not available, the design standard shall be 12 inches of rainfall below 31 degrees north latitude and nine inches of rainfall above 31 degrees north latitude. If the 24-hour/25-year storm-event level is lower, the design standard shall be required.~~ The proposed system shall be designed for a 24-hour/25-year storm event.

D. Facility geology shall be in accordance with LAC 33:VII.801.

~~1. Except as provided in Paragraph D.2 of this Section, facilities shall have natural stable soils of low permeability for the area occupied by the solid waste facility, including vehicle parking and turnaround areas, that should provide a barrier to prevent any penetration of surface spills into groundwater aquifers underlying the area or to a sand or other water-bearing stratum that would provide a conduit to such aquifers.~~

~~2. A design for surfacing natural soils that do not meet the requirement in Paragraph D.1 of this Section shall be prepared and installed under the supervision of a registered engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology. Written certification by the engineer or geologist that the surface satisfies the requirements of Paragraph D.1 of this Section shall be provided.~~

E. Facility Plans and Specifications

1. Plans, specifications, and operations represented and described in

the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana.

2. Levee Construction

a. Levees or other protective measures ~~must~~shall be constructed adjacent to the facility in order to ~~provide an adequate freeboard above~~protect the facility against the 100-year flood~~ elevation~~.

b. The perimeter levees of all facilities shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity.

F. Facility Administrative Procedures

~~1. Recordkeeping and Reports~~

1. ~~a.~~ Reports

a. ~~i.~~ The permit holder shall submit annual reports to the Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in both dry and wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. All calculations used to determine the amounts of solid waste received for processing during the annual-reporting period shall be submitted to the Office of Management and Finance, Financial Services Division~~administrative authority~~. A form to be used for this purpose ~~must~~shall be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

b.~~ii.~~ The reporting period for the processor annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c.~~iii.~~ Annual reports shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

d.~~iv.~~ The annual report is to be provided for each individual permitted facility on a separate annual-reporting form.

e.~~v.~~ A facility ~~which~~that receives industrial solid waste shall utilize, in its annual report, the ~~seven-digit~~appropriate industrial waste code number ~~that has been assigned by the administrative authority to the industrial solid waste generator~~.

f.~~vi.~~ The annual report for incinerator waste-handling facilities, shredders, balers, compactors, and transfer stations shall identify the quantity (expressed in wet-weight tons per year), and types of solid waste transported for disposal. The report shall also identify the permitted facility used for disposal of the waste.

2.~~b.~~ Recordkeeping

a.~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b.~~ii.~~ The permit holder shall maintain records of

transporters transporting waste for processing or disposal at the facility. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the administrative authority.

c. ~~iii.~~ Records kept on site for all facilities shall include, but not be limited to:

i. ~~(a).~~ copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application; ~~and~~

iv. ~~(d).~~ permit modifications; and ~~.~~

v. operator certificates from the Board of Certification and Training for Solid Waste Disposal System Operators, if applicable.

~~2~~3. Personnel

a. All facilities shall have the personnel necessary to achieve the operational requirements of the facility.

b. Facilities receiving residential and commercial solid waste shall have the numbers and levels of certified operators employed at the facility~~,~~ as required by the ~~*Louisiana Administrative Code*, Title~~LAC 46, Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

G. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

b. Open burning shall not be practiced unless authorization is first obtained from the administrative authority and any other applicable federal, state, and local authorities.

i. Salvaging shall be prevented unless approved by the administrative authority.

ii. Scavenging shall be prevented.

c. ~~The following limitation applies to Type I-A processing facilities: i~~Industrial solid waste, incinerator ash, and nonhazardous petroleum-contaminated media and debris generated by ~~underground storage tanks (~~UST~~)~~ corrective action ~~may~~shall be processed only in Type I-A facilities. A comprehensive quality-assurance/quality-control plan shall be in place before the receipt of these wastes.

d. The receipt of mercury and/or cadmium-bearing batteries by Type I-A and II-A incinerator waste-handling facilities is strictly prohibited.

2. Facility Operational Plans. Operational plans shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of processing operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used during wet weather (particular attention ~~should~~shall be given to maintenance of access roads and to water management); and

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented.

3. Facility Operational Standards

a. Waste ~~Testing~~Characterization. Hazardous waste determination, in accordance with LAC 33:V.1103, shall be performed on all solid waste going to disposal facilities, prior to acceptance of the solid waste and annually for two years following acceptance. Every year thereafter, the generator shall certify that the waste remains unchanged. ~~The following operational standards apply to waste testing for facilities receiving domestic sewage sludge, industrial solid waste, incinerator ash, or nonhazardous petroleum-contaminated media and debris generated by underground storage tanks (UST) corrective action.~~

~~i. Facilities which receive domestic septage or sewage sludge from publicly owned treatment works shall require the waste be tested for toxicity characteristics leachate procedure (TCLP) analysis and priority pollutants prior to acceptance of the waste and annually for two years following acceptance. Each year thereafter, the generator must certify that the waste remains unchanged.~~

~~ii. Facilities which receive industrial waste (Type I)~~

~~shall require testing for TCLP constituents prior to acceptance of the waste and annually thereafter, or documented process knowledge which confirms that the waste is not a characteristic or listed hazardous waste as defined in LAC 33:V.Subpart 1 or by federal regulations. Nonhazardous petroleum contaminated media and debris generated from underground storage tanks (UST) corrective action will require testing for the appropriate constituents of TCLP prior to acceptance of the waste.~~

b. All containers shall provide containment of the wastes and thereby control litter, odor, and other pollution of adjoining areas.

c. Provisions shall be made for at least daily cleanup of the facility, including equipment and waste-handling areas.

d. No solid waste shall be stored long enough to cause a nuisance, health hazard, or detriment to the environment.

e. Treatment facilities for washdown and other contaminated water shall be provided.

f. Facilities that employ incineration shall develop an ash-management plan that includes, at a minimum, testing, handling, transportation, and disposal of ash at a permitted facility.

g. Facilities shall have a plan for handling contaminated water.

h. Specific Operational Standards for Incinerator Waste-Handling Facilities

i. Handling. Ash shall be properly wetted and

contained so as to ensure that there are no dust emissions during loading, transporting, or unloading.

ii. Testing

(a). Testing procedures, schedules, and methods ~~must~~shall be submitted to the Office of Environmental Services, Permits Division for review and approval before disposal operations begin. Disposal of ash shall be only in a permitted Type I facility. Processing of ash shall be only in a permitted Type I-A facility.

~~(b). Testing of ash shall be performed quarterly for TCLP metals and annually for dioxins.~~

4. Sufficient equipment shall be provided and maintained at all facilities to meet their operational needs.

5. Facility Operations, Emergency Procedures, and Contingency Plans~~The following standards apply to facility operations, emergency procedures, and contingency plans for all facilities.~~

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the Office of Environmental Services, Permits Division and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph G.5.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of

Environmental Services, Permits Division.

c. Applicants for Type I facilities shall obtain certification from the local:

i. fire department as to whether or not that department has the ability to meet the response requirements of Section 472 of the Life Safety code of the National Fire Protection association.

ii. emergency medical services as to whether or not that agency has the ability to meet the response requirements of Section 473 of the Life Safety Code of the National fire Protection association.

iii. hospital as to whether they are able to accept and treat patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type I facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 717.D.5.c above.

e. The requirements of 717.D.5.c and d shall not apply if the applicant for a Type I facility has the ability to meet the response requirements of Section 472 of the Life Safety Code of the National Fire Protection Association.

f. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

g. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 717.D.5.f above.

h. Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR 1910.120.

i. The provisions of 717.D.5.f-h shall not apply to a Type I facility that is also a Type II or III facility.

H. Implementation Plans. ~~All facilities shall have implementation plans.~~The implementation plans for all facilities shall include the following:

1. a construction schedule for existing facilities, which shall include beginning and ending time-frames and time-frames for the installation of all major features.

2. details on phased implementation if any proposed facility is to be constructed in phases.

I. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility

and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

2. Closure Requirements

a. ~~An i~~Insect and rodent inspection is required to be documented before closure~~.~~, and ~~E~~extermination measures~~, if required, must~~shall be provided if required as a result of the final inspection.

b. All remaining waste shall be removed to a permitted facility for disposal.

c. The permit holder shall verify that the underlying soils have not been contaminated due to the operation of the facility. If contamination exists, a remediation/removal program developed to meet the standards of LAC 33:VII.713. E.~~3,~~ 4~~,~~ ~~-and 5~~ 6 ~~must~~shall be provided to the administrative authority. The Office of Environmental Compliance, Surveillance Division shall conduct a closure inspection to verify that the facility was closed in accordance with the approved closure plan.

3. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder. The permit holder shall submit a request for the release of this fund to the Office of Management and Finance, Financial Services Division.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et

seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, LR 24:2252 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2526, 2610 (November 2000), repromulgated LR 27:704 (May 2001), amended by the Office of Environmental Assessment, LR 30:2025 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter ~~D~~C. Minor Processing and Disposal Facilities

§719. Standards Governing All ~~Minor~~Type III Processing and Disposal Facilities ~~(Type III)~~

(Editor's note: New language contained in A.1, 4.a-c., 5, 6, 7, 8, 9, 10, B, C.5, and E was taken from LAC 33:VII.521.)

A. Location Characteristics. The information on location characteristics listed in this Subsection is required and shall be provided for all Type III solid waste processing and disposal facilities, as outlined in LAC 33:VII.521.

1. Area master plans shall include location maps and/or engineering drawings. The scale of the maps and engineering drawings shall be legible. Area master plans shall show x:

a. the facility;

b. the road network;

c. major draining systems;

d. drainage-flow patterns;

e. the location of the closest population center(s);

f. if putrescible the location of any public-use airport(s) used by turbojet aircraft or piston-type aircraft (if within a 5 mile radius);

g. the location of the 100-year flood plain; and

h. other pertinent information.

~~1~~2. Access to facilities by land or water transportation shall be by all-weather roads or waterways that can meet the demands of the facility and are designed to avoid, to the extent practicable, congestion, sharp turns, obstructions, or other hazards conducive to accidents~~; and~~. ~~t~~The surface roadways shall be adequate to withstand the weight of transportation vehicles.

~~2~~3. Facilities that compost putrescible solid waste shall not be located within 10,000 feet of any public-use airport runway used by turbojet aircraft or within 5,000 feet of any public-use airport runway used by only piston-type aircraft.

~~3~~4. ~~Environmental Characteristics.~~ Facilities located in or within 1,000 feet of swamps, marshes, wetlands, estuaries, wildlife-hatchery areas, habitat of endangered species, archaeologic sites, historic sites, publicly owned recreation areas, and similar critical environmental areas shall be isolated from such areas by effective barriers that eliminate probable adverse impacts from facility operations. The following information on environmental characteristics shall be provided:

a. a list of all known historic sites, recreation areas, archeological sites, designated wildlife-management areas, swamps and marshes,

wetlands, habitats for endangered species, and other sensitive ecological areas within 1,000 feet of the facility perimeter or as otherwise appropriate;

b. documentation from the appropriate state and federal agencies substantiating the historic sites, recreation areas, archaeological sites, designated wildlife-management areas, wetlands, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility; and

c. a description of the measures planned to protect the areas listed from the adverse impact of operation at the facility.

5. A letter shall be acquired from the appropriate agency or agencies regarding those facilities receiving waste generated off-site, stating that the facility will not have a significant adverse impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles.

6. A description shall be included of the total existing land use, within three miles of the facility (by approximate percentage) including, but not limited to:

a. residential;

b. health-care facilities and schools;

c. agriculture;

d. industrial and manufacturing;

e. other commercial ~~and manufacturing~~;

f. recreational; and

g. undeveloped.

7. A current aerial photograph, representative of the current land use of a one-mile radius surrounding the facility is required. The aerial photograph shall be of sufficient scale to depict all pertinent features.

~~4~~8. Processing or disposal facilities may be subject to a comprehensive land-use or zoning plan established by local regulations or ordinances.

9. A statement of ~~T~~ the estimated population, the source of the estimation, and density within a three-mile radius of the facility boundary is required of all facilities.

10. A wetlands demonstration, if applicable is required, ~~as provided~~ in accordance with LAC 33:VII.709.A.8.

B. Facility Characteristics

1. ~~Perimeter Barriers, Security, and Signs~~The following facility characteristics are required for all Type III solid waste facilities, as outlined in LAC 33:VII.521.C.

a. Elements of the process or disposal system employed shall be provided including, as applicable, property lines, original contours (shown at not greater than five-foot intervals), buildings, units of the facility, drainage, ditches, and roads.

b. Perimeter barriers and other control measures, such as security and signs, shall be provided as follows.

~~a.~~ i. ~~All f~~Facilities ~~must~~shall have a perimeter barrier

around the facility that prevents unauthorized ingress or egress, except by willful entry.

~~b.~~ ii. During operating hours, each facility entry point shall be continuously monitored, manned, or locked.

~~c.~~ iii. During nonoperating hours, each facility entry point shall be locked.

~~d.~~ iv. ~~All f~~Facilities that receive wastes from off-site sources shall post readable signs that list the types of wastes that can be received at the facility.

~~2. Buffer Zones~~

~~a~~c. Buffer zones of not less than 50 feet shall be provided between the facility and the property line. A reduction in this requirement shall be allowed only with the permission, in the form of a notarized affidavit, of the adjoining landowner~~ and occupants~~. A copy of the notarized affidavit waiving the ~~50-foot~~ buffer zone requirement shall be entered in the mortgage and conveyance records of the parish for the adjoining landowner's property. Buffer-zone requirements may be waived or modified by the administrative authority for areas of woodwaste/construction/demolition-debris landfills which have been closed in accordance with these regulations and for existing facilities~~.~~ or in accordance with LAC 33:VII.307. Notwithstanding this Paragraph, Type III air curtain destructors and composting facilities which receive ~~sewage sludge, septage~~putrescible, residential, or commercial waste ~~must~~shall meet the buffer-zone requirements in LAC 33:VII.717.B.~~2~~1.c. In addition, air curtain destructors shall maintain at least a 1,000 foot buffer from any dwelling other than a dwelling or

structure located on the property on which the burning is conducted (unless the appropriate notarized affidavit waivers are obtained).

~~b.~~ No storage, processing, or disposal of solid waste shall occur within the buffer zone.

~~3.~~ d. ~~Fire Protection and Medical Care.~~ All facilities shall have access to required fire protection and medical care, or such services shall be provided internally.

i. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the Office of Environmental Services, Permits Division and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

ii. Training sessions concerning the procedures outlined in Subparagraph B.3 of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of Environmental Services, Permits Division.

~~4.~~ e. ~~Landscaping.~~ All ~~proposed~~ facilities, other than those that are located within the boundaries of a plant, industry, or business that generates the waste to be processed or disposed of, ~~must~~shall provide landscaping to improve the aesthetics of the facility.

~~5.~~ f. Devices of Methods for Receiving and Monitoring Incoming Wastes

~~a.~~ i. ~~Each processing or disposal~~All facility~~y~~ies shall be equipped with a device or method to determine quantity (by wet-weight tonnage), sources (whether the waste was generated in-state or out-of-state), and types of incoming waste. The facility shall also be equipped with a device or method to control entry of the waste and prevent entry of unrecorded or unauthorized deliverables (i.e., hazardous, unauthorized, or unpermitted solid waste).

~~b.~~ ii. ~~Each processing or disposal~~All facility~~y~~ies shall be equipped with a central control and recordkeeping system for tabulating the information required in Subparagraph B.5.a. of this Section.

~~6.~~ g. Discharges from operating units of all facilities ~~must~~shall be controlled and ~~must~~shall conform to applicable state and federal laws. Applications for applicable state and federal discharge permits ~~must~~shall be filed before a standard permit may be issued.

C. Facility Surface Hydrology

1. Facilities located in a floodplain, wetlands, or areas historically subject to overflow from floods ~~must~~shall be filled to bring site elevation above flood levels or otherwise protected by measures approved on a site-specific basis. Perimeter levees or other measures ~~must~~shall provide and maintain adequate protection against the 100-year flood ~~elevation.~~

2. Facilities located in or within 1,000 feet of an aquifer recharge zone shall be designed to protect the areas from adverse impacts of operations at the facility.

3. Surface-runoff-diversion levees, canals, or devices shall be installed to prevent drainage from the units of the facility ~~which~~that have not received final cover. ~~to adjoining areas during a 24-hour/25-year storm event. When rainfall records are not available, the design standard shall be 12 inches of rainfall below 31 degrees north latitude and nine inches of rainfall above 31 degrees north latitude. If the 24-hour/25-year storm-event level is lower, the design standard shall be required.~~ The proposed system shall be designed for a 24-hour/25-year storm event.

4. Specific Surface Hydrology Standard for Type III Composting Facilities. The topography of the facility shall provide for drainage to prevent standing water and shall allow for drainage away from the facility.

D. Facility Geology

1. Except as provided in Paragraph D.2 of this Section, facilities shall have natural stable soils of low permeability for the area occupied by the solid waste facility, including vehicle parking and turnaround areas, that ~~should~~shall provide a barrier to prevent any penetration of surface spills into groundwater aquifers underlying the area or to a sand or other water-bearing stratum that would provide a conduit to such aquifers.

2. A design for surfacing natural soils that do not meet the requirement in Paragraph D.l of this Section shall be prepared and installed under the supervision of a ~~registered~~professional engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology. Written certification by the engineer that the surface satisfies the requirements of Paragraph D.l of this Section shall be provided to the Office of Environmental Services, Permits Division.

3. Specific requirements for Type III facilities are found in LAC 33:VII.Chapter 8.

E. Implementation Plans. ~~All facilities shall have implementation plans.~~The implementation plans for all facilities shall include the following:

1. a construction schedule for existing facilities, which shall include beginning and ending time-frames and time-frames for the installation of all major features; and

2. details on phased implementation if any proposed facility is to be constructed in phases.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2527 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§721. Construction and Demolition Debris and Woodwaste Landfills and Processing Facilities (Type III)

A. Facility Plans and Specifications

1. Plans, specifications, and operations represented and described in the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the

state of Louisiana.

2. Interim Cover Requirements

a. Cover material ~~must~~shall:

i. minimize vector-breeding areas and animal attraction by controlling:

(a). fly, mosquito, and other insect emergence and entrance;

(b). rodent burrowing for food and harborage; and

(c). bird and animal attraction;

ii. control leachate generation by:

(a). minimizing external-moisture infiltration;

(b). minimizing erosion; and

(c). utilizing materials with minimum free-liquid content and minimum concentrations of constituents monitored in leachate;

iii. reduce fire-hazard potential by minimizing inward movement of atmospheric oxygen;

iv. minimize blowing paper and litter;

v. reduce noxious odors by minimizing outward movement of methane and other gases;

vi. provide aesthetic appearance to the landfill operation; and

vii. allow accessibility regardless of weather.

b. Wastes shall be deposited in the smallest practical area each day and compacted. The wastes shall be covered with silty clays applied a minimum of 12 inches thick, at least every 30 days.

3. Levee Construction

a. Levees or other protective measures ~~must~~shall be ~~constructed adjacent to the facility~~provided in order to ~~provide an adequate freeboard above~~protect the facility against the 100-year flood ~~elevation~~.

b. If levees are required to protect the facility against the 100-year flood, ~~The~~such perimeter levees ~~of all facilities~~ shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity and shall provide adequate freeboard above the 100-year flood elevation.

B. Facility Administrative Procedures

1. ~~Recordkeeping and~~ Reports

~~a. Reports~~

a. ~~i.~~ The permit holder shall submit annual reports to the Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in both dry and wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. All

calculations used to determine the amounts of solid waste received for processing or disposal during the annual-reporting period shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division. A form to be used for this purpose ~~must~~shall be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

b. ~~ii.~~ The reporting period for the processor and/or disposer annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c. ~~iii.~~ Annual reports shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

d. ~~iv.~~ The annual report is to be provided for each individual permitted facility on a separate annual reporting form.

2. ~~b.~~ Recordkeeping

a. ~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b. ~~ii.~~ The permit holder shall maintain records of transporters transporting waste for processing or disposal at the facility. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the department.

c. ~~iii.~~ Records kept on site for all facilities shall include, but not be limited to:

i. ~~(a).~~ copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application; and

iv. ~~(d).~~ permit modifications.

~~2~~3. Personnel. All facilities shall have the personnel necessary to achieve the operational requirements of the facility.

~~3~~4. Type III facilities receiving construction and demolition debris and woodwaste shall have the number and levels of certified operators employed at the facility as required by the department in accordance with ~~*Louisiana Administrative Code*, Title~~LAC 46:~~,~~ Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

~~a.~~ The requirements of ~~LAC 33:VII.721.B.3~~this paragraph are not applicable to facilities meeting the criteria of LAC 33:VII.305.~~D~~A.4.

C. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited

and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

b. Open burning shall not be practiced unless authorization is first obtained from the administrative authority and any other applicable federal, state, and local authorities.

c. Salvaging shall be prevented unless approved by the administrative authority.

d. Scavenging shall be prevented.

e. The following types of waste may be disposed of:

i. construction/demolition debris as defined in LAC 33:VII.115 and a maximum of ~~five~~5 percent by volume of paper waste associated with such debris;

ii. woodwastes as defined in LAC 33:VII.115; and

iii. yard ~~waste~~trash as defined in LAC 33:VII.115.

f. The disposal of liquid waste, infectious waste, residential waste, industrial waste, commercial waste, friable asbestos, and putrescible waste shall be strictly prohibited and prevented.

g. No solid waste shall be deposited in standing water.

2. Facility Operational Plans. Operational plans shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of processing or disposal operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used during wet weather (particular attention ~~should~~shall be given to maintenance of access roads and to water management); and

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented.

e. The side slope shall be no steeper than 3(H):1(V).

f. The run on/ runoff-diversion system shall be maintained to ensure proper operation of the drainage system.

3. Sufficient equipment shall be provided and maintained at all facilities to meet the facilities' operational needs.

4. Segregation of Wastes. Waste determined ~~not~~to be unacceptable at a woodwaste~~/~~ and construction/demolition-debris landfill shall be removed from the facility at least every seven days. Storage of this waste shall be in a closed container that prevents vector and odor problems. The facility shall maintain a log of dates and volumes of waste removed from the facility.

5. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall

be developed and filed with the Office of Environmental Services, Permits Division and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph C.5.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of Environmental Services, Permits Division.

c. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 721.D.5.c above.

e Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR 1910.120.

f. The provisions of 721.D.5.c-e shall not apply to a Type I facility that is also a Type II or III facility.

D. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

2. Preclosure Requirements

a. Final cover shall be applied within 30 days after final grades are reached in each unit of a facility. This deadline may be extended by the administrative authority if necessary due to inclement weather or other circumstances.

b. Standing water shall be solidified or removed.

c. The runoff-diversion system shall be maintained until the final cover is installed.

d. The runoff-diversion system shall be maintained and modified to prevent overflow of the landfill to adjoining areas.

e. Insect and rodent inspection is required to be documented before installation of final cover, and extermination measures ~~must~~shall be provided, if required, ~~according to~~as a result of the facility inspection.

f. Final ~~machine~~ compacti~~ng~~on and grading shall be

completed before capping.

3. Closure Requirements

a. Final Cover

i. Final cover shall consist of a minimum of 24 inches of silty clays and six inches of topsoil cover for supporting vegetative growth; however, other covers that provide a more practical answer and satisfy the purposes of minimizing fire hazards, odors, vector food and harborage, and infiltration of precipitation, as well as discouraging scavenging and limiting erosion, may be submitted to the Office of Environmental Services, Permits Division, for approval ~~by the administrative authority~~.

ii. The side slope ~~should~~shall be no steeper than 3(H):1(V) and ~~must~~shall have a minimum of a four percent slope on the top of the final cap (unless it can be demonstrated that a lesser slope is sufficient for proper drainage following the post-settlement).

iii. The Office of Environmental Compliance, Surveillance Division shall be notified prior to planting a ground cover, and the permit holder shall notify the Office of Environmental Compliance, Surveillance Division once the ground cover is established.

iv. Quality-control procedures shall be developed and implemented to ensure that the final cover is designed, constructed, and installed properly. An engineering certification verifying that the facility meets the final cover requirements shall be prepared under the supervision of a professional engineer licensed in the state of Louisiana. This certification shall be submitted to the Office of

Environmental Assessment, Environmental Technology Division for approval.

~~iii~~v. A combination of clay and synthetic material approved by the administrative authority may also be used as final cover.

~~b. After a closure inspection and approval, the permit holder shall plant a ground cover to prevent erosion and to return the facility location to a more natural appearance.~~

~~e~~b. The permit holder shall update the parish mortgage and conveyance records by ~~entering~~recording the specific location of the facility and specifying that the property was used for the disposal of solid waste. The document shall identify the name and address of the person with knowledge of the contents of the facility. A form to be used for this purpose is provided in LAC 33:VII.3011. Appendix F. The facility shall provide the Office of Environmental Services, Permits Division with a true copy of the document filed and certified by the parish clerk of court.

4. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority may release the closure fund to the permit holder. A request for the release of this fund by the permit holder shall be submitted to the Office of Management and Finance, Financial Services Division.

E. Facility Post-Closure Requirements

1. The post-closure period begins when the Office of Environmental Services, Permits Division approves closure. The time-frame of post-closure care may be lengthened, if necessary, to protect human health or the environment in accordance with

LAC 33:I.Chapter 13.

2. The integrity of the grade and cap ~~must~~shall be maintained for no less than three years after the date of administrative authority's approval of the closure of the facility. The Office of Environmental Assessment, Environmental Technology Division shall be notified of any problems and corrective action measures associated with the integrity and effectiveness of the final cover.

3. Annual reports concerning the integrity of the cap shall be submitted to the Office of Environmental Compliance, Surveillance Division for a period of three years after closure.

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§723. Composting Facilities ~~(Type III)~~

A. Facility Plans and Specifications

1. Plans, specifications, and operations represented and described in

the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana.

2. Levee Construction

a. Levees or other protective measures ~~must~~shall be constructed adjacent to the facility in order to ~~provide an adequate freeboard above~~protect the facility against the 100-year flood~~ elevation~~.

b. The perimeter levees of all facilities shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity.

3. Leachate Management

a. Leachate produced in the composting process ~~must~~shall be collected and treated or disposed of at a permitted facility; or

b. leachate may also be reused in the composting process as a source of moisture.

B. Facility Surface Hydrology. The topography of the facility shall provide for drainage to prevent standing water and shall allow for drainage away from the facility.

~~B~~C. Facility Administrative Procedures

1. ~~Recordkeeping and~~ Reports

~~a. Reports~~

a. ~~i.~~ The permit holder shall submit annual reports to the

Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in both dry and wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. All calculations used to determine the amounts of solid waste received for processing during the annual-reporting period shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division. A form to be used for this purpose ~~must~~shall be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

i~~i~~. The reporting period for the processor and/or disposer annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

ii~~i~~. Annual reports shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

iii~~v~~. The annual report is to be provided for each individual permitted facility on a separate annual reporting form.

iv. The annual reports for composting facilities shall identify the quantity (expressed in wet-weight tons per year) and types of solid waste distributed for reuse and/or recycling and the ultimate use of the product or the quantity (expressed in wet-weight tons per year) of solid waste disposed of. The report shall also identify the permitted facility used for the disposal of the waste.

2. ~~b.~~ Recordkeeping

a. ~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b. ~~ii.~~ The permit holder shall maintain records of transporters transporting waste for processing or disposal at the facility. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the department.

c. ~~iii.~~ Records kept on site for all facilities shall include, but not be limited to:

i. ~~(a).~~ copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application; and

iv. ~~(d).~~ permit modifications.

~~2~~3. Personnel. All facilities shall have the personnel necessary to achieve the operational requirements of the facility.

~~3~~4. Type III facilities receiving solid waste for composting shall have the number and levels of certified operators employed at the facility as required by the department in accordance with~~*Louisiana Administrative Code*, Title~~ LAC 46:~~,~~ Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of

Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

~~C~~D. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

~~b. Open burning shall not be practiced unless authorization is first obtained from the administrative authority and any other applicable federal, state, and local authorities.~~

~~c. Salvaging shall be prevented unless approved by the administrative authority.~~

~~d. Scavenging shall be prevented.~~

e. The following types of wastes may be processed:

i. yard trash and woodwaste as defined in LAC 33:VII.115;

ii. manure as defined in LAC 33:VII.115;

~~iii. sewage sludge or septage as defined in LAC 33:VII.115;~~

iii~~v~~. residential or commercial solid waste as defined in LAC 33:VII.115;

iv. other materials deemed acceptable by the administrative authority.

f. The processing of infectious waste and asbestos waste shall be strictly prohibited and prevented.

g. No solid waste shall be deposited in standing water.

2. Facility Operational Plans. Operational plans shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of processing operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used during wet weather (particular attention ~~should~~shall be given to maintenance of access roads and to water management); and

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented.

3. Facility Operational Standards

~~a. Composting facilities which receive domestic septage or sewage sludge from publicly owned treatment works shall require the waste be tested for toxicity characteristics leachate procedure (TCLP) analysis and priority pollutants prior to acceptance of the waste and annually for two years following acceptance. Each year thereafter, the generator must certify that the waste remains unchanged.~~

~~b~~a. The operation of composting facilities shall be by methods which result in the aerobic, biochemical decomposition of the organic material received.

~~c~~b. The facility ~~must~~shall be designed and operated to control vectors, odors, dust, and litter.

~~d~~c. The construction and turning frequency (if turning is necessary) of a composting facility ~~must~~shall be sufficient to maintain aerobic conditions and to produce a compost product in a time-frame ~~which~~that is consistent with the level of technology employed and acceptable to the administrative authority.

~~e~~d. In-vessel composting shall be conducted in accordance with the manufacturer's specifications and these regulations.

~~f~~e. The following special requirements apply to facilities handling ~~sewage sludge, septage, and~~ residential or commercial waste.

i. If the compost is to be used exclusively for application to non-food-chain cropland, the criteria for ~~a process to significantly reduce pathogens (LAC 33:VII.3007.Appendix D) must~~ exceptional quality, as defined in LAC 33:IX.Chapter 69 shall be met. Otherwise, the facility ~~must~~shall meet the criteria for ~~a process to further reduce pathogens (LAC 33:VII.30097.Appendix E).~~ Class B compost, as defined in LAC 33:IX. Chapter 69. In addition, the compost shall meet the vector attraction reduction requirements of LAC 33: IX.69.

ii. The facility ~~must~~shall include the following components:

(a). a receiving area, mixing area, curing area,

compost storage area, drying and screening areas, and truck wash area located on surfaces capable of preventing groundwater contamination and resistant to rutting caused by vehicular traffic (periodic inspections of the surface shall be made to ensure that the underlying soils and the surrounding land surface are not being contaminated);

(b). a runoff collection system; and

(c). leachate collection; and ~~on-site/off-site treatment system.~~

(d). on-site/off-site treatment systems.

f~~e~~. The following parameters are to be monitored and recorded during the operation in the time-frame specified below (the samples taken for the parameters listed below shall be representative of the compost unit):

i. temperature, daily;

ii. process odors, daily;

iii. blower operation, daily; and

iv. other parameters as deemed appropriate by the administrative authority.

g~~h~~. Compost shall be classified based on the type of waste processed, compost maturity, particle size, and organic matter. The following characteristics shall be used.

i. Compost Maturity

(a). ~~f~~*Fresh* ~~o~~*Organic* ~~m~~*Matter*—raw material

before undergoing decomposition (or at beginning of process).

(b). ~~f~~*Fresh* ~~c~~*Compost*—organic matter that has been through the thermophilic stage and has undergone partial decomposition.

(c). ~~s~~*Semimature* ~~c~~*Compost*—compost material that is at the mesophilic stage.

(d). ~~m~~*Mature* ~~c~~*Compost*—a highly stabilized product ~~which~~that results from exposing compost to a prolonged period of humidification and mineralization, beyond the stage of maturity. Mature compost shall have been cured for at least 60 days after the mesophilic stage is complete. Minimum starting moisture content for curing semimature compost ~~should~~shall be above 45 percent (by weight) and ~~should~~shall be raised to this value if necessary.

(e). a plot of time versus temperature (to indicate that the temperature of the compost has stabilized over a period of time) or other acceptable methods may be used to determine the level of maturity of compost as defined in Subclauses C.3.h.i.(b), (c), and (d), of this Section.

ii. Particle Size. Particle size shall be determined by using the screen size, listed in this Clause, that the compost passed through. Organic matter content shall be determined by measuring the volatile solids content using the Environmental Protection Agency's (EPA) approved methods.

(a). Fine: < 12 mm and organic matter > 25 percent.

(b). Medium: < 15 mm and organic matter > 30

percent.

(c). Coarse: < 30 mm and organic matter > 35 percent.

iii. Moisture Content. ~~The moisture content i~~In the finished compost, the moisture content shall not exceed 55 percent (by weight). The moisture content shall be determined by using the ~~Environmental Protection Agency's~~EPA's approved methods.

iv. Concentration Levels. ~~(shown in mg/kg in dry weight) of finished compost~~The concentration level of finished compost shall be as shown in the following table.~~:~~

Concentration Levels of Finished Compost (shown in mg/kg in dry weight)		
Parameter	**Category 1**	**Category 2**
Cadmium	5<~~15~~	~~1~~5 - ~~2~~15
Copper	250<~~450~~	~~4~~250 - ~~10~~500
Lead	100<~~200~~	~~2~~100 - ~~8~~300
Nickel	<50	50 – 100
Zinc	<1000	1000 - 2000

h~~i~~. Finished Compost

i. The finished compost shall be sufficiently stable that it can be stored or applied to land without causing a health hazard, detriment, or nuisance to the environment as determined by the administrative authority.

ii. All distributed compost ~~must~~shall be accompanied with a label or leaflet ~~which~~that indicates, at a minimum, the type of waste from which

the compost was derived, any restriction on the use of the product, and recommended application rates.

iii. Compost derived from ~~sewage sludge, septage, or~~ residential or commercial waste ~~must~~shall meet the criteria for exceptional quality, as defined in LAC 33:IX. Chapter 69. ~~of the process to further reduce pathogens (LAC 33:VII.3009) or the process to significantly reduce pathogens (LAC 33:VII.3007) as provided in Clause C~~D.3.f.i of this Section. ~~Such compost shall not be offered for sale to or otherwise distributed to the general public unless it meets the criteria of the process to further reduce pathogens.~~

iv. Any compost made from solid waste ~~which~~that cannot be used pursuant to these regulations shall be reprocessed or disposed of in an approved solid waste facility.

v. Waste received at a composting facility shall be used as compost, sold as compost, or disposed of at a permitted disposal facility within 36 months after receipt.

vi. The sampling and testing methods shall be the ~~Environmental Protection Agency~~EPA's approved methods.

vii. Compost produced outside of the state of Louisiana, ~~which~~that is used or sold for use within the state, shall comply with the requirements of these regulations.

viii. Classes of Finished Compost

(a). Class M1—compost made only from

manure or manure with yard trash and/or woodwaste ~~which~~that is mature or semimature, fine or medium, and which meets the metals concentrations of Category 1 of Clause ~~C~~D.3.h.iv of this Section shall have unrestricted distribution except as provided in Clause ~~C~~D.f.i of this Section.

(b). Class M2—compost made only from manure or manure with yard trash and/or woodwaste ~~which~~that is mature or semimature, fine or medium, and which meet the metals concentrations of Category 2 (but not of Category 1) of Clause ~~C~~D.3.h.iv of this Section shall be restricted to use with non-food-chain crops.

(c). Class S1—compost made from solid waste, other than only manure or manure with yard trash and/or woodwaste, ~~which~~that is mature, fine, and which meets the metals concentrations in Category 1 of Clause ~~C~~D.h.iv of this Section shall have unrestricted distribution except as provided in Clause ~~C~~D.3.f.i of this Section.

(d). Class S2—compost made from solid waste, other than only manure or manure with yard trash and/or woodwaste, ~~which~~that is mature or semimature, fine or medium, and which meets concentrations in Category 1 or Category 2 of Clause ~~C~~D.3.h.iv of this Section, but which does not meet the requirements of Class S1 compost, shall be restricted to use with non-food-chain crops and shall not be used in areas where public contact is likely, such as parks or recreation areas.

(e). Class YW—compost made only from yard trash and/or woodwaste ~~which~~that is mature or semimature, fine or medium shall have unrestricted distribution except as provided in Clause ~~C~~D.3.f.i of this Section.

(f). All classes of compost shall be used in accordance with the maximum-loading rates provided in the following table and are subject to the restrictions provided in Clause ~~C~~D.3.f.i of this Section. The following loading rates, specific plant nitrogen, and other limitations shall apply. ~~apply unless soil analyses of cation-exchange capacity and pH justify higher loadings.~~

Maximum Applied Metal (lb/acre)	
Lead	~~5~~300
Zinc	~~2~~2500
Copper	~~12~~2500
Nickel	~~1~~250
Cadmium	15

ix. Testing of Finished Compost. Composite samples of batches produced at compost facilities shall be analyzed in accordance with "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods." EPA Publication SW-846, 1986, as revised December 1987, at intervals of every three months (see *Liquid Waste* as defined in LAC 33:VII.115) for the following parameters:

(a). moisture;

(b). total nitrogen;

(c). total phosphorus;

(d). total potassium;

(e). pH;

(f). cadmium;

(g). copper;

(h). lead;

(i). nickel;

(j). zinc; and

(k). appropriate parameters for pathogens and vector attraction reduction analysis. ~~fecal coliform (analyze in accordance with *Standard Methods for the Examination of Water and Wastewater*, 18th edition).~~

4. Sufficient equipment shall be provided and maintained at all facilities to meet the facility's operational needs.

5. Segregation of Waste

a. Composting facilities involving residential and commercial solid waste shall provide a waste-segregation plan and a recyclables separation program ~~which~~that shall be instituted prior to composting operations.

b. Wastes not intended for composting shall be removed from the facility to a permitted facility at least every seven days. Storage of wastes not intended for composting shall be in a closed container that prevents vector and odor problems. The facility shall maintain a log of dates and volumes of waste removed from the facility due to its inability to be composted.

c. Recyclable waste removed from the waste stream shall be

stored in a manner that prevents vector and odor problems and shall be removed from the facility at least every 90 days. The facility shall maintain a log of dates and volumes of recycled waste removed from the facility.

6. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the ~~administrative authority~~Office of Environmental Services, Permits Division, and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph ~~C~~D.6.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the ~~administrative authority~~Office of Environmental Services, Permits Division.

c. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that

it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 723.D.6.c above.

e. Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR 1910.120.

f. The provisions of 723.D.6.c-e shall not apply to a Type I facility that is also a Type II or III facility.

~~D~~E. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

2. Closure Requirements

a. An insect and rodent inspection ~~is required~~shall be performed and documented before closure~~.~~ and ~~E~~extermination measures~~, if required, must~~shall be provided if required as a result of the final inspection.

b. All remaining waste shall be removed to a permitted

facility for disposal.

c. The permit holder shall verify that the underlying soils have not been contaminated in the operation of the facility. If contamination exists, a remediation/removal program developed to meet the standards of LAC 33:VII.713. E.~~3, 4, and 5~~ 6 ~~must~~shall be provided to the Office of Environmental Services, Permits Division. The Office of Environmental Compliance, Surveillance Division shall conduct a closure inspection to verify that the facility was closed in accordance with the approved closure plan.

3. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder. A request for the release of this fund by the permit holder shall be submitted to the Office of Management and Finance, Financial Services Division.

4. Financial assurance shall be adequate to cover removal of the maximum inventory at any given time, including the cost of dismantling and removal of materials and buildings, etc.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 20:1001 (September 1994), amended by the Office of the Secretary, LR 24:2252 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2528 (November 2000),

repromulgated LR 27:705 (May 2001), amended by the Office of Environmental Assessment, LR 30:2025 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§725. Separation and Woodwaste Processing Facilities (Type III)

A. Facility Plans and Specifications

1. Plans, specifications, and operations represented and described in the permit application or permit modifications for all facilities ~~must~~shall be prepared under the supervision of and certified by a ~~registered~~professional engineer, licensed in the state of Louisiana.

2. Levee Construction~~The following standards apply to construction of levees for all facilities requiring levees.~~

a. The perimeter levees of all facilities shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity.

b. Levees or other protective measures ~~must~~shall be constructed adjacent to the facility in order to ~~provide an adequate freeboard above~~protect the facility against the 100-year flood~~ elevation~~.

B. Facility Administrative Procedures

1. ~~Recordkeeping and Reports~~

~~a. Reports~~

a. ~~i.~~ The permit holder shall submit annual reports to the

Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste (expressed in both dry and wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. All calculations used to determine the amounts of solid waste received for processing during the annual-reporting period shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division. A form to be used for this purpose ~~must~~shall be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.

b. ~~ii.~~ The reporting period for the processor annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c. ~~iii.~~ Annual reports shall be submitted to the ~~administrative authority~~Office of Management and Finance, Financial Services Division by August l of each reporting year.

d. ~~iv.~~ The annual report is to be provided for each individual permitted facility on a separate annual reporting form.

e. ~~v.~~ The annual report for separation facilities shall identify the quantity (expressed in wet-weight tons per year), and types of solid waste transported for disposal. The report shall also identify the permitted facility used for disposal of the waste.

f ~~vi.~~ The annual reports for separation facilities shall identify the quantity (expressed in wet-weight tons per year) and types of solid waste

distributed for reuse and/or recycling and the ultimate use of the product.

g ~~vii.~~ The annual report for portable air curtain destructors shall identify the site and quantity of solid waste processed at each individual site.

2. ~~b.~~ Recordkeeping

a. ~~i.~~ The permit holder shall maintain at the facility all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

b. ~~ii.~~ The permit holder shall maintain records of transporters transporting waste for processing or disposal at the facility. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the Office of Environmental Services, Permits Division.

c. ~~iii.~~ Records kept on site for all facilities shall include, but not be limited to:

i. ~~(a).~~ copies of the current, applicable Louisiana solid waste rules and regulations;

ii. ~~(b).~~ the permit;

iii. ~~(c).~~ the permit application; and

iv. ~~(d).~~ permit modifications.

~~2~~3. Personnel. All facilities shall have the personnel necessary to

achieve the operational requirements of the facility.

~~3~~4. Type III facilities receiving solid waste for ~~separation~~processing shall have the number and levels of certified operators employed at the facility as required by the department in accordance with~~*Louisiana Administrative Code*, Title~~ LAC 46~~,~~: Part XXIII, which is hereby incorporated by reference. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Office of Environmental Services, Permits Division shall be notified within 30 days of any changes in the employment status of certified operators.

C. Facility Operations

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

b. Open burning shall not be practiced unless authorization is first obtained from the administrative authority and any other applicable federal, state, and local authorities.

c. Salvaging shall be prevented unless approved by the administrative authority.

d. Scavenging shall be prevented.

2. Facility Operational Plans. Operational plans shall be provided ~~which~~that describe in specific detail how the waste will be managed during all phases of

processing operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed or disposed of within a unit;

c. the method and operational changes that will be used during wet weather (particular attention ~~should~~shall be given to maintenance of access roads and to water management); and

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented.

3. Facility Operational Standards

a. All containers shall provide containment of the wastes and thereby control litter, odor, and other pollution of adjoining areas.

b. Provisions shall be made for at least daily cleanup of the facility, including equipment and waste-handling areas.

c. No solid waste shall be stored long enough to cause a nuisance, health hazard, or detriment to the environment.

d. Treatment facilities for washdown and other contaminated water shall be provided.

e. Facilities shall have a plan for handling contaminated water.

f. Applications for air curtain destructors shall provide the

specifications of the type of air curtain unit proposed and additionally adhere to the following requirements:

i. If the air curtain destructor is a trench burner, the approximate dimensions of the trench (pit) shall be specified

ii. Ash shall be removed on a regular basis as to not cause a hazard or nuisance

iii. Water shall be applied to the ash before removal

iv. Excessive smoldering of woodwaste shall be prevented during non-operating hours.

v. Only untreated woodwaste and yard trash as defined by LAC 3:VII.115 may be accepted. No burning of treated woodwaste or other solid waste is permitted.

vi. All emissions and burning operations are subject to the Louisiana Air Quality Rules and Regulations (LAC 33:II). These rules and regulations and any other permits shall be followed.

vii. Only clean fuels (diesel fuel No. 2, etc.) shall be used to light refuse.

viii. Burning shall be conducted between the hours of 8:00 a.m. to 5:00 p.m.

ix. Incoming woodwaste shall be inspected at the gate before unloading. If any waste other than woodwaste is detected, the entire load shall be rejected. All rejected loads shall be recorded in the daily log.

x. Storage of woodwaste and yard trash shall be in a

designated area.

xi. The volume of woodwaste and yard trash stored on-site shall not exceed 10 days of the processing capacity of the air curtain destructor unless otherwise approved by the administrative authority.

xii. No waste or combustible material shall be stored within fifty (50) feet of the air-curtain destructor.

4. Sufficient equipment shall be provided and maintained at all facilities to meet the facilities' operational needs.

5. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the Office of Environmental Services, Permits Division and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subparagraph C.5.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the Office of Environmental Services, Permits Division.

c. Type II and III facilities shall obtain certification from the local;

i. fire department and emergency medical services

regarding their proficiency in 29 CFR 1910.120.

ii. hospital as to whether it is able to accept and treat patients who are contaminated with hazardous materials.

d. In the event any such agency or hospital cannot certify that it is able to meet the above requirements, the applicant for Type II and III facilities shall identify in the permit application the closest fire department, emergency medical service and hospital that can provide the services listed in 725.D.5.c above.

e. Facility operators for Type II and III facilities shall be trained in awareness and hazardous waste operations training in accordance with 29 CFR 1910.120.

f. The provisions of 7251.D.5.c-e shall not apply to a Type I facility that is also a Type II or III facility.

D. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intent to close, seal, or abandon any individual units within a facility and shall provide the following information:

a. the date of the planned closure;

b. changes, if any, requested in the approved closure plan; and

c. the closure schedule and estimated cost.

2. Closure Requirements

a. ~~An i~~Insect and rodent inspection shall be performed and documented ~~is required~~ before closure~~.~~ and ~~E~~extermination measures~~, if required, must~~shall be provided if required as a result of the final inspection.

b. All remaining waste shall be removed to a permitted facility for disposal or properly disposed of on-site as provided for in LAC 33:VII.305.~~H~~A.8. If waste is removed from the facility, documentation shall be provided that the material was properly disposed of in a permitted facility.

c. The permit holder shall verify that the underlying soils have not been contaminated from the operation of the facility. If contamination exists, a remediation/removal program developed to meet the standards of LAC 33:VII.713. E.~~3, 4, -and 5~~ 6~~must~~shall be provided to the Office of Environmental Services, Permits Division. The Office of Environmental Compliance, Surveillance Division shall conduct a closure inspection to verify that the facility was closed in accordance with the approved closure plan.

3. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder. A request for the release of this fund by the permit holder shall be submitted to the Office of Management and Finance, Financial Services Division.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187

(February 1993), amended LR 20:1001 (September 1994), LR 22:280 (April 1996), amended by the Office of the Secretary, LR 24:2252 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2528 (November 2000), repromulgated LR 27:705 (May 2001), amended by the Office of Environmental Assessment, LR 30:2026 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

Subchapter E. Financial Assurance for All Processors and Disposers of Solid Waste

(Editor's note: Subchapter E, §727 moved to Chapter 13)

Chapter 8. Standards Governing General Facility Geology, Subsurface Characterization, and Facility Groundwater Monitoring (Type I, I-A, II, II-A, and III)

§801. General Facility Geology (Editor's note: taken from 709.C)

A. The following standards regarding facility geology are applicable to all Type I, Type I-A, Type II, Type II-A, and Type III facilities.

1. The subsurface soils and groundwater conditions at facilities~~Type I facilities and at Type II surface impoundments and landfills~~ shall be characterized by a geologist or a ~~registered~~professional engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology. ~~or by a geologist with expertise in these fields. The characterization shall meet the following guidelines~~ Both field boring logs and laboratory results shall be included as part of the permit application.

2. Except as provided in ~~Subparagraph C.1.b~~Paragraph A.3 of this Section, facilities shall have natural soils of low permeability for the area occupied by the

solid waste facility, including vehicle parking and turnaround areas, that should provide a barrier to prevent any penetration of surface spills into groundwater aquifers underlying the area or to a sand or other ~~water-bearing~~permeable strata that would provide a conduit to such aquifers.

3. A design for surfacing natural soils that do not meet the requirement in ~~Subparagraph C.1.a~~Paragraph A.2 of this Section shall be prepared and installed under the supervision of a ~~registered~~professional engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology. Written certification by the engineer that the surface satisfies the requirements of ~~Subparagraph C.1.a~~Paragraph A.2 of this Section shall be provided.

Authority Note: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

Historical Note: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§803. Subsurface Characterization

A. Boring Requirements

1. Boring Requirements Applicable to Type I, II, and III Facilities

a. Borings shall be installed and plugged and abandoned in accordance with the standards in this Chapter, as well as the guidelines established in the latest versions of the department's and the Louisiana Department of Transportation and Development's (LDOTD) *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook* and the LDOTD's Water Well Rules, Regulations, and Standards in LAC 56:~~XIII~~. The administrative authority may approve other forms of

geological investigation for Type III facilities, such as hand augered borings, test pits, excavations, etc., provided that subsurface conditions are characterized by an individual that meets the requirements in LAC 33:VII.801.A, and any holes, test pits, etc., are properly plugged and abandoned.

b. Boring logs shall be submitted for each borehole, including boreholes for monitoring wells and piezometers, and shall include information for boring logs established in the latest versions of the department's and LDOTD's *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook* and the LDOTD's Water Well Rules, Regulations, and Standards in LAC 70.XIII, including the ground surface elevation with respect to mean sea level, lithology and intervals that were cored continuously, and depth of first encountered groundwater.

c. If the ground surface elevation has changed in any of the future permitted areas due to construction or other activities at the facility, than the affected borings shall be re-surveyed to reflect the current ground surface elevation.

d. A plan view map(s) shall be provided that shows existing topographic contours and locations of all borings, monitoring wells, and piezometers with respect to the facility.

e. A detailed plan-view drawing shall be provided that shows the proposed elevations of the base of units prior to installation of the liner system and boring locations.

(NOTE: Moved original "2B" 803.1.a and 803.1.g. to 803.2.a and 803.2.e.)

2. Requirements Applicable to Type I and Type II Facilities

a. Geotechnical borehole spacing shall be no greater than 450

feet (minimum of four borings required) except for Type II landfarms that require a sufficient spacing between borings to adequately characterize the subsurface soils and groundwater conditions for the facility.

b. Existing permitted facilities, which are planning a lateral and/or vertical expansion or changing the permitted lowest point of excavation within the permitted foot print, may submit a work plan to the Office of Environmental Assessment, Environmental Technology Division to demonstrate that an alternative to the geotechnical borehole minimum spacing requirements set forth in Section 803.A.3.a. will achieve adequate characterization of the subsurface soils and groundwater conditions for the facility. The proposed alternative method shall include demonstration that the subsurface soils and ground water conditions have been adequately characterized or propose additional actions necessary to achieve adequate characterization. If the Department concurs that adequate characterization has been performed, the spacing requirements of 803.A.3.a may be waived.

c. The elevation (MSL/NGVD) of the lowest point of excavation shall be provided.

d. All boreholes shall extend to a depth of at least 30 feet below the elevation (MSL) of the lowest point of excavation (or the lowest point of the zone of incorporation for landfarms). At least 10 percent of the borings (minimum of three borings) shall extend to 100 feet below grade level to characterize the shallow geology.

e. All borings shall be continuously sampled to at least 30 feet below the elevation (MSL/NGVD) of the lowest point of excavation (or lowest point of

the zone of incorporation for landfarms), with the use of thin-wall and/or split-spoon devices or similar coring devices. After 30 feet, samples shall be at a maximum of five-foot intervals. The Office of Environmental Assessment, Environmental Technology Division may approve other forms of boreholes logging on a case-by-case basis and with proper justification.

3. Boring Requirements Applicable to Type III Facilities

a. Type III facilities shall install a minimum of 3 borings and at least 1 boring for every 8 acres of regulated unit(s) to a minimum depth of 5 feet below the lowest point of excavation. [Editor's note: From GRID]

b. All borings shall be continuously sampled to at least 5 feet below the lowest point of excavation with the use of the administrative authority's approved form of geological investigation device.

c. Ground surface elevations of the boring location and the lowest point of excavation shall be surveyed (MSL/NGVD) or estimated through the use of USGS quadrangle maps. [Editor's note: From GRID]

d. Logs of borings and other forms of geological investigation approved by the administrative authority for Type III facilities shall be submitted on a geologic cross section(s) and shall include applicable information required in Subparagraph C.2.a of this Section. [Editor's note: Moved from 803.1.g.]

B. Groundwater Flow Determination Requirements Applicable to Type I and Type II Facilities.

1. Groundwater flow direction(s) shall be determined using a minimum of three piezometers or monitoring wells in each water-bearing zone including

zone(s) that comprise the uppermost aquifer and uppermost water-bearing permeable zone (if present).

2. Piezometers and monitoring wells that are used to characterize groundwater flow direction(s) shall be constructed and as-built diagrams submitted in accordance with the applicable well construction standards in LAC 33:VII.805.A.3.

3. The reference point of each piezometer and monitoring well that is used for measuring water levels shall be surveyed by a professional surveyor, licensed in the state of Louisiana.

4. Water levels of piezometers and monitoring wells that are used for determining groundwater flow direction(s) shall be measured at least four times in a one-year period (quarterly) to provide seasonal and temporal fluctuations in groundwater flow rate(s) and direction(s).

C. Geology and Groundwater Flow Characterization Requirements Applicable to Type I and II Facilities

1. Regional Geology and Groundwater Flow Characterization

a. A geologic cross-section from available published information that depicts the stratigraphy to a depth of at least 200 feet below the ground surface shall be provided.

b. The areal extent, thickness, and depth to the upper surface and any interconnection of aquifers, ~~delineation of the following~~ from all available information, shall be provided for all recognized aquifers ~~which~~that have their upper surfaces within 200 feet of the ground surface.

c. The direction(s) and rate(s) of groundwater flow shall be provided for all recognized aquifers that have their upper surface within 200 feet of the ground surface, shown on potentiometric maps.

2. Facility Geology and Groundwater Flow Characterization

a. Geologic cross sections shall be provided for each transect (line of borings) and shall depict the following information in relation to mean sea level (msl):

1. lithologic and boring log data from all borings drilled at the facility, including borings for existing as well as plugged and abandoned monitoring wells and piezometers;

ii. boring locations, including monitoring wells and piezometers and depths;

iii. excavation depths (or depths of the zone of incorporation for landfarms) on applicable cross section(s);

iv. screen intervals of all existing and plugged and abandoned monitoring wells and piezometers;

v. other applicable features such as faults, slurry walls, groundwater dewatering systems, etc.; and

vi. identification of individual stratigraphic units, including units that comprise the uppermost aquifer, uppermost water-bearing permeable zone (if present), lower confining unit, and confining unit that underlies the uppermost water-bearing permeable zone (if present).

a. The areal extent, depths, and thickness of all permeable zones to a depth of at least 30 feet below the lowest point of excavation (or zone of incorporation for landfarms) shall be provided on structure contour maps (top and/or bottom of zone maps) and isopach maps, including the zone(s) that comprise the uppermost aquifer and uppermost water-bearing permeable zone (if present). Structure contour maps and isopach maps shall display the location of the facility, boring locations, and corresponding elevation or thickness measurement at each boring location.

b. The areal extent, depths, and thickness of the lower confining unit for the uppermost aquifer and the confining unit underlying the uppermost water-bearing permeable zone (if present) shall be provided on structure contour maps (top and/or bottom of zone maps) and isopach maps. Structure contour maps and isopach maps shall display the location of the facility, boring locations, and corresponding elevation or thickness measurement at each boring location.

c. Any faults that are mapped as existing through the facility shall be displayed on structure contour maps and shall show the fault trace and arrows pointing to the downthrown side of fault.

d. At least four scaled potentiometric surface maps shall be provided over a one-year period (quarterly) for each saturated permeable zone to a depth of at least 30 feet below the lowest point of excavation (or zone of incorporation for landfarms), including the zone that comprises the uppermost aquifer and uppermost water-bearing permeable zone. Scaled potentiometric surface maps shall display the location of the facility, monitoring well and piezometer locations, and corresponding water level elevation measurement at each well location.

e. Characterization of groundwater flow direction(s) shall be provided between saturated permeable zones. The characterization shall include the use of various illustrations such as potentiometric surface maps, flow nets depicting vertical and horizontal flow directions, etc.

f. Discussion of any change in groundwater flow direction anticipated to result from any facility activities shall be provided.

g. Establishment of zone(s) that comprise the uppermost aquifer, uppermost water-bearing permeable zone (if present), and lower confining unit shall be provided.

h. Groundwater flow rate(s) and calculations shall be provided for each zone(s) that comprises the uppermost aquifer and uppermost water-bearing permeable zone (if present).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 32:**.

§805. Facility Groundwater Monitoring (Editor's note: from §709.E Groundwater Monitoring)

A. Groundwater Monitoring System

1. At each facility, a groundwater-monitoring system ~~must~~shall be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, in accordance with Paragraph A.2 of this Section, to yield groundwater

samples from the uppermost aquifer ~~(~~and from the uppermost water-bearing permeable zone which will yield sufficient quantities of water for sampling ~~if different from the uppermost aquifer and if deemed necessary by the administrative authority for adequate groundwater monitoring at the facility)~~that:

a. represent the quality of the background groundwater that has not been affected by leakage from a unit; and

b. represent the quality of groundwater passing the relevant point of compliance. For the purposes of these regulations, the relevant point of compliance is the vertical surface ~~which~~that is located no more than 150 meters downgradient from the unit(s) being monitored and extends down into the uppermost aquifer underlying the facility and any other permeable zones being monitored. The distance may be reduced by the administrative authority. The relevant point of compliance ~~must~~shall be on property owned or controlled by the permit holder and ~~must~~shall be selected ~~and subject to the approval of the administrative authority~~ based on at least the following factors:

i. hydrological characteristics of the facility and the surrounding land;

ii. volume and physical and chemical characteristics of the leachate;

iii. quantity, quality, and direction of flow of groundwater;

iv. proximity and withdrawal rate of the groundwater

users;

v. availability of alternative drinking water supplies;

vi. existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater, and whether the groundwater is currently used or reasonably expected to be used for drinking water;

vii. public health, safety, and welfare effects; and

viii. practicable capability of the owner or operator.

2. Location of Wells

a. Enough monitoring wells ~~must~~shall be located hydraulically upgradient of the facility to yield samples that represent background groundwater quality as required in Paragraph A.1 of this Section.

b. A minimum of one upgradient well per zone monitored is required.

c. Monitoring wells other than upgradient of the facility may be sampled for background groundwater quality if:

i. hydrologic conditions do not allow the permit holder to determine which wells are hydraulically upgradient; or

ii. sampling at other wells will provide an indication of background groundwater quality that is more representative than sampling of upgradient wells.

d. Enough monitoring wells ~~must~~shall be located

hydraulically downgradient from the facility to yield samples that are representative of the groundwater passing the relevant point of compliance. Downgradient monitoring well locations and screen intervals shall target the most likely contaminant pathway(s). At least two downgradient wells per zone monitored ~~must~~shall be provided. The downgradient wells ~~must~~shall be screened in the same zone as the upgradient wells. Spacing between downgradient wells shall not exceed 800 feet.

e. The number, spacing, and depths of monitoring wells shall be determined based upon site-specific technical information that ~~must~~shall include thorough characterization of:

i. aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and

ii. saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thickness, stratigraphy, lithology, hydraulic conductivities, porosities, and effective porosities.

f. The administrative authority will consider for approval multi-unit groundwater monitoring systems, provided these systems meet the requirements of Paragraph A.1 of this Section and will be as protective of human health and the environment as groundwater monitoring systems for individual units.

g. The administrative authority may modify the requirements

of this Subsection~~Subparagraph E.1.b of this Section~~ for site-specific considerations in approving groundwater monitoring systems for ditches.

3. Well Construction

a. Well construction shall be in accordance with LDOTD's "Water Wells Rules, Regulations, and Standards~~,~~ instate~~ of Louisiana~~ ~~(~~LAC ~~70~~56~~:Part XIII),~~ as ~~adopted by the Louisiana Department of Transportation and Development, Water Resources Section~~well as the latest version of the department's and LDOTD's *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook.*

b. Construction of monitoring wells for facilities regulated by the department shall require approval of the administrative authority prior to construction.

c. In addition to the construction standards set forth in ~~the~~LDOTD's "Water Wells Rules, Regulations,~~"~~ and Standards in LAC 70:XIII, the following is required for monitoring wells.

i. All wells ~~must~~shall have protective casing with locking covers and a secure locking device in place.

ii. All wells ~~must~~shall have guard posts firmly anchored outside the well slab, but not in contact with the slab.

iii. The maximum allowable screen length ~~must~~shall not exceed 10 feet.

iv. A sign or plate ~~must~~shall be permanently affixed to the protective well casing and ~~must~~shall prominently display:

(a). well identification number;

(b). identification of well as upgradient or downgradient;

(c). elevation of top of well casing in relation to mean sea level;

(d). screen depth in relation to mean sea level; and

(e). date of well installation and any subsequent repairs.

4. Post Construction. Within 90 days after construction of the wells, the permit holder or applicant ~~must~~shall submit to the Office of Environmental Services, Permits Division, well-completion details to verify that the wells were constructed according to the approved specifications and to document construction procedures. A permit modification fee will not be required. Well-completion details shall include, but are not limited to:

a. daily field notes documenting construction procedures and any unusual occurrences, such as grout loss, etc.;

b. boring log for each well including surface elevation(s) with respect to mean sea level or comparable reference points; and

c. as-built diagrams for each well showing all pertinent features, such as elevation of reference point for measuring groundwater levels, screen interval, and ground surface. If features change from the approved plans, then a permit-

modification request ~~must~~shall be submitted in accordance with LAC 33:VII.50~~7~~9.

5. Plugging and Abandonment of Monitoring Wells and Geotechnical Borings

a. ~~The~~LDOTD's "Water Wells Rules, ~~and~~ Regulations, ~~State of Louisiana~~and Standards" in ~~(~~LAC 70:~~Part~~XIII~~)~~, as ~~adopted by the Louisiana Department of Transportation and Development, Water Resource Section~~well as the latest version of the department's and LDOTD's *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook*, shall apply to all plugging and abandonment of wells and holes including, but not limited to, observation wells, monitoring wells, piezometer wells, leak-detection wells, assessment wells, recovery wells, abandoned pilot holes, test holes, and geotechnical boreholes.

b. In addition to the standards in LAC 70:XIII and the latest version of the department's and LDOTD's *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook*, the following standards shall apply to plugging and abandonment.

i. For any well, the primary method of plugging and abandonment shall be removal of the well's casing and other components of the well including, but not limited to, the screen, grout, bentonite seal, filter pack, concrete slab, protective casing, guard posts, and native soil in immediate contact with the grout and subsequent installation of cement-bentonite grout, from the bottom of the resulting borehole to the ground surface using the tremie method.

ii. In areas where all or a part of the well's casing and

other components of the well cannot be plugged and abandoned in accordance with the procedure stated in Clause A.5.b.i of this Section, the well shall be plugged and abandoned by installation of cement-bentonite grout inside the well's casing, from the bottom of the well to the ground surface, provided that the annular seal is demonstrated to be adequately sealed and the following items are submitted:

(a). supporting documentation, prior to plugging the well, that demonstrates that removal of all or part of the well's casing and other components of the well in accordance with the procedure stated in Paragraph A.5 of this Section will be detrimental to the environment; and/or

(b). certification and supporting documentation by a qualified professional well constructor that shows that removal of the well's casing was attempted and that continued attempts to remove all or a part of the well's casing and other components of the well, as stated in Paragraph A.5 of this Section, would have been detrimental to the environment.

iii. After plugging and abandoning a well, all surface features of the well including, but not limited to, the concrete slab, guard posts and protective casing, shall be dismantled and disposed of in an environmentally sound manner and the surface shall be restored to its original condition.

iv. The permit holder ~~must~~shall notify the Office of Environmental ~~Services~~Assessment, ~~Permits~~Environmental Technology Division of the plugging and abandonment of monitoring wells or geotechnical borings and keep records of such abandonments.

6. Monitoring wells, piezometers, and other measurement, sampling, and analytical devices ~~must~~shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

B. Groundwater Sampling and Analysis Requirements

1. A groundwater-monitoring program ~~must~~shall be implemented at each facility ~~which~~that includes consistent sampling and analysis procedures that ensure monitoring results are representative of groundwater quality at the background and downgradient well locations.

2. A groundwater sampling and analysis plan ~~must~~shall be prepared ~~which~~that meets the requirements of ~~Subp~~Paragraph ~~E~~B.2~~.a~~ of this Section, as well as the requirements of ~~LAC 33:VII.3005~~Appendix A of this Chapter, and ~~which~~that includes procedures and techniques for:

a. sample collection ~~which~~that ensures that collected samples are representative of the zone(s) being monitored and prevents cross-contamination of or tampering with samples;

b. sample preservation and shipment ~~which~~that ensure the integrity and reliability of the sample collected for analysis;

c. chain of custody control; ~~and~~

d. quality-assurance/quality-control, including detection limits, precision and accuracy of analyses, field blanks, and laboratory spikes and blanks; and

e. statistical evaluation of the groundwater monitoring data

for each parameter or constituent sampled at each monitoring well.

3. The sampling and analysis plan ~~must~~shall ~~also~~provide the sampling frequency and include the:

a. selection of parameters or constituents to be sampled and analyzed during detection monitoring and justification for parameters or constituents where applicable;

b. identification of analytical procedures to be followed (reference source of analytical method); and

c. practical quantitation limit for each parameter or constituent.

4. The practical quantitation limit (pql) for each groundwater monitoring parameter or constituent shall be:

a. the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility; and

b. equal to or lower than the groundwater protection standard for that parameter or constituent as set in accordance with LAC 33:I.Chapter 13 when applicable.

5. Background groundwater quality ~~must~~shall be established for the facility in a hydraulically upgradient well(s), or other well(s) as provided in Subparagraph A.2.c of this Section, for each groundwater parameter or constituent.

6. Statistical Methods

a. The number of samples collected to establish groundwater quality data ~~must~~shall be consistent with the appropriate statistical procedures used. A decision tree diagram is included in Appendix A as a reference in the selection of an appropriate statistical procedure.

b. One of the following statistical methods to be used in evaluating groundwater data ~~must~~shall be specified in the sampling and analysis plan for each parameter or constituent to be monitored. The statistical test chosen shall be conducted separately for each parameter or constituent in each well:

i. a parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method ~~must~~shall include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each parameter or constituent;

ii. an analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method ~~must~~shall include estimation and testing of the contrasts between each compliance well's median and the background median levels for each parameter or constituent;

iii. a tolerance or prediction interval procedure in which an interval for each parameter or constituent is established from the distribution of the background data, and the level of each parameter or constituent in each compliance well is compared to the upper tolerance or prediction limit;

iv. a control chart approach that gives control limits for each parameter or constituent; and

v. another statistical test method that meets the performance standards of Subparagraph B.6.c of this Section. The permit holder ~~must~~shall place a justification for this alternative in the operating record and notify the administrative authority of the use of this alternative test. The justification ~~must~~shall demonstrate that the alternative method meets the performance standards of Subparagraph B.6.c of this Section.

c. Any statistical method chosen under Subparagraph B.6.b of this Section shall comply with the following performance standards, as appropriate.

i. The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of the parameters or constituents. If the distribution of the chemical parameters or constituents or hazardous parameters or constituents is shown by the permit holder to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the parameters or constituents differ, more than one statistical method may be needed.

ii. If an individual well comparison procedure is used to compare an individual compliance well parameter or constituent concentration with background parameters or constituent concentrations or a groundwater protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment-wide error rate for each testing period shall be no less than 0.05; however, the Type I error of no less

than 0.01 for individual well comparisons ~~must~~shall be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

iii. If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter or constituent values shall be protective of human health and the environment. The parameters or constituents shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each parameter or constituent of concern.

iv. If a tolerance interval or a predictional interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval ~~must~~shall contain, shall be protective of human health and the environment. These parameters or constituents shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each parameter or constituent of concern.

v. The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

vi. If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal

correlation in the data.

d. The permit holder ~~must~~shall determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular groundwater monitoring program that applies to the facility, as determined under Subsections C and D of this Section.

i. In determining whether a statistically significant increase has occurred, the permit holder ~~must~~shall compare the groundwater quality of each parameter or constituent at each monitoring well designated in accordance with Subparagraph A.1.b of this Section to the background value of that parameter or constituent, according to the statistical procedures and performance standards specified under Subparagraphs B.6.b and c of this Section.

ii. Within 90 days after the date of sampling, the permit holder ~~must~~shall determine whether there has been a statistically significant increase over background at each monitoring well.

C. Detection Monitoring Program

1. All Type I and II facilities ~~must~~shall conduct a detection monitoring program as described in Subsection C of this Section.

2. Initial Sampling

a. For a new facility, monitoring wells ~~must~~shall be sampled and the ~~analytical~~groundwater monitoring data for a sampling event ~~must~~shall be submitted to the Office of Environmental Assessment, Environmental Technology Division before waste is accepted.

b. For an existing facility with no wells in place at the time of the application submittal or at the time at which the facility becomes subject to these regulations, the groundwater monitoring data shall be submitted to the Office of Environmental Assessment, Environmental Technology Division within 90 days after installation of the monitoring wells.

c. A minimum of four independent samples from each well (upgradient and downgradient) ~~must~~shall be collected and analyzed during the initial sampling event for a facility. The initial sampling event shall consist of quarterly sampling over a one-year period. Thereafter, at least one sample ~~must~~shall be collected and analyzed at each well for each sampling event.

3. After the initial one year sampling event, ~~For the first year of monitoring and thereafter,~~ sampling and analysis of all wells ~~must~~shall be conducted every six months.

4. The groundwater monitoring program ~~must~~shall be conducted for the life of the facility and for the duration of the post-closure care period of the facility, which is specified in LAC 33:VII.~~719.F,~~ 721.~~F~~E, or 723.~~F~~E. Groundwater monitoring may be extended beyond the period specified if deemed necessary by the administrative authority.

5. The permit holder or applicant ~~must~~shall submit ~~four~~three bound copies (8 1/2 by 11 inches) of a report of all groundwater sampling results to the Office of Environmental Assessment, Environmental Technology Division no later than 90 days after each sampling event. The reports ~~must~~shall be submitted on forms provided by the administrative authority and shall include at a minimum:

a. documentation of the chain of custody of all sampling and analyses;

b. scaled potentiometric surface maps showing monitoring well and piezometer locations~~,~~ and groundwater elevations with respect to mean sea level for each stratum monitored;

c. ~~isopleth map for each well of all parameters or constituents or~~ plots by well ~~of~~showing concentration of parameters or constituents versus time. If the facility is conducting assessment or corrective action monitoring, then in addition to the plots by well of concentration versus time, an isopleth map shall be submitted for each zone monitored; and

d. a statement of whether a statistically significant difference in concentration over background concentrations is detected.

e. The administrative authority may waive or require information to be included in each ground water sampling report.

6. If a statistically significant increase over background concentrations is determined for one or more parameters or constituents required to be monitored, the permit holder ~~must~~shall:

a. submit to the Office of Environmental Assessment, Environmental Technology Division:

i. within 14 days after the determination is made, a report that identifies which parameters or constituents were determined to have shown statistically significant changes ~~from~~over background ~~levels~~; and

ii. written notification for conducting any verification resampling events at least 14 days prior to conducting the resampling events; and

b. within 90 days after the determination is made:

i. initiate an assessment monitoring program for the facility meeting the requirements of Subsection D of this Section; or

ii. submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating that a source other than the facility being sampled caused the contamination or that the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. If the administrative authority approves this demonstration, in writing, the permit holder may continue the detection monitoring program. If the administrative authority does not approve the demonstration, in writing, the permit holder ~~must~~shall establish an assessment monitoring program meeting the requirements of Subsection D of this Section within 90 days after the determination in Paragraph C.6 of this Section is made.

7. Detection Monitoring Parameters or Constituents

a. During detection monitoring, Type I landfills and Type I surface impoundments (except Type I landfills that are also Type II landfills and Type I surface impoundments that are associated with such Type I landfills) shall monitor for at least 10 chemical parameters or constituents, both inorganic and organic, which are indicator parameters or constituents or reaction products of the waste and that provide a reliable indication of the presence of contaminants in the groundwater. The administrative

authority may reduce the number of parameters, if appropriate, based on site-specific and waste-specific consideration. Selection of these parameters or constituents is subject to the approval of the administrative authority and ~~must~~shall be based on the following factors:

i. types, quantities, and concentrations of constituents in the wastes disposed of at the facility;

ii. mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the facility;

iii. detectability of indicator parameters, waste constituents, or their reaction products in the groundwater; and

iv. concentrations or values and coefficients of variation of the proposed monitoring parameters or constituents in the background groundwater at the facility.

b. During detection monitoring, Type II landfills, including Type II surface impoundments associated with Type II landfills, shall be monitored for all the parameters or constituents listed in ~~LAC 33:VII.3005.~~Appendix A, Table 1 of this Chapter.

c. During detection monitoring, Type I landfarms, including runoff and containment areas (ROCAs) or surface impoundments associated with Type I landfarms, shall be monitored for the same parameters or constituents as provided for Type II landfarms in Subparagraph C.7.d of this Section and also for at least six parameters or constituents, both organic and inorganic, which are intrinsic to the wastes

being disposed at the facility. The intrinsic parameters or constituents shall be selected on the basis of the factors in Clauses C.7.a.i-iv of this Section and shall be subject to the approval of the administrative authority.

d. During detection monitoring, Type II landfarms ~~which~~that receive ~~domestic sewage sludge and~~ any runoff and containment areas (ROCAs) or surface impoundments associated with such landfarms shall be monitored for ~~5~~five-day biochemical oxygen demand (BOD_5), fecal coliform, total dissolved solids (TDS), nitrate, total Kjeldahl nitrogen, and polychlorinated biphenyls (PCBs), if applicable.

e. Type II surface impoundments ~~which receive domestic sewage sludge and~~ shall be monitored for the same parameters or constituents as provided for Type II landfarms in Subparagraph C.7.d of this Section.

f. The administrative authority may waive or require additional parameters or constituents, based on site-specific or waste-specific information.

D. Assessment Monitoring Program for Type I and Type II ~~Landfills~~Facilities ~~and Associated Type II Surface Impoundments~~

1. An assessment monitoring program as described in this Subsection is required to be conducted at Type I and Type II ~~landfills~~facilities ~~and associated Type II surface impoundments~~ whenever a statistically significant increase over background concentrations is detected for one or more of the parameters or constituents sampled and analyzed during the detection monitoring program.

2. The assessment monitoring parameters for:

a. Type II landfills and associated Type II impoundments shall be the parameters listed on Table 2 of Appendix A of this Chapter; and

b. Type I and Type II facilities, other than Type II landfills and associated Type II impoundments, shall be the detection monitoring parameters or constituents although the administrative authority may add additional parameters or constituents on a site-specific and waste-specific basis.

3. Within 90 days of triggering an assessment monitoring program, and annually thereafter, the permit holder ~~must~~shall sample and analyze the groundwater for ~~all~~ the assessment monitoring parameters ~~or constituents identified in LAC 33:VII.3005.Table2~~. A minimum of one sample from each downgradient well ~~must~~shall be collected and analyzed during each sampling event. For any parameter or constituent detected in the downgradient wells as a result of ~~the complete LAC 33:VII.3005.Table 2 analysis~~sampling for the assessment monitoring parameters or constituent, a minimum of four independent samples from each well (background and downgradient) ~~must~~shall be collected and analyzed to establish background for the parameters or constituents. The administrative authority:

a. may specify an appropriate subset of the wells to be sampled and analyzed for ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents during assessment monitoring; and

b. may delete any of the ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents for a facility if it can be shown that the omitted parameters or constituents are not reasonably expected to be in or derived from the waste contained in the unit.

4. No later than 90 days after the completion of the initial or subsequent sampling events for all ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents required in Paragraph D.3 of this Section, the permit holder ~~must~~shall submit a report to the Office of Environmental Assessment, Environmental Technology Division identifying the ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents that have been detected. No later than 180 days after completion of the initial or subsequent sampling events for all ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents required in Paragraph D.3 of this Section, the permit holder ~~must~~shall:

a. resample all wells and analyze for all detection monitoring parameters or constituents ~~in LAC 33:VII.3005.Table 1~~ and for those assessment monitoring parameters or constituents ~~in LAC 33:VII.3005.Table 2~~ that are detected in response to Paragraph D.3 of this Section. At least one sample ~~must~~shall be collected from each well (background and downgradient) during these sampling events. This sampling ~~must~~shall be repeated semiannually thereafter;

b. establish background groundwater concentrations for any parameter or constituent detected ~~pursuant to~~in accordance with Paragraph D.3 or 4 of this Section; and

c. establish groundwater protection standards for all parameters or constituents detected ~~pursuant to~~in accordance with Paragraph D.3 or 4 of this Section. The groundwater protection standards shall be established in accordance with Paragraph D.8 of this Section.

5. If the concentrations of all ~~LAC 33:VII.3005.Table 2~~assessment

monitoring parameters or constituents are shown to be at or below background values, using the statistical procedures in Paragraph B.6 of this Section or other EPA-approved methods for comparison to a fixed limit (such ~~two~~ as an MCL), for two consecutive sampling events, the permit holder ~~must~~shall notify the Office of Environmental Assessment, Environmental Technology Division, and upon written approval of the administrative authority, may return to detection monitoring.

6. If the concentrations of any ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents are above background values, but all concentrations are below the groundwater protection standard established under Paragraph D.8 of this Section, using the statistical procedures in Paragraph B.6 of this Section or other EPA-approved methods for comparison to a fixed limit (such as an MCL), the permit holder ~~must continue assessment monitoring~~will be placed in assessment monitoring for the life of the facility or until the assessment monitoring parameters are below the established background values. As part of the corrective action development, the permit holder shall submit a work plan for approval to the Office of Environmental Assessment, Environmental Technology Division. This work plan shall include;

a. Proposal of additional groundwater wells outside the area of contamination in order to demonstrate that the facility has control of the plume and/or source of contamination.

b. Proposal of semi-annual groundwater monitoring reports demonstrating that the concentrations of the constituents of concern is not increasing.

c. A scaled figure depicting the location of the area of

investigation, existing and proposed groundwater monitoring wells as well as property boundaries.

d. Scaled potentiometric map(s) depicting water elevations of all (existing and proposed) monitoring wells. These maps should be submitted as part of the semi-annual groundwater monitoring reports.

e. Isopleth map for each well of all parameters or constituents or plots by well concentration of parameters or constituents verses time.

f. The Environmental Technology Division may request additional information based on the data submitted in the work plan.

7. If one or more ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents are detected at statistically significant levels above the groundwater protection standard established under Paragraph D.8 of this Section, in any sampling event, using the statistical procedures in Paragraph B.6 of this Section or other EPA-approved methods for comparison to a fixed limit (such as an MCL), the permit holder ~~must~~shall, within 14 days of the determination, notify all appropriate local government officials and submit a report to the Office of Environmental Assessment, Environmental Technology Division identifying the ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents ~~which~~that have exceeded the groundwater protection standard. The permit holder ~~must~~shall also:

a. within 90 days after the determination is made, submit four bound copies (8 1/2 x 11 inches) of an assessment plan to the Office of Environmental Assessment, Environmental Technology Division, as well as any necessary permit modification to the Office of Environmental Services, Permits Division that provides for:

i. characterization of the nature and extent of the release by installing and sampling additional monitoring wells as necessary;

ii. installation of at least one additional monitoring well at the facility boundary in the direction of the contaminant migration and sampling of this well in accordance with Subparagraph D.4.b of this Section; and

iii. a schedule for implementing the plan;

b. notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off site as indicated by the sampling of the wells in accordance with Subparagraph D.7.a of this Section; and

c. upon consultation with and approval of the administrative authority, implement any interim measures necessary to ensure the protection of human health and the environment. Interim measures should, to the greatest extent practicable, be in accordance with LAC 33:I.Chapter 13 and be consistent with the objectives of and contribute to the performance of any remedy that may be required ~~pursuant to~~in accordance with Subsection F of this Section. The following factors ~~must~~shall be considered by a permit holder in determining whether interim measures are necessary:

i. time required to develop and implement a final remedy;

ii. actual or potential exposure of nearby populations or environmental receptors to hazardous parameters or constituents;

iii. actual or potential contamination of drinking water

supplies or sensitive ecosystems;

iv. further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;

v. weather conditions that may cause hazardous parameters or constituents to migrate or be released;

vi. risk of fire or explosion, or potential for exposure to hazardous parameters or constituents as a result of an accident or failure of a container or handling system; and

vii. other situations that may pose threats to human health and the environment; and

d. initiate an assessment of corrective measures as required by Subsection E of this Section; or

e. may submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating that a source other than the facility being sampled caused the contamination, or the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. If the administrative authority approves this demonstration in writing, the permit holder ~~must~~shall continue assessment monitoring at the facility in accordance with this Subsection or may return to detection monitoring if the ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents are below background as specified in Paragraph D.5 of this Section. Until such a written approval is given, the permit holder ~~must~~shall comply with Paragraph D.7 of this Section, including

initiating an assessment of corrective action measures.

8. The permit holder ~~must~~shall establish a groundwater protection standard for each ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameter or constituent detected in the groundwater. The groundwater protection standard shall be in accordance with LAC 33:I.Chapter 13. ~~and shall be:~~

~~a. for parameters or constituents for which a maximum contaminant level (MCL) has been promulgated under the federal Safe Drinking Water Act, (the MCL for that parameter or constituent);~~

~~b. for parameters or constituents for which the State of Louisiana has promulgated a MCL, the MCL for that parameter or constituent;~~

~~c. for parameters or constituents for which MCLs have not been promulgated, the background concentration for the parameter or constituent established from wells in accordance with this Subsection or the administrative authority may allow the standard to be set in accordance with LAC 33:I.Chapter 13 on a case-by-case basis;~~

~~d. for Type I facilities, the administrative authority may allow, the standard for all parameters or constituents set in accordance with LAC 33:I.Chapter 13 on a case-by-case basis;~~

~~e. for parameters or constituents for which the background level is higher than the MCL identified under Subparagraph D.8.a or b of this Section, the background concentration for the parameter or constituent established from wells in accordance with this Subsection; or~~

~~f. the administrative authority may establish, a more stringent groundwater protection standard, if necessary, to protect human health or the environment.~~

E. Assessment of Corrective Measures at Type I and Type II Facilities~~Landfills and Associated Surface Impoundments~~

1. Within 90 days of finding that any of the assessment monitoring parameters or constituents ~~listed in LAC 33:VII.3005.Table 2~~have been detected at a statistically significant level exceeding the groundwater protection standards defined under Paragraph D.8 of this Section, the permit holder ~~must~~shall initiate an assessment of corrective measures.

2. The permit holder ~~must~~shall continue to monitor in accordance with the assessment monitoring program throughout the period of corrective action, as specified in Subsection D of this Section.

3. The assessment shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under Subsection F of this Section, addressing at least the following:

a. performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

b. time required to begin and complete the remedy;

c. costs of remedy implementation; and

d. institutional requirements such as state or local permit

requirements or other environmental or public health requirements that may substantially affect implementation of the remedy.

4. For Type II landfills and associated surface impoundments, t~~T~~he results of the corrective measures assessment ~~must~~shall be discussed by the permit holder, in a public meeting prior to the selection of remedy, with interested and affected parties.

F. Selection of Remedy and Corrective Action Plan at Type II Landfills and Associated Surface Impoundments

1. Based on the results of the corrective measures assessment conducted under Subsection E of this Section, the permit holder ~~must~~shall select a remedy that, at a minimum, meets the standards of Paragraph F.2 of this Section. Within 180 days after initiation of the corrective measures assessment required in Subsection E of this Section, the permit holder ~~must~~shall submit four bound copies (8 ½ by 11 inches) of a corrective-action plan to the Office of Environmental Assessment, Environmental Technology Division, describing the selected remedy, which will meet the requirements of Paragraphs F.2-4 of this Section and be in accordance with LAC 33:I.Chapter 13. The corrective-action plan ~~must~~shall also provide for a corrective-action groundwater monitoring program as described in Subparagraph G.1.a of this Section.

2. Remedies ~~must~~shall:

a. be protective of human health and the environment;

b. attain the groundwater protection standard as specified in accordance with Paragraph D.8 of this Section;

c. control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents into the environment that may pose a threat to human health or the environment; and

d. comply with standards for management of wastes as specified in Paragraph G.7 of this Section~~;~~.

3. In selecting a remedy that meets the standards of Paragraph F.2 of this Section, the permit holder shall consider the following evaluation factors:

a. long-term and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

i. magnitude of reduction of existing risks;

ii. magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;

iii. type and degree of long-term management required, including monitoring, operation, and maintenance;

iv. short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and redisposal of containment;

v. time until full protection is achieved;

vi. potential for exposure of humans and environmental

receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;

vii. long-term reliability of the engineering and institutional controls; and

viii. potential need for replacement of the remedy;

b. effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:

i. extent to which containment practices will reduce further releases; <u>and</u>

ii. extent to which treatment technologies may be used;

c. ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:

i. degree of difficulty associated with constructing the technology;

ii. expected operational reliability of the technologies;

iii. need to coordinate with and obtain necessary approvals and permits from other agencies;

iv. availability of necessary equipment and specialists; and

v. available capacity and location of needed treatment,

storage, and disposal services;

d. practicable capability of the permit holder, including a consideration of the technical and economic capability; and

e. degree to which community concerns are addressed by a potential remedy(s).

4. The permit holder shall specify, as part of the selected remedy, a schedule(s) for initiating and completing remedial activities. Such a schedule ~~must~~shall require the initiation of remedial activities within a reasonable period of time. The permit holder ~~must~~shall consider the following factors in determining the schedule of remedial activities:

a. extent and nature of contamination;

b. practical capabilities of remedial technologies in achieving compliance with groundwater protection standards established under Paragraph D.8 of this Section and other objectives of the remedy;

c. availability of treatment or disposal capacity for wastes managed during implementation of the remedy;

d. desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;

e. potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

f. resource value of the aquifer including:

i. current and future uses;

ii. proximity and withdrawal rate of users;

iii. groundwater quantity and quality;

iv. potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to parameters or constituents;

v. hydrogeologic characteristic of the facility and surrounding land;

vi. groundwater removal and treatment costs;

vii. cost and availability of alternative water supplies; and

viii. practicable capability of the permit holder; ~~and~~

g. other relevant factors.

5. The administrative authority may determine that remediation of a release of an ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameter or constituent from a facility is not necessary if the permit holder demonstrates to the satisfaction of the administrative authority that:

a. the groundwater is additionally contaminated by substances that have originated from a source other than a facility and those substances are present in such concentrations that cleanup of the release from the facility would provide no significant reduction in risk to actual or potential receptors;

b. parameter or constituent is present in groundwater that:

i. is not currently or reasonably expected to be a source of drinking water; and

ii. is not hydraulically connected with waters to which the parameters or constituents are migrating or are likely to migrate in a concentration that would exceed the groundwater protection standards established under Paragraph D.8 of this Section;

c. remediation of the release(s) is technically impracticable; or

d. remediation results in unacceptable cross-media impacts.

6. A determination by the administrative authority ~~pursuant to~~in accordance with Paragraph F.5 of this Section shall not affect the authority of the administrative authority to require the permit holder to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the groundwater, to prevent exposure to the groundwater, or to remediate the groundwater to concentrations that are technically practicable and that significantly reduce threats to human health or the environment.

G. Implementation of the Corrective Action Programs at Type I and Type II ~~Landfills~~Facilities ~~and Associated Type II Surface Impoundments~~

1. After the corrective action plan has been approved by the administrative authority and, based on the corrective action plan schedule established under Paragraph F.4 of this Section for initiation and completion of remedial activities, the permit holder ~~must~~shall:

a. implement a corrective-action groundwater monitoring program as described in the approved corrective-action plan that:

i. at a minimum, meets the requirements of an assessment monitoring program under Subsection D of this Section;

ii. indicates the effectiveness of the corrective action remedy; and

iii. demonstrates compliance with the groundwater protection standard ~~pursuant to~~in accordance with Paragraph D.8 of this Section; and

b. implement the corrective-action plan established under Subsection F of this Section.

2. A permit holder may submit a report to the Office of Environmental Assessment, Environmental Technology Division demonstrating, based on information developed after implementation of the corrective action plan has begun or other information, that compliance with requirements of Paragraph F.2 of this Section are not being achieved through the remedy selected. A revised corrective-action plan providing other methods or techniques that could practically achieve compliance with the requirements of Paragraph F.2 of this Section ~~must~~shall accompany the demonstration.

3. If the administrative authority approves, in writing, the demonstration and revised corrective action plan submitted ~~pursuant to~~in accordance with Paragraph G.2 of this Section, the permit holder ~~must~~shall implement the revised corrective-action plan.

4. The permit holder may submit a report to the Office of

Environmental Assessment, Environmental Technology Division demonstrating that compliance with the requirements under Paragraph F.2 of this Section cannot be achieved with any currently available methods.

5. If the administrative authority approves, in writing, the demonstration submitted ~~pursuant to~~in accordance with Paragraph G.4 of this Section, the permit holder ~~must~~shall, within 30 days of the approval, submit a plan to the Office of Environmental Assessment, Environmental Technology Division (which includes an implementation schedule) to implement alternate measures in accordance with LAC 33:I.Chapter 13:

a. to control exposure of humans and the environment to residual contamination as necessary to protect human health and the environment; and

b. for the control of the sources of contamination, or for the removal or decontamination of equipment, devices, or structures, that are technically practicable and consistent with the overall objective of the remedy.

6. If the administrative authority approves the plan for alternate measures submitted ~~pursuant to~~in accordance with Paragraph G.5 of this Section, the permit holder ~~must~~shall implement the plan.

7. All solid wastes that are managed ~~pursuant to~~in accordance with a remedy required under Subsection F of this Section, or an interim measure required under Subparagraph D.7.c of this Section, shall be managed in a manner:

a. that is protective of human health and the environment; and

b. that complies with applicable RCRA requirements.

8. Remedies selected ~~pursuant to~~in accordance with Subsection F of this Section shall be considered complete when:

a. the permit holder complies with the groundwater protection standards established under Paragraph D.8 of this Section at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under Subsection A of this Section; and

b. compliance with the groundwater protection standards established under Paragraph D.8 of this Section has been achieved by demonstrating that concentrations of ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in Paragraph B.6 of this Section. The administrative authority may specify an alternative length of time during which the permit holder ~~must~~shall demonstrate that concentrations of the ~~LAC 33:VII.3005.Table 2~~assessment monitoring parameters or constituents have not exceeded the groundwater protection standard(s) taking into consideration:

i. extent and concentration of the release(s);

ii. behavior characteristics of the hazardous parameters or constituents in the groundwater;

iii. accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and

iv. characteristics of the groundwater; and

c. all actions required to complete the remedy have been satisfied.

9. Upon completion of the remedy, the permit holder ~~must~~shall submit to the administrative authority, within 14 days, a certification that the remedy has been completed in compliance with the requirements of Paragraph G.8 of this Section. The certification ~~must~~shall be signed by the permit holder and approved by the administrative authority.

10. When, upon completion of the certification, the administrative authority determines that the corrective action remedy has been completed in accordance with the requirements under Paragraph G.8 of this Section, the permit holder shall be released from the requirements for financial assurance for corrective action under LAC 33:VII.1305.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 32:**.

Chapter 9. Enforcement

§901. Failure to Comply

A. Failure of any person to comply with any of the provisions of these regulations or of the terms and conditions of any permit granted or order issued hereunder constitutes a violation of the act.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001, et

seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§903. Investigations: Purposes, Notice

A. Investigations shall be undertaken to determine whether a violation has occurred or is about to occur, the scope and nature of the violation, and the persons or parties involved. The results of an investigation shall be given to any complainant who provided the information prompting the investigation, upon written request and, if advisable, to the person under investigation, if the identity of such person is known.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001, et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§905. Development of Facts, Reports

A. The administrative authority may conduct inquiries and develop facts in investigations by staff investigatory procedures or formal investigations and may conduct inspections and examinations of facilities and records. The administrative authority or his presiding officer may hold public hearings and/or issue subpoenas pursuant to R.S. 30:2025(I) and require attendance of witnesses and production of documents, or may take such other action as may be necessary and authorized by the act or rules promulgated by the administrative authority. At the conclusion of the investigation, all facts and

information concerning any alleged violation that have been developed shall be compiled by the staff of the department. A report of the investigation shall be presented to the administrative authority for use in possible enforcement proceedings. Any complainant who provided the information prompting the investigation shall be notified of its results.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001, et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§907. Enforcement Action

A. When the administrative authority determines that a violation of the act or these regulations or the terms and conditions of any permit issued hereunder has occurred or is about to occur, he shall initiate one or more of the actions set forth in R.S. 30:2025, or as otherwise provided by appropriate rules.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001, et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§909. Closing Unauthorized and Promiscuous Dumps

~~Unauthorized and promiscuous dumps shall be closed through the following procedure.~~

A. After an unauthorized ~~or promiscuous~~ dump is discovered, the administrative authority may issue an enforcement action with a closure directive to the ~~person or persons legally responsible~~owner/operator ~~for the facility~~. Directives issued for unauthorized ~~or promiscuous~~ dumps shall require closure of the ~~facility~~unauthorized dump in accordance with the ~~following~~ procedures indicated in this Section.

B. The administrative authority shall require closure of u~~U~~nauthorized ~~or promiscuous~~ dumps ~~may be closed~~ either by removal to a solid waste facility or by completing on-site closure requirements. The method of closure shall be determined by the administrative authority.

C. Requirements for on-site closure are as follows:

1. if required, or authorized and approved, by the administrative authority, closure shall be conducted in accordance with LAC 33:I.Chapter 13. However, the requirements of Subparagraph C.2.g of this Section ~~will~~shall apply. If closure in accordance with LAC 33:I.Chapter 13 results in constituent-of-concern levels remaining above those allowed for residential scenarios, the requirements of Subparagraph C.2.f of this Section ~~will~~shall also apply; and

2. if closure will not be conducted in accordance with Paragraph C.1 of this Section, then approval or authorization may be granted by the administrative authority for the following alternative closure requirements:

a. extinguish all fires;

b. dewater and either solidify waste for return to the landfill or discharge it as governed by a NPDES/LPDES permit, if applicable;

c. implement a ~~rodent~~ disease vector extermination program, if applicable~~, to prevent migration of rats~~;

d. compact the waste with suitable equipment;

e. provide a final cover consisting of a minimum of 24 inches of silty clays and 6 inches of topsoil cover for supporting vegetative growth and revegetate the area to control erosion if necessary;

f. record in the parish mortgage and conveyance records a document describing the specific location of the facility and specifying that the property was used for the disposal of solid waste. The document shall identify the name of the person with knowledge of the contents of the facility, as well as providing the chemical levels remaining, if present. A true copy of the document, filed and certified by the parish clerk of court, shall be sent to the Office of Environmental Compliance; and

g. conduct long-term monitoring in accordance with Subsection E of this Section, if deemed necessary by the administrative authority.

D. Inspection and Reports. The administrative authority reserves the right to inspect the facility to determine if the requirements for closure have been met.

E. Long-Term Monitoring Responsibilities. The administrative authority may require the following or other long-term monitoring responsibilities of the person legally responsible for the unauthorized or promiscuous dump if deemed necessary:

1. Installation of groundwater monitoring wells in accordance with LAC 33:VII.709.E may be required along with semiannual reporting for a period of 10 years of monitoring of the facility after closure, or longer if deemed necessary, on a

facility-specific basis.

2. Annual reports may be required for a period of three years, or longer if deemed necessary, on the condition of the final cover and the use of the property.

F. Owners that voluntarily request closure of promiscuous dumps shall close either by removal to a solid waste facility or by completing on-site closure requirements in accordance with Subsection C of the Section. The method of closure shall be determined by the administrative authority. The department reserves the right of authority of Subsections D and E of this Section. Promiscuous dumps shall be closed either by removal to a solid waste facility or by completing on-site closure requirements in accordance with Subsections C, D, and E of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:1051 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, LR 24:2252 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2536 (November 2000), amended by the Office of Environmental Assessment, LR 32:**.

Chapter 11. Solid Waste Beneficial-Use and Soil Reuse~~Facilities~~

§1101. ~~General Requirements~~Applicability

A. ~~Except as otherwise specified in this Chapter, beneficial-use facilities and permit holders shall be subject to the requirements of LAC 33:VII.Chapters 1, 3, 5, 7 and~~

~~9, including but not limited to definitions, permitting and public notice requirements, fees, standards, and enforcement.~~ Solid waste beneficial use and soil reuse options apply to all solid waste generators. Solid waste beneficial use is available to solid waste streams that are typically disposed of in a solid waste disposal facility and that meet certain requirements as described in this Chapter.

B. Sewage sludge (including domestic septage) that is generated, treated, processed, composted, blended, mixed, prepared, transported, used, or disposed of in accordance with LAC 33:IX.Chapter 69.

C. Solid waste shall not be discharged, applied, incorporated, injected, or deposited onto or into the land for the purpose of beneficial use or soil reuse unless the requirements of this chapter are met.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Offices of Environmental Assessment, LR 32:**.

§1103. ~~Permit Requirements~~On-Site Soil Reuse Requirements

A. ~~Solid waste shall not be discharged, applied, incorporated, injected, or deposited onto or into the land for the purpose of beneficial use unless a beneficial-use permit is first obtained from the administrative authority. If a beneficial-use permit is issued to anyone other than the generator of the solid waste, the permit holder must comply with the financial assurance requirements in LAC 33:VII.727.A.1 for Type III facilities during operation, except that the liability amount shall be $250,000 per permit,~~

~~rather than per site.~~ This section is limited to *in situ* contaminated soil and does not include sludges and sediments from regulated solid waste units. Soil which is to be reused on-site is exempt from these regulations provided the level of contaminants in such soil is at or below the pertinent RECAP standard(s) developed by the department in accordance with LAC 33:I.Chapter 13, as applicable to surface soil located in an area meeting the definition of non-industrial land use. Any person claiming this exemption shall have records:

1. supporting the exemption; and

2. clearly describing the particular soils reused on-site pursuant to the exemption, including, e.g., soil source, soil quantities, and site location(s) where the soil was reused.

B. ~~No permit for beneficial use can be issued by the administrative authority unless the applicant supplies written documentation from a qualified, independent third party, such as the Louisiana Cooperative Extension Service, the Louisiana Department of Agriculture, the Louisiana Department of Transportation and Development, or other appropriate organization that the proposed activity is a legitimate beneficial use of solid waste.~~ Soil which is not otherwise exempt under Section A and which is to be reused on-site at an "industrial/commercial" property, as such term is defined under LAC 33:I.Chapter 13, is exempt from these regulations provided:

1. the level of contaminants in such soil is at or below the pertinent RECAP standard(s) developed by the department in accordance with LAC 33:I.Chapter 13, as applicable to surface soil located in an area meeting the definition of industrial land use (MO-1 or MO-2);

2. the owner or operator of the property notifies the Office of Environmental Assessment, Environmental Technology Division, in writing, and attaches the following to such notification:

a. characterization of the soil in question;

b. description of the property in question;

c. description of the proposed uses of the soil on-site (e.g., levee construction; road bed; construction fill; daily cover in regulated facility; etc.); and

d. an on-site soil reuse plan regarding the reuse of the soil in question, which plan shall address at least the following:

i. procedures for storage of the soil pending reuse;

ii. procedures for handling, transportation, and application of soil on-site;

iii. procedures for record keeping; and

iv. any other procedures required for the protection of human health and the environment (e.g., security, restricted site access, institutional controls, control of storm water runoff, etc.); and

3. the administrative authority notifies the owner/operator of the facility of the approval or disapproval of the on-site soil reuse plan.

C. ~~The administrative authority may issue a single beneficial-use permit for multiple beneficial-use locations provided that the permit application includes required information for each location, each location meets the standards provided in this Chapter, and the same solid waste stream (from a single generation site) is disposed of at all~~

~~locations. The multiple locations will be considered as one facility and each location will be a unit of the facility.~~ Soil which is not otherwise addressed under Section A or B and which is to be reused on-site shall be addressed in accordance with LAC 33:VII.303.A.11, LAC 33:VII.Chapter 11, or as otherwise deemed appropriate by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§1105. ~~Part I Application Form for Beneficial-Use Facilities~~Beneficial Use of Other Solid Waste

~~The applicant shall complete a beneficial-use application Part I Form (see LAC 33:VII.3013). The following notes refer to the items on the form requiring that information:~~

A. ~~name of applicant (prospective permit holder) applying for a beneficial-use permit (also name of property owner if different from permit holder);~~An application for beneficial use of solid waste streams shall address the following information:

1. Name, address, and telephone number of the applicant;

2. Name, address, and telephone number of the applicant's primary contact for departmental correspondence and inquiries and of the applicant's attorney or other representative, if applicable;

3. Address or site(s) of origin of the solid waste proposed for beneficial use;

4. Chemical and physical characteristics of the material to be beneficially used;

5. Identification of the quantity, quality, consistency, and the source of the solid waste;

6. A description of the process by which the solid waste is generated, and a demonstration that the generator has minimized the quantity and toxicity of the solid waste proposed for beneficial use to the extent reasonably practicable. The applicant shall provide a detailed narrative and schematic diagram of the production, manufacturing and/or residue process by which the solid waste that will be beneficially used is generated.

7. A detailed description of the processing activity, if applicable, that will be used to make the solid waste suitable for beneficial use.

8. A demonstration that there is a known or reasonably probable market for the intended use of the beneficial use material, such as a contract to purchase or utilize the material, a description of how it will be used, a demonstration that the material complies with industry standards for a product or other documentation that a market exists.

9. A description of the proposed methods of handling, storing, and utilization of the beneficial use material to ensure that it will not adversely affect the public health, safety, or the environment. This description shall consist of:

a. procedures for periodic testing for quality control purposes;

b. storage procedures;

i. run-on/run-off control;

ii. maximum anticipated inventory;

iii. measures to ensure no contamination of underlying soil or groundwater

iv. dispersion control due to wind; and

c. record keeping procedures.

10. At least 75% of the material placed in storage during a year shall be sent to market or to other secure storage within the following year unless the operator demonstrates that a particular order requires greater than one year of product storage prior to shipment. See section F of this section.

11. A demonstration that the end use of the material is protective of public health, safety, and the environment.

12. A discussion of the end-user(s) of material and location(s) of the end-use.

B. ~~facility name;~~ The signature of the applicant and of the individual or individuals responsible for actually preparing the information and supporting data submitted with the application, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate, and complete to the best of my

knowledge and belief.

I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with La. R. S. 2025.F, and in accordance with any other applicable statute."

C. ~~description of the location(s) of the facility (identify by street and number or by intersection of roads, or by mileage and direction from an intersection);~~Any other information the Secretary may require or the applicant believes will demonstrate that the proposed beneficial use of the material will conserve, improve and protect human health, natural resources and the environment.

D. Upon approval the material shall be handled, processed, stored, or otherwise managed by the proposed plan.

~~D~~E. ~~geographic location(s) (section, township, range, and parish where the facility is located), and the coordinates (as defined by the longitude and latitude to the second) of the center point of the facility;~~Beneficial use plan(s) that have been approved by the administrative authority are referenced in LAC 33:VII.3009. Appendix 1. Beneficial use of solid waste generated from the same source or similar sources or materials and utilized as outlined in the approved plan(s) does not require additional approval from the department. However, the owner/operator shall furnish to the administrative authority, within a reasonable time, any information which may be requested so that the department may determine whether material is being beneficially used in accordance with an approved plan.

F. Respondents in actions to enforce regulations who raise a claim that the transportation, storage, handling, processing, and/or use of certain material has been

approved by the department pursuant to this Section must demonstrate that there is a known or reasonably probable market or disposition for the material and that they meet the terms of this Section and any department approval. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not discarded but is, instead, subject to beneficial use. In addition, owners or operators of facilities claiming that they actually are preparing materials for beneficial use pursuant to this Section must be able to show that they have the necessary equipment to do so. The department may revoke or rescind any prior approval provided by the department pursuant to this Section upon failure of a respondent to provide adequate proof in accordance with this Subsection.

~~E. mailing address of the applicant and the name(s) of the property owner if different from applicant;~~

~~F. contact and phone number for the applicant and for the property owner (position or title of the contact person is acceptable);~~

~~G. type and purpose of operation (check each applicable block);~~

~~H. a list of all environmental permits that relate directly to the facility represented in this application;~~

~~I. a letter from the Louisiana Resource Recovery and Development Authority (LRRDA) stating that the operation conforms to the applicable statewide plan;~~

~~[NOTE: In accordance with R.S. 30:2307(B), this regulation does not apply to solid waste disposal activity occurring entirely within the boundaries of a plant,~~

~~industry or business which generates such solid waste.]~~

~~J. zoning of the facility (If the facility is zoned, note the classification and zoning authority, and include a zoning affidavit or other documentation stating that the proposed use does not violate existing land use requirements.);~~

~~K. types and maximum quantities (wet-weight tons per week) of waste to be applied at the facility;~~

~~L. proof of publication of the notice regarding submittal of the permit application as required in LAC 33:VII.513.A;~~

~~M. the signature, typed name, and the title of the individual(s) authorized to sign the application by the applicant and the property owner (Proof of legal authority of the signatory to sign for the applicant must be provided.);~~

~~N. third party documentation as required in LAC 33:VII.1103.B; and~~

~~O. other information required by the administrative authority.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2536 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§1107. Part II Supplementary Information Required for Beneficial-Use Facilities

Repealed

~~The following information is required in the permit application for beneficial-use facilities. All responses and exhibits must be identified within the following sequence to facilitate the evaluation. Additionally, all applicable sections of LAC 33:VII.1109 must be addressed and incorporated into the application responses. If a section does not apply, the applicant must state that it does not apply and why it does not apply.~~

~~A. Location Characteristics. Standards pertaining to location characteristics are contained in LAC 33:VII.1109.A.~~

~~1. Area Master Plan. A location map showing the facility, major drainage systems, drainage flow patterns, location of the 100-year floodplain, and other pertinent information. The scale of the maps and drawings must be legible, and engineering drawings are required.~~

~~2. Environmental Characteristics. The following information is required:~~

~~a. a list of all known recreation areas, designated wildlife management areas, swamps and marshes, wetlands, habitat for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility perimeter or as otherwise appropriate;~~

~~b. documentation from the appropriate state and federal agencies substantiating the recreation areas, designated wildlife management areas, wetlands, habitat for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility; and~~

~~c. a map showing the locations of all known locations of all~~

~~public water systems, industrial water wells and irrigation wells within 1 mile of the facility.~~

~~B. Facility Characteristics. Standards concerning facility characteristics are contained in LAC 33:VII.1109. A facility plan, including drawings and a narrative, describing the information required below must be provided:~~

~~1. elements of the beneficial-use system employed, including as applicable, property lines, original contours (shown at not greater than 5-foot intervals), units of the facility, drainage, ditches, and roads;~~

~~2. security and signs;~~

~~3. buffer zone; and~~

~~4. other features, as appropriate.~~

~~C. Facility Geology. The following information regarding geology is required:~~

~~1. a general description of the soils, provided by a qualified professional (such as a geotechnical engineer, soil scientist, or geologist) along with a description of the method used to determine soil characteristics; and~~

~~2. logs of all known soil borings taken on the facility.~~

~~D. Certification. The person preparing the permit application must provide the following certification:~~

~~"I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this permit application and that the~~

~~facility as described in this permit application meets the requirements of the solid waste rules and regulations. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."~~

~~E. Facility Administrative Procedures. Standards governing facility administrative procedures are contained in LAC 33:VII.1109. The following information on administrative procedures is required for all facilities:~~

~~1. a recordkeeping system, types of records to be kept, and the use of records by management to control operations;~~

~~2. an estimate of the minimum personnel, listed by general job classification, required to operate the facility; and~~

~~3. the maximum days of operation per week and per facility operating-day (the maximum hours of operation within a 24-hour period).~~

~~F. Facility Operational Plans. Standards governing facility operational plans are contained in LAC 33:VII.1109. The following information is required:~~

~~1. types of waste (including chemical, physical, and biological characteristics), maximum quantities of wastes per year, and sources of wastes that are to be beneficially used;~~

~~2. waste-handling procedures from entry to final application;~~

~~3. minimum equipment to be used at the facility;~~

~~4. procedures planned in case of breakdowns, inclement weather, and other abnormal conditions;~~

~~5. procedures, equipment, and contingency plans for protecting employees and the general public from accidents, fires, explosions, etc., and provisions for emergency care should an accident occur (include the proximity to a hospital, fire and emergency services, and training programs);~~

~~6. provisions for vector, dust, litter, and odor control;~~

~~7. a comprehensive operational plan describing the total operation including, but not limited to, inspection of incoming waste to ensure that only permitted wastes are accepted, equipment operation, personnel involvement, and day-to-day activities;~~

~~8. detailed analysis of waste including, but not limited to, pH, phosphorus, nitrogen, potassium, sodium, calcium, magnesium, sodium adsorption ratio, and total metals (as listed in LAC 33:VII.1109.G.3.a.i);~~

~~9. soil classification, cation-exchange capacity, organic matter, content in soil, soil pH, nitrogen, phosphorus, metals (as listed in LAC 33:VII:1109.G.3.a.i), salts, sodium, calcium, magnesium, sodium adsorption ratio, and PCB concentrations of the treatment zone;~~

~~10. annual application rate (dry-tons per acre) and weekly hydraulic loading (inches per acre);~~

~~11. an evaluation of the potential for nitrogen to enter the groundwater; and~~

~~12. if the facility is to be used for food-chain cropland, the following information is required:~~

~~a. a description of the pathogen-reduction method for domestic septage, sewage sludges, and other sludges subject to pathogen production;~~

~~b. crops to be grown and the dates for planting;~~

~~c. PCB concentrations in waste;~~

~~d. annual application rates of cadmium and PCB application; and~~

~~e. cumulative applications of cadmium and PCBs;~~

~~13. if the facility is to be used for non-food-chain purposes the following information is required:~~

~~a. a description of the pathogen-reduction method in septage, domestic sewage sludges, and other sludges subject to pathogen production; and~~

~~b. a description of control of public and livestock access.~~

~~G. Facility Closure. The facility must provide the date of final closure.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), repealed by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§1109. Standards Governing Beneficial-Use Facilities

Repealed

~~A. Location Characteristics. Processing or disposal facilities may be subject to a comprehensive land use or zoning plan established by local regulations or ordinances.~~

~~B. Facility Characteristics~~

~~1. The following standards apply to perimeter barriers, security, and signs of all facilities: all facilities must have signs of sufficient size posted that warn of restricted access.~~

~~2. Buffer Zones~~

~~a. The following standards apply to buffer zones for beneficial-use facilities.~~

~~i. Buffer zones of not less than 100 feet shall be provided between the facility and the property line. A reduction in this requirement shall be allowed only with the permission (in the form of a notarized affidavit) of the adjoining landowner and occupants. Buffer zone requirements may be exempted by the administrative authority in accordance with LAC 33:VII.307.~~

~~ii. No storage or application of solid waste shall occur within the buffer zone.~~

~~3. All facilities shall have access to required fire protection and medical care.~~

~~4. The following standards for receiving and monitoring incoming wastes shall apply for beneficial-use facilities.~~

~~a. Each facility shall control the entry of waste and prevent~~

~~entry of unrecorded or unauthorized waste.~~

~~b. Each facility shall maintain records regarding application rates, application dates, and methods of application.~~

~~5. Discharges from beneficial-use facilities must be controlled and must conform to applicable state and federal laws.~~

~~C. Facility Surface Hydrology. The following standards regarding surface hydrological characteristics apply to beneficial-use facilities.~~

~~1. Land slope shall be controlled to prevent erosion.~~

~~2. Waste shall be applied in accordance with the slope guidelines in the following table.~~

~~Slope Percent~~	~~Application Restriction~~
~~0-3~~	~~None; liquid or solid material may be applied to surface.~~
~~3-6~~	~~Surface application of liquid or solid material may be made; a 100-foot vegetated runoff area is required at the downslope end of the application area with liquid applications.~~
~~6-12~~	~~Liquid material must be injected; solid material must be incorporated into soil if not vegetated; a 100-foot vegetated runoff area is required at the downslope end of the application area for all application.~~
~~>12~~	~~Unsuitable for application unless a~~

~~200-foot buffer area with slope less than 3 percent is provided at the downslope edge of the application area.~~

~~3. The topography of the facility shall provide for drainage to prevent standing water and shall allow for drainage away from the facility.~~

~~4. Wastes shall not be surface-applied within 100 feet of clean water ponds, lakes, or the 10-year high water mark for streams. In this 100-foot zone wastes must be injected.~~

~~5. Wastes shall not be applied within 300 feet of drinking water wells, irrigation wells, or industrial water supply wells.~~

~~D. Facility Geology~~

~~1. Facilities shall have natural stable soils suitable for the beneficial application of the waste.~~

~~2. Documentation shall be provided by a soil scientist or other individual with expertise in this area that soils meet the requirements in Paragraph D.1 of this Section.~~

~~E. Facility Subsurface Hydrology. The following standard applies to subsurface hydrology for beneficial-use facilities: The facilities shall be located in a hydrologic section where the historic high water table is at a minimum of a 3-foot depth below the zone of incorporation, or the water table at the facility shall be controlled to a minimum of a 3-foot depth below this zone.~~

~~F. Facility Administrative Procedures~~

~~1. Recordkeeping and Reports~~

~~a. Reports~~

~~i. The permit holder shall submit annual reports to the Office of Management and Finance, Financial Services Division indicating quantities and types of solid waste beneficially used, (expressed in wet-weight tons and dry-weight tons per year), during the reporting period. All calculations used to determine the amounts of solid waste received for processing or disposal during the annual reporting period shall be submitted to the administrative authority. A form for this purpose must be obtained from the Office of Management and Finance, Financial Services Division or through the department's website.~~

~~ii. The reporting period for the annual report shall be from July 1 through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.~~

~~iii. Annual reports shall be submitted to the administrative authority by August 1 of each reporting year.~~

~~iv. The annual report is to be provided for each individual permitted facility on a separate annual reporting form.~~

~~v. Facilities which receive industrial solid waste shall utilize, in their annual report, the seven-digit industrial waste number that has been assigned by the department to the industrial solid waste generator.~~

~~vi. Reports shall be submitted as provided in Subclauses F.1.b.ii.(f)-(h) of this Section.~~

~~b. Recordkeeping~~

~~i. The permit holder shall maintain all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.~~

~~ii. Records kept by the permit holder shall include (but not be limited to):~~

~~(a). daily log;~~

~~(b). quality-assurance/quality-control records;~~

~~(c). inspections by the permit holder or operator;~~

~~(d). monitoring, testing, or analytical data;~~

~~(e). any other applicable or required data deemed necessary by the administrative authority; and~~

~~(f). copy of the semiannual soil waste mixtures tests and analyses of the results, with conclusions, submitted semiannually to the Office of Environmental Assessment, Environmental Technology Division, or more frequently if deemed necessary by the administrative authority.~~

~~(g). Test parameters shall consist of cation-exchange capacity, soil pH, total nitrogen, phosphorus, organic matter, salts (intrinsic to the waste), cumulative metals, and any others deemed necessary on a site- and waste-specific basis.~~

~~(h). Annual reports of the analysis of all tests results on the soils; land-use, and crop information; calculated amounts of waste applied~~

~~per acre; total amounts of nitrogen applied per acre; and cumulative metals loading per acre shall be submitted to the Office of Environmental Assessment, Environmental Technology Division.~~

~~2. Personnel. All facilities shall have the personnel necessary to achieve the operational requirements of the facility.~~

~~G. Facility Operations~~

~~1. Facility Limitations~~

~~a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.~~

~~b. Only waste with a demonstrated beneficial use may be applied.~~

~~c. A comprehensive quality-assurance/quality-control plan shall be on place to ensure that incoming wastes are in conformance with the facility permit.~~

~~2. Facility Operational Plans~~

~~a. The following standards apply to operational plans for beneficial-use facilities. Operational plans shall be provided which describe in specific detail how the waste will be managed. At a minimum, the plan shall address:~~

~~i. the sequence in which the waste will be applied; and~~

~~ii. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented.~~

~~b. The comprehensive operational plans for beneficial-use facilities shall also include a comprehensive operational management plan for the facility which indicates with calculations that the acreages and methods are adequate for treating the type and volumes of wastes anticipated. The plan shall include contingencies for variations.~~

~~3. Facility Operational Standards~~

~~a. The following operational standards apply to beneficial-use facilities.~~

~~i. The maximum allowable lifetime metals loading shall be restricted to the following:~~

~~Maximum Allowable Metal Loading (lb/acre)*~~

~~Soil Cation-exchange Capacity (meq/100 g)~~

~~Metal~~	~~<5~~	~~5-15~~	~~>15~~
~~Lead (Pb)~~	~~500~~	~~1000~~	~~2000~~
~~Zinc (Zn)~~	~~250~~	~~500~~	~~1000~~
~~Copper (Cu)~~	~~125~~	~~250~~	~~500~~
~~Nickel (Ni)~~	~~125~~	~~250~~	~~500~~
~~Cadmium (Cd)~~	~~5~~	~~10~~	~~20~~

~~*Other metals not listed may be subject to restrictions based upon the metals content of the waste.~~

~~ii. Surface application of liquid wastes shall not exceed 2 inches per week.~~

~~iii. Soils shall maintain a sufficiently high cation-exchange capacity (CEC) to absorb metallic elements in the solid waste by natural (pH range of soil) or artificial (additives) means. Soil in the zone of incorporation must be monitored to assess the effectiveness of ongoing treatment, management needs, and soil integrity.~~

~~iv. Nitrogen concentrations in the waste must be within the limits deemed acceptable, as determined by plant nitrogen uptake, and soil and waste analyses (which shall indicate the movement of all forms of nitrogen). The potential for nitrogen to enter the groundwaters shall be addressed.~~

~~v. Wastes shall be applied to the land surface or incorporated into the soil within 3 feet of the surface.~~

~~vi. A comprehensive quality-assurance/quality-control plan shall be in place to ensure that all incoming wastes are in conformance with the facility's permit and these regulations.~~

~~vii. Tests of soil/waste mixtures and an analysis of the results with conclusions shall be conducted semi annually or more frequently if deemed necessary by the administrative authority. Test parameters shall consist of cation-exchange capacity, soil pH, total nitrogen, phosphorus, organic matter, salts (intrinsic to~~

~~the waste), cumulative metals, and others as deemed necessary by the administrative authority.~~

~~viii. The administrative authority may provide additional requirements as necessary on a site-specific basis depending on waste type and method of application.~~

~~b. The following operational standards apply to beneficial-use facilities that receive domestic sewage sludge and septic tank pumpings.~~

~~i. If spread on or incorporated into non-food-chain cropland, waste shall be treated by a process to significantly reduce pathogens (LAC 33 VII.3007) prior to application or incorporation, and public access shall be controlled for 12 months following the final application. Grazing by animals whose products are consumed by humans shall be prevented for at least 30 days.~~

~~ii. If spread on or incorporated into land used to grow crops for human consumption, the waste must be treated by a process to further reduce pathogens (LAC 33:VII.3009) before application or incorporation. If there is no contact between the waste and edible portions of the crop, or if crops are grown more than 18 months after application or incorporation, the conditions specified in Clause G.3.b.i of this Section only apply.~~

~~iii. The administrative authority may provide additional requirements necessary on a site-specific basis, depending upon waste type, land use, and methods of application.~~

~~c. The following standards apply to land use requirements for~~

~~beneficial-use facilities.~~

~~i. Food-Chain Cropland~~

~~(a). The pH of the solid waste and soil mixture shall be maintained at or above 6.5.~~

~~(b). The annual application of cadmium from the waste shall not exceed 0.5 lb per acre.~~

~~(c). Cumulative application of cadmium from sewage sludge for soils with a background pH of less than 6.5 shall not exceed 5 lb per acre unless the pH of the sludge and soil mixture is adjusted and maintained at 6.5 or greater whenever food-chain crops are grown.~~

~~ii. Land Used for Animal Feed Only~~

~~(a). The pH of waste-soil mixture must be 6.5 or greater at the time of solid waste application or when the crop is planted, whichever occurs later; and this pH level must be maintained whenever food-chain crops are grown. Crops requiring a lower pH will be considered on a site-specific basis.~~

~~(b). An operating plan for the facility shall be filed with the administrative authority demonstrating how the animal feed will be distributed to preclude ingestion by humans and that describes the measures to be taken to safeguard against possible health hazards from the entry of cadmium or other heavy metals into the food chain, as may result from alternative land use.~~

~~(c). Solid waste with concentrations of polychlorinated biphenyls (PCBs) of 10 mg/kg or more shall not be allowed.~~

~~d. The following operational standards apply to waste testing.~~

~~i. Facilities which receive sewage sludge, domestic septage or incinerator ash shall require the waste be tested for TCLP constituents prior to acceptance of the waste and annually for two years following acceptance.~~

~~ii. Facilities which receive industrial solid waste (type I) shall require testing for TCLP constituents prior to acceptance of waste and annually thereafter, or documented process knowledge that the waste is not a characteristic or listed hazardous waste as defined in LAC 33:V.Subpart 1 or by federal regulations.~~

~~H. Facility Closure Requirements~~

~~1. All permit holders shall notify the Office of Environmental Services, Permits Division in writing at least 90 days before closure or intention to close or abandon any individual units within a facility and shall provide the following information:~~

~~a. date of planned closure; and~~

~~b. closure schedule.~~

~~2. During the closure period the permit holder must continue to comply with any prohibitions or conditions concerning growth of food-chain crops.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental

Planning Division, LR 26:2536 (November 2000), repromulgated LR 27:40 (January 2001), LR 27:705 (May 2001), amended by the Office of Environmental Assessment, LR 30:2027 (September 2004), repealed by the Office of the Secretary, Legal Affairs Division, LR 32:**.

3009. Appendix ??

The Louisiana Pulp and paper Association-Louisiana Department of Environmental Quality Solid Waste Beneficial Use Work Group (LPPA-LDEQ Work Group) ~~has met several times since~~in May 1997 ~~to discuss~~established an agreement regarding the applicability of the Louisiana Solid Waste Regulation ("LSWR") to a variety of materials produced by the pulp and paper industry. During these meetings, a number of preliminary agreements regarding the regulatory applicability of the LSWR to certain categories of materials ~~have been~~were reached.

1. ~~First, there is a group of materials ("~~Group 1~~")~~ materials that are to be used or reused as either:

~~(~~a.~~)~~ ingredients, raw materials, or feedstocks in industrial processes to make products or

~~(~~b.~~)~~ effective substitutes for commercial products, provided that such uses do not involve application to the land.

The LPPA-LDEW Work Group agreed that the Group 1 materials, when employed for these uses, are not being discarded and, thus, are not subject to the generator, transporter, or permitting requirements of the LSWR. A listing of the Group 1 materials and their uses are provided in the attached Table 1.

2. ~~The second group of materials, called~~ Group 2~~, was discussed and~~

~~numerous uses were evaluated. The Group 2~~ materials are those that are to be applied to the land subject to the general approval of the LDEQ in accordance with this Section (as set forth in the response to this request) and:

~~(~~a.~~)~~ the specific approval of the Louisiana Department of Agriculture and Forestry ("LDAF") for use as either a potting soil amendment, soil liming agent, soil nutritional supplement, or cover for timber land~~:~~;

~~(2)~~ b. satisfying the Louisiana Department of Transportation and Development ("LDOTD") standards of criteria for soil cement, road base material, or an aggregate for road surfaces; or

~~(3)~~ c. the specific approval of the LDEQ for use as ingredients for landfill or surface impoundment closure caps.

The LPPA-LDEQ Work Group agreed that the Group 2 materials, when employed for these uses, are not being discarded and, thus, are not subject to the generator, transporter, or permitting requirements of the LSWR. A listing of the Group 2 materials and their uses are provided in the attached Table 2.

3. ~~The third group of materials discussed, called~~ Group 3~~,~~ materials ~~were~~are those materials listed in Table 1 or Table 2 that are either presently located in a regulated solid waste landfill or surface impoundment or that will be temporarily stockpiled in a regulated solid waste landfill or surface impoundment prior to one of the uses specified in Table 1 or 2. The LPPA-LDEQ Work Group agreed that these Group 3 materials, when proposed to be removed for one of the corresponding uses indicated for the Group 1 or 2 materials~~,~~ would be subjected to a one-time, facility-specific Solid Waste Permit Minor Modification that would not require public notice. The agreed upon

language for the permit condition to be added pursuant to the one-time, facility-specific Minor Solid Waste Permit Modification is attached. The LPPA-LDEQ work Group also agreed that these Group 3 materials, when removed from a regulated solid waste landfill or surface impoundment pursuant to the above noted permit condition and employed for the Group 1 or 2 uses, are not being discarded and, thus, are not subject to the generator, transporter or permitting requirements of the LSWR upon such removal.

~~The LPPA-LDEQ Work Group also discussed concerns related to the potential storage or stockpiling of such Group 1, 2 or 3 materials, in lieu of temporary storage or stockpiling within a regulated solid waste landfill or surface impoundment, prior to their use for one of the recycling or reuse purposes discussed herein. It was agreed that o~~Only Group 2 materials, i.e., those materials destined for offsite applications to the land for such uses as soil amendments, supplements, or ingredients, ~~would~~are allowed to be stored onsite in a location outside of any regulated solid waste unit. ~~However, it was also agreed that s~~Such storage ~~would~~shall only occur in those onsite areas ~~whose~~where runoff ~~was~~is fully captured and treated by the mill's wastewater treatment system. ~~Further, it was agreed that s~~Such materials destined for approved offsite applications ~~would~~shall only be held in temporary storage for a period not to exceed 24 months. ~~Finally, it was agreed that n~~No Group 3 materials, i.e., those that had been placed in and subsequently removed from regulated solid waste units, ~~would~~shall be stored onsite at any location outside of a regulated solid waste unit at any time.

Reporting Requirements: ~~Finally, the PPPA-LDEQ Work Group discussed concerns related to the reporting of such~~ Group 1, 2 or 3 materials when utilized or removed for one of the uses specified in Table 1 or 2~~. It was agreed that all such materials~~

~~would~~shall be reported on the Disposer Annual Report filed by ~~each such~~the mill.

~~The LPPA respectfully requests a formal reclassification of certain materials produced by the Pulp and Paper Industry in Louisiana: (1) the Group 1 materials, when used as ingredients, raw materials or feedstocks in industrial processes to make products or effective substitutes for commercial products as not subject to the generator, transporter or permitting requirements of the LSWR: (2) the Group 2 materials, when used for a land application purpose approved by the LDAF or satisfying the standards or criteria of the LDOTD or when approved by the LDEQ for use as ingredients in landfill or impoundment closure cps, as not subject to the generator, transporter or permitting requirement of the LSWR; and (3) the Group 3 materials, when removed from a regulated solid waste landfill or surface impoundment pursuant to the permit condition attached hereto and employed for the Group 1 or 2 uses, as not subject to the generator, transporter or permitting requirements of the LSWR.~~

~~Should you have any questions or require any additional information, please advise.~~

~~Sincerely,~~

~~Enclosures: Table 1 – Group 1 Materials~~

~~Table 2 – Group 2 Materials~~

~~Suggested Permit Condition Language~~

~~cc:~~

TABLE 1

GROUP 1 MATERIALS

(Materials not Applied to Land)

MATERIAL DESCRIPTION	USES
Wood-fired Boiler Ash	**Feedstock to Produce Activated Carbon**
	Feedstock to Produce Charcoal
	Waste Solidification or Stabilization Agent
	Feedstock to Produce Portland Cement
	Any other feedstock use or substitute for a commercial product (no land application)
Coal-fired Boiler Ash	**Waste Solidification or Stabilization Agent**
	Feed stock to Produce Portland Cement
	Any other feedstock use of substitute for a commercial product (no land application)
Lime and Lime Mud	**Feedstock to Produce Lime**
	Feedstock to Produce Portland Cement
	Any other feedstock use or substitute for a commercial product (no land application)
Slaker Grit	**Feedstock to Produce Portland Cement**
Wood Fiber (Primary Clarifier Sludge)	**Feedstock to Produce Absorbents**
	Feedstock to Produce Tar Paper or Roofing Felt
	Feedstock to Produce Filter Paper
	Feedstock to Produce Insulation
	Use as ingredient or core material in structural and nonstructural concrete products

	Any other feed stock use or substitute for a commercial product (no land application)
Recycled fiber (Recycled Fiber Residues	**Feed stock to Produce Absorbents**
	Feedstock to Produce Tar Paper or Roofing Felt
	Feedstock to Produce filter Paper
	Feedstock to Produce insulation
	Use as ingredient or core material in structural and nonstructural concrete products
	Any other feedstock use or substitute for a commercial product (no land application)

* The specifications and approval from LDEQ consist of those that will be set forth in the LDEQ Letter received in response to this LPPA request for reclassification dated June 18, 1999

TABLE 2 **GROUP 2 MATERIALS** **(Materieals Applied to Land)**		
Material Description	**USES**	SPECIFICATIONS THAT ~~MUST~~SHALL BE **MET FOR SUCH USE**
Wood-fired Boiler Ash (Produced by the Pulp and	Potting Soil amendment	Those required by the LDAF and LDEQ for approval

Paper industry in Louisiana)	Soil Liming Agent	Those required by the LDAF and LDEQ for approval
	Soil Nutritional Supplement	Those required by the LDAF and LDEQ for approval
	Ingredient for Landfill or surface Impoundment Closure Caps	Those required by the LDEQ for approval
	Any other use approved by the LDAF or LDOTD and LDEQ	Those required by the LDAF or LDOTD and LDEQ for approval
Coal-fired Boiler Ash (Produced by the Pulp and Paper industry in Louisiana)	Potting Soil Amendment	Those required by the LDAF and LDEQ for approval
	Soil Liming Agent	Those required by the LDAF and LDEQ for approval
	Soil Nutritional Supplement	Those required by the LDAF and LDEQ for approval
	Ingredient for Landfill or Surface Impoundment Closure Caps	Those required by the LDEQ for approval
	Any other use approved by the LDAF or LDOTD and LDEQ	Those required by the LDAF or LDOTD and LDEQ for approval
Lime, Lime Mud, Lime	Potting Soil Amendment	Those required by the LDAF and

Residues and Slaker Grit (Produced by the Pulp and Paper industry in Louisiana)		LDEQ for approval
	Soil Cement	Those required or adopted by the LDOTD
	Soil Liming Agent	Those required by the LDAF for approval
	Ingredient for landfill or Surface Impoundment Closure Caps	Those required by the LDEQ for approval
	Any other use approved by the LDOTD, LDAF and LDEQ	Those required by the LDAF and LDEQ for approval or required or adopted by the LDOTD
Boiler Gravel (That Which Becomes Trapped in the Bark on Logs Prior to Debarking by the Pulp and Paper Industry in Louisiana)	Road Base material	None if used onsite; if used offsite, those required or adopted by the LDOTD
	Aggregate for Road Surfaces	None if used onsite; If used offsite, those required or adopted by the LDOTD
	Asphalt amendments	None if used onsite; If used offsite, those required or adopted by the LDOTD

	Any other offsite use satisfying the criteria or standards of the LDOTD	If used offsite, those required or adopted by the LDOTD
Wood Fiber & Recycled Fiber (Such as primary clarifier sludge produced by the Pulp and Paper Industry in Louisiana)	Potting Soil Amendment	Those required by the LDAF and LDEQ for approval
	Soil Nutritional Supplement	Those required by the LDAF and LDEQ for approval
	Ingredient for Landfill /Surface Impoundment Closure Caps	Those required by the LDEQ for approval
	Cover for timber land	Those required by the LDAF and LDEQ for approval
	Any other use approved by the LDAF or LDOTD and LDEQ	Those required by the LDAF or LDOTD and LDEQ for
Mixtures containing Boiler Ash, Boiler Gravel, Wood Fiber, Recycled Fiber, Lime Residues and Slaker Grit (Produced by the Pulp and Paper Industry in Louisiana)	Potting Soil Amendment	Those required by the LDAF and LDEQ for approval
	Soil Liming Agent	Those required by the LDAF and LDEQ for approval
	Ingredient for Landfill / Surface Impoundment Closure Caps	Those required by the LDEQ for approval

	Road Base material	None if used onsite; If used offsite, those required or adopted by the LDOTD
	Aggregate for Road Surfaces	None if used onsite; If used offsite, those required or adopted by the LDOTD
	Asphalt Amendments	None if used onsite; If used offsite, those required or adopted by the LDOTD
	Any other onsite or offsite use approved by the LDAF or LDOTD and LDEQ	Those required by the LDAF or LDOTD and LDEQ, or LDEQ only as appropriate, for approval

*The specifications and approval from LDEQ consist of those that will be set forth in the LDEQ letter received in response to this LPPA request for reclassification dated June 18, 1999.

Suggested Permit Condition Language For The One-Time, Facility-Specific Minor Permit Modification Addressing Materials Removed From LSWR Regulated Surface Impoundments Or Landfills In Louisiana's Pulp And Paper Industry

In accordance with LAC 33:VII.303.~~K~~A.11, when the _____ (description of material). Which has not been commingled or contaminated with dissimilar solid wastes, is removed from the _____ (name of facility specific surface impoundment or landfill). And subsequently used as:

~~(a)~~1. a Louisiana Department of Agriculture and Forestry (LDAF) approved potting soil amendments, so~~u~~il liming agents, so~~u~~il nutritional supplements or cover for timber land;

~~(b)~~2. soil cement, road bade materials or aggregate for road surfaces that satisfy the standards or criteria approved by the Louisiana Department of Transportation and Development (LDOTD); OR

~~(c)~~3. Louisiana Department of Environmental Quality (LDEQ) approved ingredients for landfill or surface impoundment closure caps, such material, when managed in accordance with all other applicable laws, regulations, and conditions, is no longer considered to be discarded and, thus, is not subject to the generator, transporter or permitting requirements of the Louisiana Solid Waste Regulations (LSWR).

However, while such material is present in the _____(name of facility specific surface impoundment or landfill), it remains subject to all applicable requirements of the LSWR until such removal occurs.

The total tonnage of this material removed from the regulated unit for any such use ~~must~~shall be reported on the facility's Annual Disposer's Solid Waste Report. Any

proposed new use for the material must have the approval of the LDAF or LDOTD and LDEQ or the LDEQ only, as appropriate.

Chapter 13. Financial Assurance for All Processors and Disposers of Solid Waste

(Editor's note: this language is from §727;

Statewide Beautification was moved to Chapter 14)

§1301. Financial Responsibility During Operation

A. Permit holders or applicants for standard permits of Type I, I-A, II, II-A, and III facilities have the following financial responsibilities while the facility is in operation.

1. Type I and II facilities shall maintain liability insurance, or its equivalent, for sudden and accidental occurrences in the amount of $1 million per occurrence and $1 million annual aggregate, per site, exclusive of legal-defense costs, for claims arising from injury to persons or property, owing to the operation of the site. Evidence of this coverage shall be updated annually and provided to the Office of Management and Finance, Financial Services Division

2. Type I-A and II-A facilities shall maintain liability insurance, or its equivalent, for sudden and accidental occurrences in the amount of $500,000 per occurrence, and $500,000 annual aggregate, per site, exclusive of legal-defense costs, for claims arising from injury to persons or property, owing to the operation of the site. Evidence of this coverage shall be updated annually and provided to the Office of Management and Finance, Financial Services Division.

3. Type III facilities shall maintain liability insurance, or its

equivalent, for sudden and accidental occurrences in the amount of $250,000 per occurrence, and $250,000 annual aggregate, per site, exclusive of legal-defense costs, for claims arising from injury to persons or property, owing to the operation of the site. Evidence of this coverage shall be updated annually and provided to the Office of Management and Finance, Financial Services Division.

B. Establishment of Financial Responsibility. The financial responsibility may be established by any one or a combination of the following.

1. Evidence of Liability Insurance. Evidence of liability insurance ~~may~~shall consist of either a signed duplicate original of a solid waste liability endorsement, or a certificate of insurance. All liability endorsements and certificates of insurance must include:

a. a statement of coverage relative to environmental risks;

b. a statement of all exclusions to the policy; and

c. a certification by the insurer that the insurance afforded with respect to such sudden accidental occurrences is subject to all of the terms and conditions of the policy, provided, however, that any provisions of the policy inconsistent with the following ~~C~~clauses ~~(i) through (vi)~~ are amended to conform with said clauses:

i. bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy;

ii. the insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer. This provision does not apply with

respect to that amount of any deductible for which coverage is demonstrated as specified in ~~Clause A.1.d.ii, iii, or iv~~Paragraphs 4, 5, and 6. of this Sub~~S~~section;

iii. whenever requested by the administrative authority, the insurer agrees to furnish to the administrative authority a signed duplicate original of the policy and all endorsements;

iv. cancellation of the policy, whether by the insurer or the insured, ~~will~~shall be effective only upon written notice and upon lapse of 60 days after a copy of such written notice is received by the Office of Management and Finance, Financial Services Division;

v. any other termination of the policy ~~will~~shall be effective only upon written notice and upon lapse of 30 days after a copy of such written notice is received by the Office of Management and Finance, Financial Services Division; and

vi. the insurer is admitted, authorized, or eligible to conduct insurance business in Louisiana.

2. Liability Endorsement. The wording of the liability endorsement shall be identical to the wording ~~that follows~~in Appendix A of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

3. Liability Insurance. The wording of the certificate of insurance shall be identical to the wording ~~that follows~~in Appendix B of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the

brackets deleted.

4. Letter of Credit. A permit holder or applicant may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the following requirements, and by submitting the letter to the administrative authority.

a. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.

b. A permit holder or applicant who uses a letter of credit to satisfy the requirements of this Section must also provide to the administrative authority evidence of the establishment of a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the administrative authority will be deposited by the issuing institution directly into the standby trust fund. The wording of the standby trust fund agreement shall be as specified in ~~Clause A.2.d.ix of this Section~~LAC 33:VII.1303.C.9.

c. The letter of credit must be accompanied by a letter from the permit holder or applicant referring to the letter of credit by number, name of issuing institution, and date, and providing the following information:

i. solid waste identification number~~,~~;

ii. site name~~,~~;

iii. facility name~~,~~;

iv. facility permit number~~,~~; and

v. the amount of funds assured for liability coverage of the facility by the letter of credit.

d. The letter of credit must be irrevocable and issued for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the permit holder and the administrative authority by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days ~~will~~shall begin on the date when both the permit holder and the Office of Management and Finance, Financial Services Division receive the notice, as evidenced by the return receipts.

e. The wording of the letter of credit shall be identical to the wording ~~that follows~~in Appendix C of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

5. Financial Test

a. To meet this test, the applicant, permit holder, parent corporation of the applicant (corporate guarantor), or permit holder must submit to the Office of Management and Finance, Financial Services Division the documents required by ~~Paragraph A.2 of this Section~~LAC 33:VII.1303 demonstrating that the requirements of that Subsection have been met. Use of the financial test may be disallowed on the basis of the accessibility of the assets of the permit holder, applicant, or parent corporation (corporate guarantor). If the applicant, permit holder, or parent corporation is using the financial test to demonstrate liability coverage and closure and post-closure care, only one letter from the chief financial officer is required.

b. The assets of the parent corporation of the applicant or permit holder shall not be used to determine whether the applicant or permit holder satisfies the financial test, unless the parent corporation has supplied a corporate guarantee as authorized in ~~Clause A.1.d.iv~~Paragraph 6 of this Sub~~S~~section.

c. The wording of the financial test shall be as specified in ~~Subclause A.2.i.iv.(e) of this Section~~ LAC 33:VII.1303.H.4.

6. Corporate Guarantee. A permit holder or applicant may meet the requirements of ~~Paragraph A.1~~Subsection A of this Section for liability coverage by obtaining a written guarantee, hereafter referred to as a "corporate guarantee." The guarantor must demonstrate to the administrative authority that the guarantor meets the requirements in ~~Subparagraph A.2.i of this Section~~LAC 33:VII.1303.H and must comply with the terms of the corporate guarantee. The corporate guarantee must accompany the items sent to the administrative authority specified in ~~Clauses A.2.i.ii and iv of this Section~~LAC 33:VII.1303.H.2 and 4. The terms of the corporate guarantee must be in an authentic act signed and sworn to by an authorized officer of the corporation before a notary public and must provide that:

a. the guarantor meets or exceeds the financial-test criteria and agrees to comply with the reporting requirements for guarantors as specified in ~~Subparagraph A.2.i of this Section~~LAC 33:VII.1303.H;

b. the guarantor is the parent corporation of the permit holder or applicant of the solid waste facility or facilities to be covered by the guarantee, and the guarantee extends to certain facilities;

c. if the permit holder or applicant fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden and accidental occurrences (or both as the case may be), arising from the operation of facilities covered by the corporate guarantee, or fails to pay an amount agreed to in settlement of the claims arising from or alleged to arise from such injury or damage, the guarantor will do so up to the limits of coverage;

d. the guarantor agrees that if, at the end of any fiscal year before termination of the guarantee, the guarantor fails to meet the financial-test criteria, the guarantor shall send within 90 days, by certified mail, notice to the Office of Management and Finance, Financial Services Division, and to the permit holder or applicant, that he intends to provide alternative financial assurance as specified in ~~Paragraph A.1 of~~ this Section, in the name of the permit holder or applicant, and that within 120 days after the end of said fiscal year the guarantor shall establish such financial assurance, unless the permit holder or applicant has done so;

e. the guarantor agrees to notify the Office of Management and Finance, Financial Services Division by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the guarantor as debtor, within 10 days after commencement of the proceeding;

f. the guarantor agrees that within 30 days after being notified by the administrative authority of a determination that the guarantor no longer meets the financial-test criteria or that he or she is disallowed from continuing as a guarantor of closure or post-closure care, he or she shall establish alternate financial assurance as specified in ~~Paragraph A.1 of~~ this Section in the name of the permit holder or applicant

unless the permit holder or applicant has done so;

g. the guarantor agrees to remain bound under the guarantee notwithstanding any or all of the following: amendment or modification of the permit, or any other modification or alteration of an obligation of the permit holder or applicant ~~pursuant to~~in accordance with these regulations;

h. the guarantor agrees to remain bound under the guarantee for as long as the permit holder or applicant must comply with the applicable financial assurance requirements of ~~Paragraph A.2 of this Section~~LAC 33:VII.1303 for the above-listed facilities, except that the guarantor may cancel this guarantee by sending notice by certified mail to the administrative authority and the permit holder or applicant. Such cancellation will become effective no earlier than 90 days after receipt of such notice by both the administrative authority and the permit holder, as evidenced by the return receipts;

i. the guarantor agrees that if the permit holder or applicant fails to provide alternate financial assurance, as specified in ~~Paragraph A.1 of~~ this Section, and obtain written approval of such assurance from the administrative authority within 60 days after the administrative authority receives the guarantor's notice of cancellation, the guarantor shall provide such alternate financial assurance in the name of the permit holder or applicant;

j. the guarantor expressly waives notice of acceptance of the guarantee by the administrative authority or by the permit holder or applicant. Guarantor also expressly waives notice of amendments or modifications of the facility permit(s); and

k. the wording of the corporate guarantee shall be as specified in ~~Subclause A.2.i.ix.(l) of this Section~~LAC 33:VII.1303.H.9. A corporate guarantee may be used to satisfy the requirements of this Section only if the attorney general(s) or insurance commissioner(s) of the state in which the guarantor is incorporated, and the state in which the facility covered by the guarantee is located, has submitted a written statement to the Office of Management and Finance, Financial Services Division that a corporate guarantee is a legally valid and enforceable obligation in that state.

7. The use of a particular financial responsibility mechanism is subject to the approval of the administrative authority.

8. Permit holders of existing facilities must submit, on or before February 20, 1995, financial responsibility documentation that complies with the requirements of ~~Paragraph A.1 of~~ this Section. Applicants for permits for new facilities must submit evidence of financial assurance in accordance with this ~~Section~~Chapter at least 60 days before the date on which solid waste is first received for processing or disposal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2521 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 26:2610 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§1303. Financial Responsibility for Closure and Post-Closure Care

A. **Financial Responsibility for Type I, I-A, II, II-A, and III Facilities.**

Permit holders or applicants of Type I, I-A, II, II-A, and III facilities have the following financial responsibilities for closure and post-closure care.

1. Permit holders or applicants for processing or disposal facilities shall establish and maintain financial assurance for closure and post-closure care.

2. The applicant or permit holder shall submit to the Office of Management and Finance, Financial Services Division the estimated closure date and the estimated cost of closure and post-closure care in accordance with the following procedures.

a. The applicant or permit holder must have a written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in these rules. The estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by the closure plan, and shall be based on the cost of hiring a third party to close the facility in accordance with the closure plan.

b. The applicant or permit holder of a facility subject to post-closure monitoring or maintenance requirements must have a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the provisions of these rules. The estimate of post-closure costs is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required and shall be based on the cost of hiring a third party to conduct post-closure activities in accordance with the closure plan.

c. The cost estimates must be adjusted within 30 days after

each anniversary of the date on which the first cost estimate was prepared on the basis of either the inflation factor derived from the Annual Implicit Price Deflator for Gross Domestic Product, as published by the U.S. Department of Commerce in its *Survey of Current Business* or a reestimation of the closure and post-closure costs in accordance with Clauses A.2.a and b.~~i and ii~~ of this Section. The permit holder or applicant must revise the cost estimate whenever a change in the closure/post-closure plans increases or decreases the cost of the closure plan. The permit holder or applicant must submit a written notice of any such adjustment to the Office of Management and Finance, Financial Services Division within 15 days following such adjustment.

d. For trust funds, the first payment must be at least equal to the current closure and post-closure cost estimate, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each annual anniversary of the date of the first payment. The amount of each subsequent payment must be determined by subtracting the current value of the trust fund from the current closure and post-closure cost estimates and dividing the result by the number of years remaining in the pay-in period. The initial pay-in period is based on the estimated life of the facility.

B. **Financial Assurance Mechanisms.** The financial assurance mechanism must be one or a combination of the following: a trust fund, surety bond, a financial guarantee bond ensuring closure funding, a performance bond, a letter of credit, an insurance policy, or the financial test. The financial assurance mechanism is subject to the approval of the administrative authority and must fulfill the following criteria.

1. Except when a financial test, trust fund, or certificate of insurance

is used as the financial assurance mechanism, a standby trust fund naming the administrative authority as beneficiary must be established at the time of the creation of the financial assurance mechanism into which the proceeds of such mechanism could be transferred should such funds be necessary for either closure or post-closure of the facility, and a signed copy must be furnished to the administrative authority with the mechanism.

2. A permit holder or applicant may use a financial assurance mechanism specified in this ~~Section~~Chapter for more than one facility, if all such facilities are located within Louisiana and are specifically identified in the mechanism.

3. The amount covered by the financial assurance mechanism(s) must equal the total of the current closure and post-closure estimates for each facility covered.

4. When all closure and post-closure requirements have been satisfactorily completed, the administrative authority shall execute an approval to terminate the financial assurance mechanism(s).

C. **Trust Funds.** A permit holder or applicant may satisfy the requirements of this Section by establishing a closure trust fund that conforms to the following requirements and submitting an originally signed duplicate of the trust agreement to the Office of Management and Finance, Financial Services Division.

1. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

2. Trusts must be accomplished in accordance with and subject to the

laws of Louisiana. The beneficiary of the trust shall be the administrative authority.

3. Trust-fund earnings may be used to offset required payments into the fund, to pay the fund trustee, or to pay other expenses of the funds, or may be reclaimed by the permit holder or applicant upon approval of the administrative authority.

4. The trust agreement must be accompanied by an affidavit certifying the authority of the individual signing the trust on behalf of the permit holder or applicant.

5. The permit holder or applicant may accelerate payments into the trust fund or deposit the full amount of the current closure cost estimate at the time the fund is established. The permit holder or applicant must, however, maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in ~~Clause A.2.b.iv~~Subparagraph A.2.d of this Section.

6. If the permit holder or applicant establishes a trust fund after having used one or more of the alternate mechanisms specified in this Section, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to the specifications of this Paragraph.

7. After the pay-in period is completed, whenever the current cost estimate changes, the permit holder must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the permit holder or applicant, within 60 days after the change in the cost estimate, must either deposit an amount into the fund that will make its

value at least equal to the amount of the closure/post-closure cost estimate or it must estimate or obtain other financial assurance as specified in this ~~Section~~Chapter to cover the difference.

8. After beginning final closure, a permit holder, or any other person authorized by the permit holder to perform closure and/or post-closure may request reimbursement for closure and/or post-closure expenditures by submitting itemized bills to the Office of Management and Finance, Financial Services Division. Within 60 days after receiving bills for such activities, the administrative authority will determine whether the closure and/or post-closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he or she will instruct the trustee to make reimbursement in such amounts as the administrative authority specifies in writing. If the administrative authority has reason to believe that the cost of closure and/or post-closure will be significantly greater than the value of the trust fund, he may withhold reimbursement for such amounts as he deems prudent until he determines that the permit holder is no longer required to maintain financial assurance.

9. The wording of the trust agreement shall be identical to the wording ~~that follows~~in Appendix D of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted. The trust agreement shall be accompanied by a formal certification of acknowledgement.

D. **Surety Bonds.** A permit holder or applicant may satisfy the requirements of this Section by obtaining a surety bond that conforms to the following requirements and submitting the bond to the Office of Management and Finance, Financial Services Division.

1. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury and approved by the administrative authority.

2. The permit holder or applicant who uses a surety bond to satisfy the requirements of this Section must also provide to the administrative authority evidence of the establishment of a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the administrative authority. The wording of the standby trust fund shall be as specified in ~~Clause A.2.d.ix~~Paragraph C.9 of this Section.

3. The bond must guarantee that the operator will:

a. fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

b. fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure or post-closure is issued; or

c. provide alternate financial assurance as specified in this Section and obtain the administrative authority's written approval of the assurance provided, within 90 days after receipt by both the permit holder and the administrative authority of a notice of cancellation of the bond from the surety.

4. Under the terms of the bond, the surety will become liable on the bond obligation when the permit holder fails to perform as guaranteed by the bond.

5. The penal sum of the bond must be at least equal to the current

closure and post-closure cost estimates.

6. Whenever the current cost-estimate increases to an amount greater than the penal sum, the permit holder, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure and post-closure estimate and submit evidence of such increase to the Office of Management and Finance, Financial Services Division, or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current cost estimate decreases, the penal sum may be reduced to the amount of the current cost estimate following written approval by the administrative authority.

7. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the permit holder and to the administrative authority. Cancellation may not occur, however, before 120 days have elapsed, beginning on the date that both the permit holder and the administrative authority receive the notice of cancellation, as evidenced by the return receipts.

8. The wording of the surety bond guaranteeing payment into a standby trust fund shall be identical to the wording ~~that follows~~in Appendix E of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets delete.

E. **Performance Bonds.** A permit holder or applicant may satisfy the requirements of this Section by obtaining a surety bond that conforms to the following requirements and submitting the bond to the Office of Management and Finance, Financial Services Division.

1. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury and approved by the administrative authority.

2. The permit holder or applicant who uses a surety bond to satisfy the requirements of this Section must also provide to the administrative authority evidence of establishment of a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the administrative authority. The wording of the standby trust fund shall be as specified in ~~Clause A.2.d.ix~~Paragraph C.9 of this Section.

3. The bond must guarantee that the permit holder or applicant will:

a. perform final closure and post-closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or

b. provide alternate financial assurance as specified in this Section and obtain the administrative authority's written approval of the assurance provided within 90 days after the date both the permit holder and the administrative authority receive notice of cancellation of the bond from the surety.

4. Under the terms of the bond, the surety will become liable on the bond obligation when the permit holder fails to perform as guaranteed by the bond. Following a determination by the administrative authority that the permit holder has failed to perform final closure and post-closure in accordance with the closure plan and

other permit requirements when required to do so, under the terms of the bond the surety will perform final closure and post-closure as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.

5. The penal sum of the bond must be at least equal to the current closure and post-closure cost estimates.

6. Whenever the current closure cost estimate increases to an amount greater than the penal sum, the permit holder, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure and post-closure cost estimates and submit evidence of such increase to the Office of Management and Finance, Financial Services Division, or obtain other financial assurance as specified in this Section. Whenever the current cost estimate decreases, the penal sum may be reduced to the amount of the current cost estimate after written approval of the administrative authority.

7. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the permit holder and to the Office of Management and Finance, Financial Services Division. Cancellation may not occur before 120 days have elapsed beginning on the date that both the permit holder and the administrative authority receive the notice of cancellation, as evidenced by the return receipts.

8. The wording of the performance bond shall be identical to the wording ~~that follows~~in Appendix F of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

F. **Letter of Credit.** A permit holder or applicant may satisfy the requirements of this ~~Section~~Chapter by obtaining an irrevocable standby letter of credit that conforms to the following requirements and submitting the letter to the Office of Management and Finance, Financial Services Division.

1. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.

2. A permit holder or applicant who uses a letter of credit to satisfy the requirements of this ~~Section~~Chapter must also provide to the administrative authority evidence of the establishment of a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the administrative authority will be deposited by the issuing institution directly into the standby trust fund. The wording of the standby trust fund shall be as specified in ~~Clause A.2.d.ix~~Paragraph C.9 of this Section.

3. The letter of credit must be accompanied by a letter from the permit holder or applicant referring to the letter of credit by number, issuing institution, and date, and providing the following information:

a. solid waste identification number,

b. site name,

c. facility name,

d. facility permit number, and

e. the amount of funds assured for closure and/or post-closure of the facility by the letter of credit.

4. The letter of credit must be irrevocable and issued for a period of at least one year, unless, at least 120 days before the current expiration date, the issuing institution notifies both the permit holder and the Office of Management and Finance, Financial Services Division by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the permit holder and the administrative authority receive the notice, as evidenced by the return receipts.

5. The letter of credit must be issued in an amount at least equal to the current closure and post-closure cost estimates.

6. Whenever the current cost estimates increase to an amount greater than the amount of the credit, the permit holder, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure and post-closure cost estimates and submit evidence of such increase to the Office of Management and Finance, Financial Services Division, or obtain other financial assurance as specified in this ~~Section~~Chapter to cover the increase. Whenever the current cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure and post-closure cost estimates upon written approval of the administrative authority.

7. Following a determination by the administrative authority that the permit holder has failed to perform final closure or post-closure in accordance with the

closure plan and other permit requirements when required to do so, the administrative authority may draw on the letter of credit.

8. The wording of the letter of credit shall be identical to the wording ~~that follows~~in Appendix G of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

G. **Insurance.** A permit holder or applicant may satisfy the requirements of this Section by obtaining insurance that conforms to the following requirements ~~of this Subparagraph~~ and submitting a certificate of such insurance to the Office of Management and Finance, Financial Services Division.

1. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess-lines or surplus-lines insurer in one or more states, and authorized to transact insurance business in Louisiana.

2. The insurance policy must be issued for a face amount at least equal to the current closure and post-closure cost estimates.

3. The term *face amount* means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

4. The insurance policy must guarantee that funds will be available to close the facility and provide post-closure care once final closure occurs. The policy must also guarantee that, once final closure begins, the insurer will be responsible for paying out funds up to an amount equal to the face amount of the policy, upon the direction of

the administrative authority, to such party or parties as the administrative authority specifies.

5. After beginning final closure, a permit holder or any other person authorized by the permit holder to perform closure and post-closure may request reimbursement for closure or post-closure expenditures by submitting itemized bills to the Office of Management and Finance, Financial Services Division. Within 60 days after receiving such bills, the administrative authority will determine whether the expenditures are in accordance with the closure plan or otherwise justified, and if so, he or she will instruct the insurer to make reimbursement in such amounts as the administrative authority specifies in writing.

6. The permit holder must maintain the policy in full force and effect until the administrative authority consents to termination of the policy by the permit holder.

7. Each policy must contain a provision allowing assignment of the policy to a successor permit holder. Such assignment may be conditional upon consent of the insurer, provided consent is not unreasonably refused.

8. The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the permit holder and the Office of Management and Finance, Financial Services Division. Cancellation, termination, or failure to renew may not occur, however, before

120 days have elapsed, beginning on the date that both the administrative authority and the permit holder receive notice of cancellation, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect in the event that, on or before the date of expiration:

a. the administrative authority deems the facility to be abandoned; ~~or~~

b. the permit is terminated or revoked or a new permit is denied; ~~or~~

c. closure and/or post-closure is ordered; ~~or~~

d. the permit holder is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

e. the premium due is paid.

9. Whenever the current cost estimate increases to an amount greater than the face amount of the policy, the permit holder, within 60 days after the increase, must either increase the face amount to at least equal to the current closure and post-closure cost estimates and submit evidence of such increase to the Office of Management and Finance, Financial Services Division, or obtain other financial assurance as specified in this ~~Section~~Chapter to cover the increase. Whenever the current cost estimate decreases, the face amount may be reduced to the amount of the current closure and post-closure cost estimates following written approval by the administrative authority.

10. The wording of the certificate of insurance shall be identical to the wording ~~that follows~~in Appendix H of this Chapter, except that the instructions in

brackets are to be replaced with the relevant information and the brackets deleted.

H. **Financial Test.** A permit holder, applicant, or parent corporation of the permit holder or applicant, which will be responsible for the financial obligations, may satisfy the requirements of this Section by demonstrating that he or she passes a financial test as specified in this Subparagraph. The assets of the parent corporation of the applicant or permit holder shall not be used to determine whether the applicant or permit holder satisfies the financial test, unless the parent corporation has supplied a corporate guarantee as outlined in ~~Clause A.1.d.iv of this Section~~LAC 33:VII.1301.B.6.

1. To pass this test, the permit holder, applicant, or parent corporation of the permit holder or applicant, must meet the criteria of either ~~Subclause (a) or (b) below~~of the following.

a. The permit holder, applicant, or parent corporation of the permit holder or applicant must have:

i. tangible net worth of at least six times the sum of the current closure and post-closure estimates to be demonstrated by this test, and the amount of liability coverage to be demonstrated by this test; ~~and~~

ii. tangible net worth of at least $10 million; and

iii. assets in the United States amounting to either at least 90 percent of his or her total assets, or at least six times the sum of the current closure and post-closure estimates, to be demonstrated by this test, and the amount of liability coverage to be demonstrated by this test.

b. The permit holder, applicant, or parent corporation of the

permit holder or applicant must have:

i. a current rating for his or her most recent bond issuance of AAA, AA, A, or BBB, as issued by *Standard and Poor's*, or Aaa, Aa, or Baa, as issued by *Moody's*; and

ii. tangible net worth of at least $10 million; and

iii. assets in the United States amounting to either 90 percent of his or her total assets or at least six times the sum of the current closure and post-closure estimates, to be demonstrated by this test, and the amount of liability coverage to be demonstrated by this test.

2. To demonstrate that he or she meets this test, the permit holder, applicant, or parent corporation of the permit holder or applicant must submit the following three items to the Office of Management and Finance, Financial Services Division:

a. a letter signed by the chief financial officer of the permit holder, applicant, or parent corporation demonstrating and certifying the criteria in ~~Clause A.2.i.i~~Paragraph H.1 of this Section and including the information required by ~~Clause A.2.i.iv~~Paragraph H.4 of this Section. If the financial test is provided to demonstrate both assurance for closure and/or post-closure care and liability coverage, a single letter to cover both forms of financial responsibility is required;

b. a copy of the independent certified public accountant (CPA)'s report on the financial statements of the permit holder, applicant, or parent corporation of the permit holder or applicant for the latest completed fiscal year; and

c. a special report from the independent CPA to the permit holder, applicant, or parent corporation of the permit holder or applicant stating that:

i. he or she has computed the data specified by the chief financial officer as having been derived from the independently audited, year-end financial statements with the amounts for the latest fiscal year in such financial statements; and

ii. in connection with that procedure, no matters came to his attention that caused him to believe that the specified data should be adjusted.

3. The administrative authority may disallow use of this test on the basis of the opinion expressed by the independent CPA in his report on qualifications based on the financial statements. An adverse opinion or a disclaimer of opinion will be cause for disallowance. The administrative authority will evaluate other qualifications on an individual basis. The administrative authority may disallow the use of this test on the basis of the accessibility of the assets of the parent corporation (corporate guarantor), permit holder, or applicant. The permit holder, applicant, or parent corporation must provide evidence of insurance for the entire amount of required liability coverage, as specified in this ~~Section~~Chapter, within 30 days after notification of disallowance.

4. The permit holder, applicant, or parent corporation (if a corporate guarantor) of the permit holder or applicant shall provide to the Office of Management and Finance, Financial Services Division a letter from the chief financial officer, the wording of which shall be identical to the wording in Appendix I of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted. The letter shall certify~~ing~~ the following information:

a. a list of solid waste facilities, whether in Louisiana or not, owned or operated by the permit holder or applicant of the facility, for which financial assurance for liability coverage is demonstrated through the use of financial tests, including the amount of liability coverage;

b. a list of solid waste facilities, whether in Louisiana or not, owned or operated by the permit holder or applicant, for which financial assurance for the closure or post-closure care is demonstrated through the use of a financial test or self-insurance by the permit holder or applicant, including the cost estimates for the closure and post-closure care of each facility;

c. a list of the solid waste facilities, whether in Louisiana or not, owned or operated by any subsidiaries of the parent corporation for which financial assurance for closure and/or post-closure is demonstrated through the financial test or through use of self-insurance, including the current cost estimate for the closure or post-closure care for each facility and the amount of annual aggregate liability coverage for each facility; and

d. a list of solid waste facilities, whether in Louisiana or not, for which financial assurance for closure or post-closure care is not demonstrated through the financial test, self-insurance, or other substantially equivalent state mechanisms, including the estimated cost of closure and post-closure of such facilities.

e. The wording of the letter from the chief financial officer shall be identical to the wording ~~as follows~~in Appendix I of this Chapter, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

5. For the purposes ~~of Paragraph A.2~~ of this Section, the phrase "tangible net worth" shall mean the tangible assets that remain after liabilities have been deducted; such assets would not include intangibles such as good will and rights to patents or royalties.

6. The phrase "current closure and post-closure cost estimates," as used in ~~Clause A.2.i.i~~Paragraph H.1 of this Section, includes the cost estimates required to be shown in ~~Division A.2.i.i.(a).(i)~~Paragraph H.1.a.i of this Section.

7. After initial submission of the items specified in ~~Clause A.2.i.ii~~Paragraph H.2 of this Section, the permit holder, applicant, or parent corporation of the permit holder or applicant must send updated information to the Office of Management and Finance, Financial Services Division within 90 days after the close of each succeeding fiscal year. This information must include all three items specified in ~~Clause A.2.i.ii~~Paragraph H.2 of this Section.

8. The administrative authority may, on the basis of a reasonable belief that the permit holder, applicant, or parent corporation of the permit holder or applicant may no longer meet the requirements of ~~Subparagraph A.2.i of~~ this Subsection, require reports of financial condition at any time in addition to those specified in ~~Clause A.2.i.ii~~Paragraph H.2 of this Section. If the administrative authority finds, on the basis of such reports or other information, that the permit holder, applicant, or parent corporation of the permit holder or applicant no longer meets the requirements of ~~Clause A.2.i.ii~~Paragraph H.2 of this Section, the permit holder or applicant, or parent corporation of the permit holder or applicant must provide alternate financial assurance as specified in ~~Paragraph A.2 of~~ this Section within 30 days after notification of such a finding.

9. A permit holder or applicant may meet the requirements of ~~Subparagraph A.2.i of~~ this Subsection for closure and/or post-closure by obtaining a written guarantee, hereafter referred to as a "corporate guarantee." The guarantor must be the parent corporation of the permit holder or applicant. The guarantor must meet the requirements and submit all information required for permit holders or applicants in ~~Clauses i-viii~~Paragraphs H.1-8 of this ~~Subparagraph~~Section and must comply with the terms of the corporate guarantee. The corporate guarantee must accompany the items sent to the administrative authority specified in ~~Clauses ii and iv~~Paragraphs H.2 and 4 of this ~~Subparagraph~~Section. The wording of the corporate guarantee must be identical to the wording in Appendix J of this Chapter, except that instructions in brackets are to be replaced with the relevant information and the brackets removed. The terms of the corporate guarantee must be in an authentic act signed and sworn by an authorized officer of the corporation before a notary public and must provide that:

a. the guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in ~~Subparagraph A.2.i of~~ this Section;

b. the guarantor is the parent corporation of the permit holder or applicant of the solid waste management facility or facilities to be covered by the guarantee, and the guarantee extends to certain facilities;

c. "closure plans," as used in the guarantee, refers to the plans maintained as required by the Louisiana solid waste rules and regulations for the closure and post-closure care of facilities, as identified in the guarantee;

d. for value received from the permit holder or applicant, the

guarantor guarantees to the Louisiana Department of Environmental Quality that the permit holder or applicant will perform closure, post-closure care, or closure and post-closure care of the facility or facilities listed in the guarantee, in accordance with the closure plan and other permit or regulatory requirements whenever required to do so. In the event that the permit holder or applicant fails to perform as specified in the closure plan, the guarantor shall do so or establish a trust fund as specified in Subparagraph A.2.d of this Section, in the name of the permit holder or applicant, in the amount of the current closure or post-closure cost estimates or as specified in ~~Subp~~Paragraph A.2~~.b.~~ of this Section;

e. guarantor agrees that if, at the end of any fiscal year before termination of the guarantee, the guarantor fails to meet the financial test criteria, the guarantor shall send within 90 days after the end of the fiscal year, by certified mail, notice to the Office of Management and Finance, Financial Services Division and to the permit holder or applicant that he intends to provide alternative financial assurance as specified in ~~Paragraph A.2 of~~ this Section, in the name of the permit holder or applicant, and that within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless the permit holder or applicant has done so;

f. the guarantor agrees to notify the Office of Management and Finance, Financial Services Division by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the guarantor as debtor, within 10 days after commencement of the proceeding;

g. the guarantor agrees that within 30 days after being notified by the administrative authority of a determination that the guarantor no longer meets the

financial test criteria or that he is disallowed from continuing as a guarantor of closure or post-closure care, he shall establish alternate financial assurance as specified in ~~Paragraph A.2 of~~ this Section in the name of the permit holder or applicant, unless the permit holder or applicant has done so;

h. the guarantor agrees to remain bound under the guarantee, notwithstanding any or all of the following: amendment or modification of the closure plan, amendment or modification of the permit, extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the permit holder or applicant ~~pursuant to~~in accordance with these regulations;

i. the guarantor agrees to remain bound under the guarantee for as long as the permit holder must comply with the applicable financial assurance requirements ~~of Paragraph A.2~~ of this Section for the above-listed facilities, except that the guarantor may cancel this guarantee by sending notice by certified mail to the Office of Management and Finance, Financial Services Division and the permit holder or applicant. The cancellation will become effective no earlier than 90 days after receipt of such notice by both the administrative authority and the permit holder or applicant, as evidenced by the return receipts;

j. the guarantor agrees that if the permit holder or applicant fails to provide alternative financial assurance as specified in ~~Paragraph A.2 of~~ this Section, and to obtain written approval of such assurance from the administrative authority within 60 days after the administrative authority receives the guarantor's notice of cancellation, the guarantor shall provide such alternate financial assurance in the name

of the owner or operator; and

k. the guarantor expressly waives notice of acceptance of the guarantee by the administrative authority or by the permit holder. Guarantor also expressly waives notice of amendments or modifications of the closure plan and of amendments or modifications of the facility permit(s).

I. **Local Government Financial Test.** An owner or operator that satisfies the requirements of ~~Clauses A.2.j.i iii~~Paragraphs I.1-3 of this Section may demonstrate financial assurance up to the amount specified in ~~Clause A.2.j.iv~~Paragraph I.4 of this Section.

1. Financial Component

a. The owner or operator must satisfy the following conditions, as applicable:

i. if the owner or operator has outstanding, rated, general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, ~~it~~he or she must have a current rating of Aaa, Aa, A, or Baa, as issued by *Moody's*, or AAA, AA, A, or BBB, as issued by *Standard and Poor's,* on all such general obligation bonds; or

ii. the owner or operator must satisfy the ratio of cash plus marketable securities to total expenditures being greater than or equal to 0.05 and the ratio of annual debt service to total expenditures less than or equal to 0.20 based on the owner or operator's most recent audited annual financial statement.

b. The owner or operator must prepare ~~its~~his or her financial

statements in conformity with *Generally Accepted Accounting Principles* for governments and have ~~its~~his or her financial statements audited by an independent certified public accountant (or appropriate state agency).

c. A local government is not eligible to assure its obligations under ~~Subparagraph A.2.j of~~ this Subsection if it:

i. is currently in default on any outstanding general obligation bonds;

ii. has any outstanding general obligation bonds rated lower than Baa as issued by *Moody's* or BBB as issued by *Standard and Poor's*;

iii. operated at a deficit equal to 5 percent or more of total annual revenue in each of the past two fiscal years; or

iv. receives an adverse opinion, disclaimer of opinion, or other qualified opinion from the independent certified public accountant (or appropriate state agency) auditing its financial statement as required under ~~Subclause A.2.j.i.(b)~~Subparagraph I.1.b of this Section. The administrative authority may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the administrative authority deems the qualification insufficient to warrant disallowance of use of the test.

d. The following terms used in this Subsection are defined as follows:

i. *Deficit*—total annual revenues minus total annual expenditures.

ii. *Total Revenues*—revenues from all taxes and fees, but does not include the proceeds from borrowing or asset sales, excluding revenue from funds managed by local government on behalf of a specific third party.

iii. *Total Expenditures*—all expenditures, excluding capital outlays and debt repayment.

iv. *Cash Plus Marketable Securities*—all the cash plus marketable securities held by the local government on the last day of a fiscal year, excluding cash and marketable securities designated to satisfy past obligations such as pensions.

v. *Debt Service*—the amount of principal and interest due on a loan in a given time period, typically the current year.

2. Public Notice Component. The local government owner or operator must place a reference to the closure and post-closure care costs assured through the financial test into its next comprehensive annual financial report (CAFR) after the effective date of this ~~Section~~Chapter or prior to the initial receipt of waste at the facility, whichever is later. Disclosure must include the nature and source of closure and post-closure care requirements, the reported liability at the balance sheet date, the estimated total closure and post-closure care cost remaining to be recognized, the percentage of landfill capacity used to date, and the estimated landfill life in years. A reference to corrective action costs must be placed in the CAFR not later than 120 days after the corrective action remedy has been selected in accordance with the requirements of LAC 33:VII.~~709.E.6~~805.F. For the first year the financial test is used to assure costs at a particular facility, the reference may be placed in the operating record until issuance of

the next available CAFR if timing does not permit the reference to be incorporated into the most recently issued CAFR or budget. For closure and post-closure costs, conformance with *Government Accounting Standards Board Statement 18* assures compliance with this public notice component.

3. Recordkeeping and Reporting Requirements

a. The local government owner or operator must place the following items in the facility's operating record:

i. a letter signed by the local government's chief financial officer that lists all the current cost estimates covered by a financial test, as described in Clause ~~A.2.j.iv~~I.4 of this Section. It must provide evidence that the local government meets the conditions of ~~Subclauses A.2.j.i.(a), (b), and (c)~~Subparagraphs I.1.a, b, and c of this Section, and certify that the local government meets the conditions of ~~Subclauses A.2.j.i.(a), (b), (c), ii, and iv~~Subparagraphs I.1.a, b, and c and Paragraphs I.2 and 4 of this Section;

ii. the local government's independently audited year-end financial statements for the latest fiscal year (except for local governments where audits are required every two years and unaudited statements may be used in years when audits are not required), including the unqualified opinion of the auditor who must be an independent certified public accountant or an appropriate state agency that conducts equivalent comprehensive audits;

iii. a report to the local government from the local government's independent certified public accountant or the appropriate state agency

based on performing an agreed upon procedures engagement relative to the financial ratios required by ~~Division A.2.j.i.(a).(ii)~~Clause I.1.a.ii of this Section, if applicable, and the requirements of ~~Subclauses A.2.j.i.(b) and (c).(iii) and (iv)~~Subparagraph I.1.b and Clauses I.1.c.iii and iv of this Section. The certified public accountant or state agency's report ~~should~~shall state the procedures performed and the certified public accountant or state agency's findings; and

iv. a copy of the ~~comprehensive annual financial report (~~CAFR~~)~~ used to comply with ~~Clause A.2.j.ii~~Paragraph I.2 of this Section (certification that the requirements of *General Accounting Standards Board Statement 18* have been met).

b. The items required in ~~Subclauses A.2.j.iii.(a)~~Subparagraph I.3.a of this Section must be placed in the facility operating record as follows:

i. in the case of closure and post-closure care, either before the effective date of this ~~Section~~Chapter, which is April 9, 1997, or prior to the initial receipt of waste at the facility, whichever is later; or

ii. in the case of corrective action, not later than 120 days after the corrective action remedy is selected in accordance with the requirements of LAC 33:VII.~~709.E.6~~805.F.

c. After the initial placement of the items in the facility's operating record, the local government owner or operator must update the information and place the updated information in the operating record within 180 days following the close of the owner or operator's fiscal year.

d. The local government owner or operator is no longer required to meet the requirements of ~~Clause A.2.j.iii~~Paragraph I.3 of this Section when:

i. the owner or operator substitutes alternate financial assurance, as specified in this ~~Section~~Chapter; or

ii. the owner or operator is released from the requirements of this ~~Section~~Chapter in accordance with LAC 33:VII.1301.A or ~~Paragraph~~Subsection A.~~1 or 2~~ of this Section.

e. A local government must satisfy the requirements of the financial test at the close of each fiscal year. If the local government owner or operator no longer meets the requirements of the local government financial test, it must, within 210 days following the close of the owner or operator's fiscal year, obtain alternative financial assurance that meets the requirements of this ~~Section~~Chapter, place the required submissions for that assurance in the operating record, and notify the Office of Management and Finance, Financial Services Division that the owner or operator no longer meets the criteria of the financial test and that alternate assurance has been obtained.

f. The administrative authority, based on a reasonable belief that the local government owner or operator may no longer meet the requirements of the local government financial test, may require additional reports of financial condition from the local government at any time. If the administrative authority finds, on the basis of such reports or other information, that the owner or operator no longer meets the local government financial test, the local government must provide alternate financial assurance in accordance with this ~~Section~~Chapter.

4. Calculation of Costs to be Assured. The portion of the closure, post-closure, and corrective action costs for which an owner or operator can assure under ~~Subparagraph A.2.j of~~ this Subsection is determined as follows:

a. if the local government owner or operator does not assure other environmental obligations through a financial test, it may assure closure, post-closure, and corrective action costs that equal up to 43 percent of the local government's total annual revenue;

b. if the local government assures other environmental obligations through a financial test, including those associated with UIC facilities under 40 CFR 144.62, petroleum underground storage tank facilities under 40 CFR Part 280, PCB storage facilities under 40 CFR Part 761, and hazardous waste treatment, storage, and disposal facilities under 40 CFR Parts 264 and 265, or corresponding state programs, it must add those costs to the closure, post-closure, and corrective action costs it seeks to assure under ~~Subparagraph A.2.j of~~ this Subsection. The total that may be assured must not exceed 43 percent of the local government's total annual revenue;

c. the owner or operator must obtain an alternate financial assurance instrument for those costs that exceed the limits set in ~~Subclauses A.2.j.iv.(a) and (b)~~Subparagraphs I.4.a and b of this Section.

J. **Local Government Guarantee.** An owner or operator may demonstrate financial assurance for closure, post-closure, and corrective action, as required by ~~Paragraphs A.1-2 of~~ LAC 33:1301 and this Section, by obtaining a written guarantee provided by a local government. The guarantor must meet the requirements of the local government financial test in ~~Subparagraph A.2.j~~Subsection I of this Section, and must

comply with the terms of a written guarantee.

1. Terms of the Written Guarantee. The guarantee must be effective before the initial receipt of waste or before the effective date of this ~~Section~~Chapter, whichever is later, in the case of closure and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of LAC 33:VII.~~709.E.6~~805.F. The guarantee must provide that:

a. if the owner or operator fails to perform closure, post-closure care, and/or corrective action of a facility covered by the guarantee, the guarantor will:

i. perform, or pay a third party to perform closure, post-closure care, and/or corrective action as required; or

ii. establish a fully funded trust fund as specified in ~~Subparagraph A.2.d~~Subsection C of this Section in the name of the owner or operator;

b. the guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Office of Management and Finance, Financial Services Division. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the administrative authority, as evidenced by the return receipts; and

c. if a guarantee is canceled, the owner or operator must, within 90 days following receipt of the cancellation notice by the owner or operator and the administrative authority, obtain alternate financial assurance, place evidence of that

alternate financial assurance in the facility operating record, and notify the Office of Management and Finance, Financial Services Division. If the owner or operator fails to provide alternate financial assurance within the 90-day period, then the owner or operator must provide that alternate assurance within 120 days following the guarantor's notice of cancellation, place evidence of the alternate assurance in the facility operating record, and notify the Office of Management and Finance, Financial Services Division.

2. Recordkeeping and Reporting

(a). The owner or operator must place a certified copy of the guarantee, along with the items required under ~~Clause A.2.j.iii~~Paragraph I.3 of this Section, into the facility's operating record before the initial receipt of waste or before the effective date of this Section, whichever is later, in the case of closure or post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of LAC 33:VII.~~709.E.6~~805.F.

(b). The owner or operator is no longer required to maintain the items specified in ~~Clause A.2.k.ii~~Paragraph J.2 of this Section when:

(i). the owner or operator substitutes alternate financial assurance as specified in this Section; or

(ii). the owner or operator is released from the requirements of this Section in accordance with ~~Paragraphs A.1-2 of~~ this ~~Section~~Chapter.

(c). If a local government guarantor no longer meets the requirements of ~~Subparagraph A.2.j~~Subsection I of this Section, the owner or operator must, within 90 days, obtain alternate assurance, place evidence of the alternate assurance

in the facility operating record, and notify the Office of Management and Finance, Financial Services Division. If the owner or operator fails to obtain alternate financial assurance within that 90-day period, the guarantor must provide that alternate assurance within the next 30 days.

K. **Use of Multiple Mechanisms.** An owner or operator may demonstrate financial assurance for closure, post-closure, and corrective action, ~~as required by Paragraphs A.1-2 of~~ in accordance with this ~~Section~~Chapter, by establishing more than one financial mechanism per facility, except that mechanisms guaranteeing performance, rather than payment may not be combined with other instruments. The mechanisms must be as specified in ~~Subparagraphs A.2.d-i~~Subsections C-H of this Section, except that financial assurance for an amount at least equal to the current cost estimate for closure, post-closure care, and/or corrective action may be provided by a combination of mechanisms, rather than a single mechanism.

L. **Discounting.** The administrative authority may allow discounting of closure and post-closure cost estimates in ~~Paragraph A.2~~Subsection A of this Section, and/or corrective action costs in ~~Paragraph A.1 of this Section~~LAC 33:VII.1301.A up to the rate of return for essentially risk-free investments, net of inflation, under the following conditions:

1. the administrative authority determines that cost estimates are complete and accurate and the owner or operator has submitted a statement from a registered professional engineer to the Office of Management and Finance, Financial Services Division so stating;

2. the state finds the facility in compliance with applicable and

appropriate permit conditions;

3. the administrative authority determines that the closure date is certain and the owner or operator certifies that there are no foreseeable factors that will change the estimate of site life; and

4. discounted cost estimates ~~must be~~are adjusted annually to reflect inflation and years of remaining life.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2522 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 26:2610 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§1305. Financial Responsibility for Corrective Action for Type II Landfills

A. A permit holder of a Type II landfill required to undertake a corrective action program under LAC 33:VII.~~709.E~~805 must provide to the Office of Management and Finance, Financial Services Division a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the program required under LAC 33:VII.~~709.E~~805. The corrective action cost estimate must account for the total costs of corrective action activities as described in the corrective action plan for the entire corrective action period.

1. The permit holder must provide an annual adjustment of the estimate for inflation to the Office of Management and Finance, Financial Services

Division until the corrective action program is completed in accordance with LAC 33:VII.~~709.E~~805.

2. The permit holder must provide an increased corrective action cost estimate to the Office of Management and Finance, Financial Services Division and the amount of financial assurance provided under ~~Paragraph B.2~~Subsection B of this Section if changes in the corrective action program or landfill conditions increase the maximum costs of corrective action.

3. Subject to approval of the administrative authority, the permit holder ~~may~~shall provide a reduced corrective action cost estimate to the Office of Management and Finance, Financial Services Division and the amount of financial assurance provided under ~~Paragraph B.2~~Subsection B of this Section if the cost estimate exceeds the maximum remaining costs of corrective action. The permit holder must provide the Office of Management and Finance, Financial Services Division justification for the reduction of the corrective action cost estimate and the revised amount of financial assurance.

B. The permit holder of each Type II landfill required to undertake a corrective action program under LAC 33:VII.~~709.E~~805 must establish, in a manner in accordance with ~~Paragraph A.2 of this Section~~LAC 33:VII.1303, financial assurance for the most recent corrective action program. The financial assurance must be provided within 120 days after the selection of the corrective action remedy in LAC 33:VII.~~709.E.6~~805.F. The permit holder must provide continuous coverage for corrective action until released from financial assurance requirements for corrective action by demonstrating compliance with LAC 33:VII.~~709.E.7.h.iii.(a) and (b)~~805.G.8-10. For the

purpose of corrective action financial assurance only the words "corrective action" shall be substituted for the words "closure" or "post-closure" throughout ~~Paragraph A.2 of this Section~~this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2524 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 26:2610 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:**.

§1399. Appendices

Appendix A

SOLID WASTE FACILITY LIABILITY ENDORSEMENT

Secretary
Louisiana Department of Environmental Quality
Post Office Box 82231
Baton Rouge, Louisiana 70884-2231

Attention: Office of Management and Finance, Financial Services Division

Dear Sir:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with [name of the insured, which must be either the permit holder, the applicant, or the operator. (Note: The operator will provide the liability-insurance documentation only when the permit holder/applicant is a public governing body and the public governing body is not the operator.)] The insured's obligation to demonstrate financial responsibility is required in accordance with LAC 33:VII.1301.A. The coverage applies at [list the site identification number, site name, facility name, facility permit number, and facility address] for sudden and accidental occurrences. The limits of liability are per occurrence and annual aggregate, per site, exclusive of legal-defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with Subclauses (a) through (e) below are hereby amended to conform with Subclauses (a) through (e) below:

(a). Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy to which this endorsement is attached.

(b). The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated, as specified in LAC 33:VII 1301.B.4, 5, or 6.

(c). Whenever requested by the administrative authority, the insurer agrees to furnish to the administrative authority a signed duplicate original of the policy and all endorsements.

(d). Cancellation of this endorsement, whether by the insurer or the insured, will be effective only upon written notice and upon lapse of 60 days after a copy of such written notice is received by the administrative authority.

(e). Any other termination of this endorsement will be effective only upon written notice and upon lapse of 30 days after a copy of such written notice is received by the administrative authority.

3. Attached is the endorsement, which forms part of the policy [policy number] issued by [name of insurer], herein called the insurer, of [address of the insurer] to [name of the insured] of [address of the insured], this [date]. The effective date of said policy is [date].

4. I hereby certify that the wording of this endorsement is identical to the wording specified in LAC 33:VII.1301.B.2, effective on the date first written above and that insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and is admitted, authorized, or eligible to conduct insurance business in the state of Louisiana.

[Signature of authorized representative of insurer]

[Typed name of authorized representative of insurer]

[Title of authorized representative of insurer]

[Address of authorized representative of insurer]

Appendix B

SOLID WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

Secretary
Louisiana Department of Environmental Quality
Post Office Box 82231
Baton Rouge, Louisiana 70884-2231

Attention: Office of Management and Finance, Financial Services Division

Dear Sir:

1. [Name of insurer], the "insurer," of [address of insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured, which must be either the permit holder or applicant of the facility], the "insured," of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under LAC 33:VII.1301.~~A.~~ The coverage applies at [list solid waste identification number, site name, facility name, facility permit number, and site address] for sudden and accidental occurrences. The limits of liability are each occurrence and annual aggregate, per site, exclusive of legal-defense costs. The coverage is provided under policy number [policy number], issued on [date]. The effective date of said policy is [date].

2. The insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a). Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy.

(b). The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated, as specified in LAC 33:VII.1301.B.4, 5, or 6.

(c). Whenever requested by the administrative authority, the insurer agrees to furnish to him a signed duplicate original of the policy and all endorsements.

(d). Cancellation of the insurance, whether by the insurer or the insured, will be effective only upon written notice and upon lapse of 60 days after a copy of such written notice is received by the administrative authority.

(e). Any other termination of the insurance will be effective only upon written notice and upon lapse of 30 days after a copy of such written notice is received by the administrative authority.

3. I hereby certify that the wording of this certificate is identical to the wording specified in LAC 33:VII.1301.~~D~~ B.3 as such regulations were constituted on the date first written above, and that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and is admitted, authorized, or eligible to conduct insurance business in the state of Louisiana.

[Signature of authorized representative of insurer]

[Typed name of authorized representative of insurer]

[Title of authorized representative of insurer]

[Address of authorized representative of insurer]

Appendix C

SOLID WASTE FACILITY IRREVOCABLE LETTER OF CREDIT

Secretary
Louisiana Department of Environmental Quality
Post Office Box 82231
Baton Rouge, Louisiana 70884-2231

Attention: Office of Management and Finance, Financial Services Division

Dear Sir:

We hereby establish our Irrevocable Standby Letter of Credit No.[ ] at the request and for the account of [permit holder's or applicant's name and address] for its [list site identification number, site name, facility name, and facility permit number] at [location], Louisiana, in favor of any governmental body, person, or other entity for any sum or sums up to the aggregate amount of U.S. dollars [ ] upon presentation of:

1. A final judgment issued by a competent court of law in favor of a governmental body, person, or other entity and against [permit holder's or applicant's name] for sudden and accidental occurrences for claims arising out of injury to persons or property due to the operation of the solid waste site at the [name of permit holder or applicant] at [site location] as set forth in the LAC 33:VII.1301.~~A.~~

2. A sight draft bearing reference to the Letter of Credit No. [ ] drawn by the governmental body, person, or other entity, in whose favor the judgment has been rendered as evidenced by documentary requirement in Paragraph 1.

The Letter of Credit is effective as of [date] and will expire on [date], but such expiration date will be automatically extended for a period of at least one year on the above expiration date [date] and on each successive expiration date thereafter, unless, at least 120 days before the then-current expiration date, we notify both the administrative authority and [name of permit holder or applicant] by certified mail that we have decided not to extend this Letter of Credit beyond the then-current expiration date. In the event we give such notification, any unused portion of this Letter of Credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both the Department of Environmental Quality and [name of permit holder/applicant] as shown on the signed return receipts.

Whenever this Letter of Credit is drawn under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [name of permit holder or applicant] in accordance with the administrative authority's instructions.

Except to the extent otherwise expressly agreed to, the Uniform Customs and Practice for Documentary Letters of Credit (1983), International Chamber of Commerce Publication No. 400, shall apply to this Letter of Credit.

We certify that the wording of this Letter of Credit is identical to the wording specified in LAC 33:VII.1301.B.4.e, effective on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution(s)]
[date]

Appendix D

SOLID WASTE FACILITY TRUST AGREEMENT/STANDBY TRUST AGREEMENT

This Trust Agreement, the "Agreement," is entered into as of [date] by and between [name of permit holder or applicant], a [name of state] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert "incorporated in the state of" or "a national bank" or "a state bank"], the "Trustee."

WHEREAS, the Department of Environmental Quality of the State of Louisiana, an agency of the state of Louisiana, has established certain regulations applicable to the Grantor, requiring that a permit holder or applicant for a permit of a solid waste processing or disposal facility shall provide assurance that funds will be available when needed for [closure and/or post-closure] care of the facility;

WHEREAS, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facility identified herein;

WHEREAS, the Grantor, acting through its duly authorized officers, has selected [the Trustee] to be the trustee under this Agreement, and [the Trustee] is willing to act as trustee.

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

SECTION 1. DEFINITIONS

As used in this Agreement:

(a). The term "Grantor" means the permit holder or applicant who enters into this Agreement and any successors or assigns of the Grantor.

(b). The term "Trustee" means the Trustee who enters into this Agreement and any successor trustee.

(c). The term "Secretary" means the Secretary of the Louisiana Department of Environmental Quality.

(d). The term "Administrative Authority" means the secretary or his designee or the appropriate assistant secretary or his designee.

SECTION 2. IDENTIFICATION OF FACILITIES AND COST ESTIMATES

This Agreement pertains to the facilities and cost estimates identified on attached Schedule A. [On Schedule A, list the site identification number, site name, facility name, facility permit number, and the annual aggregate amount of liability coverage or current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement.]

SECTION 3. ESTABLISHMENT OF FUND

The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of the Louisiana Department of Environmental Quality. The Grantor and the Trustee intend that no third party shall have access to the Fund, except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. [Note: Standby Trust Agreements need not be funded at the time of execution. In the case of Standby Trust Agreements, Schedule B should be blank except for a statement that the Agreement is not presently funded, but

shall be funded by the financial assurance document used by the Grantor in accordance with the terms of that document.] Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, in trust, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the administrative authority.

SECTION 4. PAYMENT FOR CLOSURE AND/OR POST-CLOSURE CARE OR LIABILITY COVERAGE

The Trustee shall make payments from the Fund as the administrative authority shall direct, in writing, to provide for the payment of the costs of [liability claims, closure and/or post-closure] care of the facility covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the administrative authority from the Fund for [liability claims, closure and/or post-closure] expenditures in such amounts as the administrative authority shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the administrative authority specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

SECTION 5. PAYMENTS COMPRISED BY THE FUND

Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

SECTION 6. TRUSTEE MANAGEMENT

The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines, which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing <u>that</u> persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of like character and with like aims, except that:

(a). Securities or other obligations of the Grantor, or any owner of the [facility or facilities] or any of their affiliates, as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(b). The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or state government; and

(c). The Trustee is authorized to hold cash awaiting investment or distribution, uninvested for a reasonable time and without liability for the payment of interest thereon.

SECTION 7. COMMINGLING AND INVESTMENT

The Trustee is expressly authorized, at its discretion:

(a). To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b). To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1, et seq., including one which may be created, managed, or underwritten, or one to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares at its discretion.

SECTION 8. EXPRESS POWERS OF TRUSTEE

Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a). To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b). To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c). To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show that all securities are part of the Fund;

(d). To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e). To compromise or otherwise adjust all claims in favor of, or against, the Fund.

SECTION 9. TAXES AND EXPENSES

All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and other proper charges and disbursements of the Trustee, shall be paid from the Fund.

SECTION 10. ANNUAL VALUATION

The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the administrative authority a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of

the Fund. The failure of the Grantor to object in writing to the Trustee, within 90 days after the statement has been furnished to the Grantor and the administrative authority, shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

SECTION 11. ADVICE OF COUNSEL

The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any questions arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

SECTION 12. TRUSTEE COMPENSATION

The Trustee shall be entitled to reasonable compensation for its services, as agreed upon in writing from time to time with the Grantor.

SECTION 13. SUCCESSOR TRUSTEE

The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall, in writing, specify to the Grantor, the administrative authority, and the present Trustee, by certified mail 10 days before such change becomes effective, the date on which it assumes administration of the trust. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

SECTION 14. INSTRUCTIONS TO THE TRUSTEE

All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by the persons designated in the attached Exhibit A or such other persons as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the administrative authority to the Trustee shall be in writing and signed by the administrative authority. The Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or termination of the authority of any person to act on behalf of the Grantor or administrative authority hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or administrative authority, except as provided for herein.

SECTION 15. NOTICE OF NONPAYMENT

The Trustee shall notify the Grantor and the administrative authority, by certified mail, within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

SECTION 16. AMENDMENT OF AGREEMENT

This Agreement may be amended by an instrument, in writing, executed by the Grantor, the Trustee, and the administrative authority, or by the Trustee and the administrative authority, if the Grantor ceases to exist.

SECTION 17. IRREVOCABILITY AND TERMINATION

Subject to the right of the parties to amend this Agreement, as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the administrative authority, or by the Trustee and the administrative authority, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

SECTION 18. IMMUNITY AND INDEMNIFICATION

The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any direction by the Grantor or the administrative authority issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all reasonable expenses incurred in its defense in the event that the Grantor fails to provide such defense.

SECTION 19. CHOICE OF LAW

This Agreement shall be administered, construed, and enforced according to the laws of the state of Louisiana.

SECTION 20. INTERPRETATION

As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective officers duly authorized [and their corporate seals to be hereunto affixed] and attested to as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in LAC 33:VII.1303.C.9, on the date first written above.

WITNESSES: GRANTOR:

_____ _____

_____ By:_____

Its:_____

[Seal]

TRUSTEE:

_____

By:_____

Its:_____

[Seal]

THUS DONE AND PASSED in my office in _____, on the _____day of_____, 20 _____, in the presence of _____and_____, competent witnesses, who

hereunto sign their names with the said appearers and me, Notary, after reading the whole.

_____

Notary Public

(The following is an example of the certification of acknowledgement that must accompany the trust agreement.)

STATE OF LOUISIANA

PARISH OF _____

BE IT KNOWN, that on this _____ day of _____, 20_____, before me, the undersigned Notary Public, duly commissioned and qualified within the State and Parish aforesaid, and in the presence of the witnesses hereinafter named and undersigned, personally came and appeared _____, to me well known, who declared and acknowledged that he had signed and executed the foregoing instrument as his act and deed, and as the act and deed of the _____, a corporation, for the consideration, uses, and purposes and on terms and conditions therein set forth.

And the said appearer, being by me first duly sworn, did depose and say that he is the _____ of said corporation and that he signed and executed said instrument in his said capacity, and under authority of the Board of Directors of said corporation.

Thus done and passed in the State and Parish aforesaid, on the day and date first hereinabove written, and in the presence of _____ and _____, competent witnesses, who have hereunto subscribed their name as such, together with said appearer and me, said authority, after due reading of the whole.

WITNESSES:

_____

_____

_____

NOTARY PUBLIC

Appendix E

SOLID WASTE FACILITY FINANCIAL GUARANTEE BOND

Date bond was executed:_____

Effective date:_____

Principal: [legal name and business address of permit holder or applicant]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation:_____

Surety: [name and business address]

[site identification number, site name, facility name, facility permit number and current closure and/or post-closure amount(s) for each facility guaranteed by this bond]

Total penal sum of bond: $_____

Surety's bond number: _____

Know All Persons By These Presents, That we, the Principal and Surety hereto, are firmly bound to the Louisiana Department of Environmental Quality in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where Sureties are corporations acting as co sureties, we the sureties bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit or liability is indicated, the limit of liability shall be the full amount of the penal sum.

WHEREAS, said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA) and the Louisiana Environmental Quality Act, R.S. 30:2001, et seq., to have a permit in order to own or operate the solid waste facility identified above; and

WHEREAS, the Principal is required by law to provide financial assurance for closure and/or post-closure care, as a condition of the permit; and

WHEREAS, said Principal shall establish a standby trust fund as is required by the *Louisiana Administrative Code*, Title 33, Part VII, when a surety bond is used to provide such financial assurance;

NOW THEREFORE, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of the facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

OR, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after an order to close is issued by the administrative authority or a court of competent jurisdiction,

OR, if the Principal shall provide alternate financial assurance as specified in LAC 33:VII.1303.~~A~~ and obtain written approval from the administrative authority of such assurance, within 90 days after the date of notice of cancellation is received by both the Principal and the administrative authority from the Surety, then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the administrative authority that the Principal has failed to perform as guaranteed by this bond, the Surety shall place funds in the amount guaranteed for the facility into the standby trust fund as directed by the administrative authority.

The Surety hereby waives notification or amendments to closure plans, permits, applicable laws, statutes, rules, and regulations, and agrees that no such amendment shall in any way alleviate its obligation on this bond.

The liability of the Surety shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety hereunder exceed the amount of the penal sum.

The Surety may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the administrative authority. Cancellation shall not occur before 120 days have elapsed beginning on the date that both the Principal and the administrative authority received the notice of cancellation, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety and to the administrative authority, provided, however, that no such notice shall become effective until the Surety receives written authorization for termination of the bond by the administrative authority.

Principal and Surety hereby agree to adjust the penal sum of the bond yearly in accordance with LAC 33:VII.1303.~~A~~, and the conditions of the solid waste facility permit so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase or decrease without the written permission of the administrative authority.

The Principal and Surety hereby agree that no portion of the penal sum may be expended without prior written approval of the administrative authority.

IN WITNESS WHEREOF, the Principal and the Surety have executed this FINANCIAL GUARANTEE BOND and have affixed their seals on the date set forth above.

Those persons whose signatures appear below hereby certify that they are authorized to execute this FINANCIAL GUARANTEE BOND on behalf of the Principal and Surety, that each Surety hereto is authorized to do business in the state of Louisiana and that the wording of this surety bond is identical to the wording specified in LAC 33:VII.1303.D.8, effective on the date this bond was executed.

PRINCIPAL

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate Seal]

CORPORATE SURETIES

[Name and Address]

State of incorporation:_____

Liability limit:_____

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[This information must be provided for each cosurety]

Bond Premium: $_____

Appendix F

SOLID WASTE FACILITY PERFORMANCE BOND

Date bond was executed:_____

Effective date:_____

Principal: [legal name and business address of permit holder or applicant]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation:_____

Surety: [name(s) and business address(es)]

[Site identification number, site name, facility name, facility permit number, facility address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond (indicate closure and/or post-closure costs separately)]

Total penal sum of bond: $_____

Surety's bond number: _____

Know All Persons By These Presents, That we, the Principal and Surety hereto are firmly bound to the Louisiana Department of Environmental Quality in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where Sureties are corporations acting as cosureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

WHEREAS, said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA) and the Louisiana Environmental Quality Act, R.S. 30:2001, et seq., to have a permit in order to own or operate the solid waste facility identified above; and

WHEREAS, the Principal is required by law to provide financial assurance for closure and/or post-closure care, as a condition of the permit; and

WHEREAS, said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

THEREFORE, the conditions of this obligation are such that if the Principal shall faithfully perform closure, whenever required to do so, of the facility for which this bond guarantees closure, in accordance with the closure plan and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended;

AND, if the Principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure care, in accordance with the closure plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended;

OR, if the Principal shall provide financial assurance as specified in the *Louisiana Administrative Code* (LAC) Title 33, Part VII, Section 1303.A and obtain written

approval of the administrative authority of such assurance, within 90 days after the date of notice of cancellation is received by both the Principal and the administrative authority, then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described hereinabove.

Upon notification by the administrative authority that the Principal has been found in violation of the closure requirements of LAC 33:VII, or of its permit, for the facility for which this bond guarantees performances of closure, the Surety shall either perform closure, in accordance with the closure plan and other permit requirements, or place the closure amount guaranteed for the facility into the standby trust fund as directed by the administrative authority.

Upon notification by the administrative authority that the Principal has been found in violation of the post-closure requirements of LAC 33:VII, or of its permit for the facility for which this bond guarantees performance of post-closure, the Surety shall either perform post-closure in accordance with the closure plan and other permit requirements or place the post-closure amount guaranteed for the facility into the standby trust fund as directed by the administrative authority.

Upon notification by the administrative authority that the Principal has failed to provide alternate financial assurance as specified in LAC 33:VII.1303.~~A~~ and obtain written approval of such assurance from the administrative authority during the 90 days following receipt by both the Principal and the administrative authority of a notice of cancellation of the bond, the Surety shall place funds in the amount guaranteed for the facility into the standby trust fund as directed by the administrative authority.

The Surety hereby waives notification of amendments to closure plans, permit, applicable laws, statutes, rules, and regulations, and agrees that no such amendment shall in any way alleviate its obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety hereunder exceed the amount of the penal sum.

The Surety may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the administrative authority. Cancellation shall not occur before 120 days have lapsed beginning on the date that both the Principal and the administrative authority received the notice of cancellation, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety and to the administrative authority, provided, however, that no such notice shall become effective until the Surety receives written authorization for termination of the bond by the administrative authority.

Principal and Surety hereby agree to adjust the penal sum of the bond yearly in accordance with LAC 33:VII.1303.~~A~~ and the conditions of the solid waste facility permit so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase or decrease without the written permission of the administrative authority.

The Principal and Surety hereby agree that no portion of the penal sum may be expended without prior written approval of the administrative authority.

IN WITNESS WHEREOF, the Principal and the Surety have executed this PERFORMANCE BOND and have affixed their seals on the date set forth above.

Those persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety, that each Surety hereto is authorized to do business in the state of Louisiana and that the wording of this surety bond is identical to the wording specified in LAC 33:VII.1303.E.8, effective on the date this bond was executed.

PRINCIPAL

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

CORPORATE SURETY

[Name and address]

State of incorporation:_____

Liability limit: $_____

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every cosurety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: $_____

Appendix G

SOLID WASTE FACILITY IRREVOCABLE LETTER OF CREDIT

Secretary
Louisiana Department of Environmental Quality
Post Office Box 82231
Baton Rouge, Louisiana 70804-2231

Attention: Office of Management and Finance, Financial Services Division

Dear Sir:

We hereby establish our Irrevocable Standby Letter of Credit No._____in favor of the Department of Environmental Quality of the state of Louisiana at the request and for the account of [permit holder's or applicant's name and address] for the [closure and/or post-closure] fund for its [list site identification number, site name, facility name, facility permit number] at [location], Louisiana, for any sum or sums up to the aggregate amount of U.S. dollars $_____ upon presentation of:

1. A sight draft, bearing reference to the Letter of Credit No. _____ drawn by the administrative authority, together with;

2. A statement, signed by the administrative authority, declaring that the amount of the draft is payable into the standby trust fund pursuant to the Louisiana Environmental Quality Act, R.S. 30:2001, et seq.

The Letter of Credit is effective as of [date] and will expire on [date], but such expiration date will be automatically extended for a period of at least one year on the above expiration date [date] and on each successive expiration date thereafter, unless, at least 120 days before the then-current expiration date, we notify both the administrative authority and [name of permit holder or applicant] by certified mail that we have decided not to extend this Letter of Credit beyond the then-current expiration date. In the event that we give such notification, any unused portion of this Letter of Credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both the Department of Environmental Quality and [name of permit holder or applicant] as shown on the signed return receipts.

Whenever this Letter of Credit is drawn under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [name of permit holder or applicant] in accordance with the administrative authority's instructions.

Except to the extent otherwise expressly agreed to, the Uniform Customs and Practice for Documentary Letters of Credit (1983), International Chamber of Commerce Publication No. 400, shall apply to this Letter of Credit.

We certify that the wording of this Letter of Credit is identical to the wording specified in LAC 33:VII.1303.F.8, effective on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution(s)]
[date]

Appendix H

SOLID WASTE FACILITY CERTIFICATE OF INSURANCE FOR CLOSURE AND/OR POST-CLOSURE CARE

Name and Address of Insurer:_____(hereinafter called the "Insurer")

Name and Address of Insured:_____(hereinafter called the "Insured") (Note: Insured must be the permit holder or applicant)

Facilities covered: [list the site identification number, site name, facility name, facility permit number, address, and amount of insurance for closure and/or post-closure care] (These amounts for all facilities must total the face amount shown below.)

Face Amount: _____

Policy Number: _____

Effective Date: _____

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for [insert "closure and/or post-closure care"] for the facilities identified above. The Insurer further warrants that such policy conforms in all respects to the requirements of LAC 33:VII.1303.~~A~~, as applicable, and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the administrative authority, the Insurer agrees to furnish to the administrative authority a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the Insurer is admitted, authorized, or eligible to conduct insurance business in the state of Louisiana and that the wording of this certificate is identical to the wording specified in LAC 33:VII.1303.G.10, effective on the date shown immediately below.

[Authorized signature of Insurer]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:_____

[Date]

Appendix I

SOLID WASTE FACILITY LETTER FROM THE CHIEF FINANCIAL OFFICER
(Liability Coverage, Closure, and/or Post-Closure)

Secretary
Louisiana Department of Environmental Quality
Post Office Box 82231
Baton Rouge, Louisiana 70884-2231

Attention: Office of Management and Finance, Financial Services Division

Dear Sir:

I am the chief financial officer of [name and address of firm, which may be either the permit holder, applicant, or parent corporation of the permit holder or applicant]. This letter is in support of this firm's use of the financial test to demonstrate financial responsibility for [insert "liability coverage," "closure," and/or "post-closure," as applicable] as specified in [insert "LAC 33:VII.1301~~.A,~~" "LAC 33:VII.1303~~.A~~," or LAC 33:VII.1301~~.A~~ and 1303.~~A~~"].

[Fill out the following four paragraphs regarding facilities and associated liability coverage, and closure and post-closure cost estimates. If your firm does not have facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, list the site identification number, site name, facility name, and facility permit number.]

1. The firm identified above is the [insert "permit holder," "applicant for a standard permit," or "parent corporation of the permit holder or applicant for a standard permit"] of the following solid waste facilities, whether in Louisiana or not, for which liability coverage is being demonstrated through the financial test specified in LAC 33:VII.1301.~~A.~~ The amount of annual aggregate liability coverage covered by the test is shown for each facility:

2. The firm identified above is the [insert "permit holder," "applicant for a standard permit," or "parent corporation of the permit holder or applicant for a standard permit"] of the following solid waste facilities, whether in Louisiana or not, for which financial assurance for [insert "closure," "post-closure," or "closure and post-closure"] is demonstrated through a financial test similar to that specified in LAC 33:VII.1303.~~A~~ or other forms of self-insurance. The current [insert "closure," "post-closure," or "closure and post-closure"] cost estimates covered by the test are shown for each facility:

3. This firm guarantees through a corporate guarantee similar to that specified in [insert "LAC 33:VII.1303~~.A,~~" or "LAC 33:VII.1301~~.A~~ and 1303~~.A~~"], [insert "liability coverage," "closure," "post-closure," or "closure and post-closure"] care of the following solid waste facilities, whether in Louisiana or not, of which [insert the name of the permit holder or applicant] are/is a subsidiary of this firm. The amount of annual aggregate liability coverage covered by the guarantee for each facility and/or the current cost estimates for the closure and/or post-closure care so guaranteed is shown for each facility:

4. This firm is the owner or operator of the following solid waste facilities, whether in Louisiana or not, for which financial assurance for liability coverage, closure and/or post-closure care is not demonstrated either to the U.S. Environmental Protection Agency or to a state through a financial test or any other financial assurance mechanism similar to those specified in LAC 33:VII.1301~~.A~~ and/or 1303~~.A~~. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed year, ended [date].

[Fill in Part A if you are using the financial test to demonstrate coverage only for the liability requirements.]

PART A. LIABILITY COVERAGE FOR ACCIDENTAL OCCURRENCES
[Fill in Alternative I if the criteria of LAC 33:VII.1303.H.1.a are used.]

ALTERNATIVE I

1. Amount of annual aggregate liability coverage to be demonstrated	$_____
*2. Current assets	$_____
*3. Current liabilities	$_____
*4. Tangible net worth	$_____
*5. If less than 90 percent of assets are located in the U.S., give total U.S. assets	$_____

	YES	NO
6. Is line 4 at least $10 million?	____	____
7. Is line 4 at least 6 times line 1?	____	____
*8. Are at least 90 percent of assets located in the U.S.? If not, complete line 9.	____	____
9. Is line 4 at least 6 times line 1?	____	____

[Fill in Alternative II if the criteria of LAC 33:VII. 14303.H.1.b are used.]

ALTERNATIVE II

1. Amount of annual aggregate liability coverage to be demonstrated	$_____
2. Current bond rating of most recent issuance of this firm and name of rating service	$_____
3. Date of issuance of bond	$_____

4. Date of maturity of bond $_____

*5. Tangible net worth $ _____

*6. Total assets in U.S. (required only if less than 90 percent of assets are located in the U.S.) $_____

	YES	NO
7. Is line 5 at least $10 million?	____	____
8. Is line 5 at least 6 times line 1?	____	____
*9. Are at least 90 percent of assets located in the U.S.? If not, complete line 10.	____	____
10. Is line 6 at least 6 times line 1?	____	____

[Fill in Part B if you are using the financial test to demonstrate assurance only for closure and/or post-closure care.]

PART B. CLOSURE AND/OR POST CLOSURE

[Fill in Alternative I if the criteria of LAC 33:VII.1303.H.1.a are used.]

ALTERNATIVE I

1. Sum of current closure and/or post-closure estimate (total all cost estimates shown above) $_____

*2. Tangible net worth $_____

*3. Net worth $_____

*4. Current Assets $_____

*5. Current liabilities $_____

*6. The sum of net income plus depreciation, depletion, and amortization $_____

*7. Total assets in U.S. (required only if less than 90 percent of firm's assets are located in the U.S.) $_____

	YES	NO
8. Is line 2 at least $10 million?	____	____
9. Is line 2 at least 6 times line 1?	____	____
*10. Are at least 90 percent of the firm's assets located in the U.S.? If not, complete line 11.	____	____
11. Is line 7 at least 6 times line 1?	____	____

[Fill in Alternative II if the criteria of LAC 33:VII.1303.H.1.b are used.]

ALTERNATIVE II

1. Sum of current closure and post-closure cost estimates (total of all cost estimates shown above) $_____

2. Current bond rating of most recent issuance of this firm and name of rating service _____

3. Date of issuance of bond _____

4. Date of maturity of bond _____

*5. Tangible net worth (if any portion of the closure and/or post-closure cost estimate is included in "total liabilities" on your firm's financial statement, you may add the amount of that portion to this line) $_____

*6. Total assets in U.S. (required only if less than 90 percent of the firm's assets are located in the U.S.) $_____

	YES	NO
7. Is line 5 at least $10 million?	____	____
8. Is line 5 at least 6 times line 1?	____	____
9. Are at least 90 percent of the firm's assets located in the U.S.? If not, complete line 10.	____	____
10. Is line 6 at least 6 times line 1?	____	____

[Fill in Part C if you are using the financial test to demonstrate assurance for liability coverage, closure, and/or post-closure care.]

PART C. LIABILITY COVERAGE, CLOSURE, AND/OR POST-CLOSURE

[Fill in Alternative I if the criteria of LAC 33:VII.1303.H.1-H.1.a are used.]

ALTERNATIVE I

1. Sum of current closure and/or post-closure cost estimates (total of all cost estimates listed above) $_____

2. Amount of annual aggregate liability coverage to be demonstrated $_____

3. Sum of lines 1 and 2 $_____

*4. Total liabilities (If any portion of your closure and/or post-closure cost estimates is included in your "total liabilities" in your firm's financial statements, you may deduct that portion from this line and add that amount to lines 5 and 6.) $_____

*5. Tangible net worth $_____

*6. Net worth $_____

*7. Current assets $_____

*8. Current liabilities $_____

*9. The sum of net income plus depreciation, depletion, and amortization $_____

*10. Total assets in the U.S. (required only if less than 90 percent of assets are located in the U.S.) $_____

	YES	NO
11. Is line 5 at least $10 million?	____	____
12. Is line 5 at least 6 times line 3?	____	____
*13. Are at least 90 percent of assets located in the U.S.? If not, complete line 14.	____	____
14. Is line 10 at least 6 times line 3?	____	____

[Fill in Alternative II if the criteria of LAC 33:VII.1303.H.1.b are used.]

ALTERNATIVE II

1. Sum of current closure and/or post-closure cost estimates (total of all cost estimates listed above) $_____

2. Amount of annual aggregate liability coverage to be demonstrated $_____

3. Sum of lines 1 and 2 $_____

4. Current bond rating of most recent issuance of this firm and name of rating service $_____

5. Date of issuance of bond $_____

6. Date of maturity of bond $_____

*7. Tangible net worth (If any portion of the closure and/or post-closure cost estimates is included in the "total liabilities" in your firm's financial statements, you may add that portion to this line.) $_____

*8. Total assets in U.S. (required only if less than 90 percent of assets are located in the U.S.) $_____

	YES	NO
9. Is line 7 at least $10 million?	____	____
10. Is line 7 at least 6 times line 3?	____	____
*11. Are at least 90 percent of assets located in the U.S.? If not, complete line 12.	____	____
12. Is line 8 at least 6 times line 3?	____	____

(The following is to be completed by all firms providing the financial test)

I hereby certify that the wording of this letter is identical to the wording specified in LAC 33:VII.1303.H.4.e.

[Signature of chief financial officer for the firm]

[Typed name of chief financial officer]

[Title]

[Date]

Appendix J

SOLID WASTE FACILITY CORPORATE GUARANTEE FOR LIABILITY COVERAGE, CLOSURE, AND/OR POST-CLOSURE CARE

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of the state of [insert name of state], hereinafter referred to as guarantor, to the Louisiana Department of Environmental Quality, obligee, on behalf of our subsidiary [insert the name of the permit holder or applicant] of [business address].

Recitals

1. The guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in the *Louisiana Administrative Code* (LAC), Title 33, Part VII, Section 1303.H.9.

2. [Subsidiary] is the [insert "permit holder," or "applicant for a permit"] hereinafter referred to as [insert "permit holder" or "applicant"] for the following solid waste facility covered by this guarantee: [List the site identification number, site name, facility name, and facility permit number. Indicate for each facility whether guarantee is for liability coverage, closure, and/or post-closure and the amount of annual aggregate liability coverage, closure, and/or post-closure costs covered by the guarantee]

[Fill in Paragraphs 3 and 4 below if the guarantee is for closure and/or post-closure.]

3. "Closure plans" as used below refers to the plans maintained as required by LAC 33:VII, for the closure and/or post-closure care of the facility identified in Paragraph 2 above.

4. For value received from [insert "permit holder" or "applicant"], guarantor guarantees to the Louisiana Department of Environmental Quality that in the event that [insert "permit holder" or "applicant"] fails to perform [insert "closure," "post-closure care," or "closure and post-closure care"] of the above facility in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor shall do so or shall establish a trust fund as specified in LAC 33:VII.1303.C, as applicable, in the name of [insert "permit holder" or "applicant"] in the amount of the current closure and/or post-closure estimates, as specified in LAC 33:VII.1303.~~A.~~

[Fill in Paragraph 5 below if the guarantee is for liability coverage.]

5. For value received from [insert "permit holder" or "applicant"], guarantor guarantees to any and all third parties who have sustained or may sustain bodily injury or property damage caused by sudden and accidental occurrences arising from operations of the facility covered by this guarantee that in the event that [insert "permit holder" or "applicant"] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by sudden and accidental occurrences arising from the operation of the above-named facilities, or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor will satisfy such judgment(s), award(s), or settlement agreement(s) up to the coverage limits identified above.

6. The guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send

within 90 days, by certified mail, notice to the administrative authority and to [insert "permit holder" or "applicant"] that he intends to provide alternative financial assurance as specified in [insert "LAC 33:VII.1301.A" and/or "LAC 33:VII.1303.A"], as applicable, in the name of the [insert "permit holder" or "applicant"], within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless [insert "permit holder" or "applicant"] has done so.

7. The guarantor agrees to notify the administrative authority, by certified mail, of a voluntary or involuntary proceeding under Title 11 (bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

8. The guarantor agrees that within 30 days after being notified by the administrative authority of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of [insert "liability coverage" or "closure and/or post-closure care"] he shall establish alternate financial assurance as specified in [insert "LAC 33:VII.1301.A" and/or "LAC 33:VII.1303.A"], as applicable, in the name of [insert "permit holder" or "applicant"], unless [insert "permit holder" or "applicant"] has done so.

9. The guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: [if the guarantee is for closure and post-closure insert "amendment or modification of the closure and/or post-closure care, the extension or reduction of the time of performance of closure and/or post-closure"] or any other modification or alteration of an obligation of the [insert "permit holder" or "applicant"] pursuant to LAC 33:VII.

10. The guarantor agrees to remain bound under this guarantee for as long as the [insert "permit holder" or "applicant"] must comply with the applicable financial assurance requirements of [insert "LAC 33:VII.1301.A" and/or "LAC 33:VII.1303.A"] for the above-listed facility, except that guarantor may cancel this guarantee by sending notice by certified mail, to the administrative authority and to the [insert "permit holder" or "applicant"], such cancellation to become effective no earlier than 90 days after receipt of such notice by both the administrative authority and the [insert "permit holder" or "applicant"], as evidenced by the return receipts.

11. The guarantor agrees that if the [insert "permit holder" or "applicant"] fails to provide alternative financial assurance as specified in [insert "LAC 33:VII.1301.A" and/or "LAC 33:VII.1303.A"], as applicable, and obtain written approval of such assurance from the administrative authority within 60 days after a notice of cancellation by the guarantor is received by the administrative authority from guarantor, guarantor shall provide such alternate financial assurance in the name of the [insert "permit holder" or "applicant"].

12. The guarantor expressly waives notice of acceptance of this guarantee by the administrative authority or by the [insert "permit holder" or "applicant"]. Guarantor expressly waives notice of amendments or modifications of the closure and/or post-closure plan and of amendments or modifications of the facility permit(s).

I hereby certify that the wording of this guarantee is identical to the wording specified in LAC 33:VII.1303.H.9.1, effective on the date first above written.

Effective date:_____

[Name of Guarantor]

[Authorized signature for guarantor]

[Typed name and title of person signing]

Thus sworn and signed before me this [date].

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Chapter 14. Statewide Beautification

(Editor's note: Moved from Chapter 13)

§1401. Purpose

A. It is declared to be the purpose of these rules and regulations to:

1. control and reduce litter; and

2. create a statewide beautification program to enhance the tourist, recreational, and economic development of the state.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2521 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1403. Definitions

A. The following words, terms, and phrases, when used in conjunction with LAC 33:VII. Subpart 1, shall have the meanings ascribed to them in this Chapter, except where the context clearly indicates a different meaning.

Commission—the Louisiana Litter Reduction and Public Action Commission.

Dump—to throw, discard, place, deposit, discharge, burn, dump, drop, eject, or allow the escape of a substance.

Litter—all waste material, except as provided and defined in R.S. 30:2173(2), including but not limited to, disposable packages, containers, sand, gravel, rubbish, cans, bottles, refuse, garbage, trash, debris, dead animals, furniture or appliances, automotive parts including, but not limited to, tires and engines, trailers, boats and boating accessories, tools and equipment, and building materials, or other discarded materials of any kind and description. *Litter* shall not include agricultural products that are being transported from the harvest or collection site to a processing or market site if reasonable measures are taken to prevent the agricultural product from leaving the transporting vehicle. *Litter* shall also not include recyclable cardboard being transported in compressed bundles to processing facilities. *Agricultural product*, as used in this definition, means all crops, livestock, poultry, and forestry; and all aquacultural, floracultural, horticultural, silvicultural, and viticultural products.

Local Governing Authority—the governing authority of the parish or the governing authority of the municipality in which the littering offense was committed.

Public or Private Property—the right-of-way of any road or highway, levee, any body of water or watercourse or the shores or beaches thereof, any park, playground, building, refuge, or conservation or recreation area, and residential or farm properties, timberland, or forests.

Section—the ~~Litter Reduction and Public Action~~ Recycling and Abatement

Section located within and acting through the Office of Environmental Services of the Department of Environmental Quality.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2522 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1405. Louisiana Litter Abatement Program

A. The purpose of the Louisiana Litter Abatement Program shall be to support the community-based litter abatement programs.

B. Program Award

1. Program awards shall be made available to local governments and nonprofit organizations.

2. Funding through the program shall be subject to the availability of funds.

3. All requests for awards shall be made in writing on a form provided by the department to the ~~Litter Reduction and Public Action~~ Recycling and Litter Abatement Section of the Office of Environmental Services.

4. The monies awarded through the award shall be used to further the administration and execution of the Keep Louisiana Beautiful Program. Allowable uses of award funding shall include, but not be limited to:

a. Keep America Beautiful fees;

b. Keep America Beautiful precertification training, education curriculums, and workshops;

c. law enforcement seminars;

d. litter surveys;

e. projects, services, activities, and operational costs of litter abatement programs;

f. materials and services for program development and training;

g. direct expenditures for materials that can facilitate litter reduction, recycling, waste reduction, reuse, and general solid waste management programs;

h. minimal advertising, public relations, and promotional materials necessary for publicity and promotion of program activities; and

i. salary of the program coordinator.

5. Each successful applicant shall supplement award funds with a 25 percent match from other sources. All matching funds must be available to the program after the date of the program award, and funds spent prior to the program award shall not be considered eligible in fulfilling the match requirement.

6. Awards shall be awarded based on a comparative basis as determined by the Recycling and Litter Abatement Section of the Office of Environmental Services.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2524 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

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b. Keep America Beautiful precertification training, education curriculums, and workshops;

c. law enforcement seminars;

d. litter surveys;

e. projects, services, activities, and operational costs of litter abatement programs;

f. materials and services for program development and training;

g. direct expenditures for materials that can facilitate litter reduction, recycling, waste reduction, reuse, and general solid waste management programs;

h. minimal advertising, public relations, and promotional materials necessary for publicity and promotion of program activities; and

i. salary of the program coordinator.

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6. Awards shall be awarded based on a comparative basis as determined by the ~~Litter Reduction and Public Action~~ Recycling and Litter Abatement Section of the Office of Environmental Services.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2524 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 28:**.

Chapter 15. Solid Waste Fees

§1501. Standard Permit Application Review Fee (Editors Note: Text moved from §525)

A. Applicants for Type I, I-A, II, and II-A standard permits shall pay a $3,300 permit application review fee for each facility. The fee shall accompany each permit application submitted.

B. Applicants for Type III standard permits or beneficial-use permits shall pay a permit application review fee of $660 for each facility. The fee shall accompany each permit application submitted.

C. Permit holders providing permit modifications for Type I, I-A, II, and II-A facilities shall pay a $1,320 permit-modification review fee. The fee shall accompany each modification submitted. Permit holders providing mandatory modifications in response to these regulations shall pay a $660 permit-modification fee. The fee shall accompany each mandatory modification submitted. Permit modifications required by LAC 33:VII.~~709.E.1~~ 805.A will not be subject to a permit modification fee.

D. Permit holders providing permit modifications for Type III facilities or beneficial use facilities shall pay a $330 permit-modification review fee. The fee shall accompany each modification submitted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental

Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1503. Closure Plan Review Fee (Editor's note: from §527)

A. Applicants for Type I, I-A, II, and II-A closures shall pay a $1,320 closure-plan review fee. The fee shall accompany each closure plan submitted.

B. Applicants for Type III or beneficial-use facilities closures shall pay a $330 closure-plan review fee. The fee shall accompany each closure plan submitted.

C. Permit holders providing closure-plan modifications for Type I, I-A, II, and II-A facilities shall pay a $660 closure-plan modification review fee. The fee shall accompany each modification submitted.

D. Permit holders providing closure-plan modifications for Type III or beneficial-use facilities shall pay a $165 closure-plan modification review fee. The fee shall accompany each modification submitted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1505. Annual Monitoring and Maintenance Fee (Editor's note: from §529)

A. An initial fee is charged for the processing of transporter notifications.

1. The fee shall be calculated by the following formula:

Initial fee per notification + Fee based on each vehicle owned by the transporter = Notification fee

2. No fee is assessed for modifying an existing notification form. The fee shall accompany the notification form at the time of its filing. Fees are as follows:

Initial fee	$132
Fee Per Vehicle	$33

B. All holders of permits for solid waste processing and/or disposal facilities that have not completed closure, including post-closure activities, in accordance with an approved plan, shall be charged an annual monitoring and maintenance fee for each permit. This annual monitoring and maintenance fee shall be calculated by the following formula:

Base fee per permit + Fee based on tonnage = Annual monitoring and maintenance fee

1. Base fees are as follows:

a. $7,920 for Type I facilities (including facilities that handle both industrial and nonindustrial waste);

b. $1,980 for Type II facilities; and

c. $660 for Type I-A, II-A, III, and beneficial-use facilities.

2. Tonnage fees will be based on the wet-weight tonnage, as reported in the previous year's disposer annual report, and are calculated as follows:

a. for industrial wastes (Type I facilities, except surface impoundments), $0.79/ton;

b. for nonindustrial wastes (Type II facilities, except surface impoundments), $0.20/ton for amounts exceeding 75,000 tons;

c. for surface impoundments, no tonnage fee;

d. for publicly operated facilities that treat domestic sewage sludge, no tonnage fee; and

e. for Type I-A, II-A, III, and beneficial-use facilities, no tonnage fee.

3. The maximum annual monitoring and maintenance fee per facility for Type I facilities (including facilities that handle both industrial and nonindustrial solid wastes) is $105,600. The maximum fee per facility for Type II facilities is $26,400. Surface impoundments, as noted above, are assessed only the base fee.

C. The annual monitoring and maintenance period shall be from July 1 through June 30, commencing upon promulgation of these regulations and terminating upon completion of closure or post-closure activities for the facility in accordance with the permit of the administrative authority. The annual monitoring and maintenance fee for facilities during post-closure shall be 25 percent of the applicable base fee in Paragraph B.1 of this Section.

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

E. Late Payment Fee. 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.

F. 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 act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.

G. The annual fees prescribed herein shall be effective retroactive for the state fiscal year in which these fee regulations are published in the *Louisiana Register* as adopted and each state fiscal year thereafter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Chapter 30. Appendices

§3001. Appendix A

Example of a Public Notice to be Placed in the Local Newspaper for Intention to Submit a Permit Application to the Office of Environmental Services, Permits Division for Existing/Proposed Solid Waste Facilities:

PUBLIC NOTICE

OF

INTENT TO SUBMIT PERMIT APPLICATION

(NAME OF APPLICANT/FACILITY)

FACILITY (location), PARISH (location), LOUISIANA

Notice is hereby given that (name of applicant) does intend to submit to the Department of Environmental Quality, Office of Environmental Services, Permits Division, an application for a permit to operate a (type of solid waste facility) in (parish name), Range__, Township__, Section__, which is approximately (Identify the physical location of the site by direction and distance from the nearest town.).

Comments concerning the facility may be filed with the secretary of the Louisiana Department of Environmental Quality at the following address:

Louisiana Department of Environmental Quality
Office of Environmental Services
Permits Division
Post Office Box ~~82135~~4313
Baton Rouge, Louisiana ~~70884-2135~~70821-4313.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2536 (November 2000), amended by the Office of Environmental Assessment, LR 30:2027 (September 2004), amended by the Office of the

Secretary, Legal Affairs Division, LR 32:**.

§3005. Appendix C

Groundwater Sampling and Analysis Plan

i. All wells must be measured for total depth and depth to water on the same day and immediately prior to purging. Measurements must be to the nearest 0.01 foot, and the values must be recorded in the field notebook. If 10 percent of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event. Wells with dedicated sampling devices that preclude total-depth measurement must be measured annually.

ii. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The well must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Purging and sampling methods must be consistent throughout the life of the facility.

iii. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices, other than bailers, must be approved by the administrative authority prior to use in monitoring programs. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the life of the facility.

iv. Sample preservation, handling, and analysis must meet the specifications of the "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," third edition EPA Publication SW-846, 1986, as revised December, 1987 (SW-846) or an equivalent substitute as approved by the administrative authority. Parameters, containers, preservation methods, and analytical limits are listed in Tables 1 and 2.

v. Analytical methods with the equivalency to SW-846, or analytical methods for parameters not listed in SW-846, must be approved by the administrative authority prior to implementation.

vi. A chain of custody must be employed that will allow for the possession and handling of samples to be traced from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the test parameters required.

vii. At the site, an up-to-date field logbook must be kept, which documents for each sample the well identification number, total well depth, elevation of top of casing, water level, water color, well-evacuation procedures and equipment, date, time, sample identification numbers, field measurements (pH, specific conductance, etc.) and methods, name of collector, field observations, calculations of the standing-water volume in the well, and the total volume evacuated.

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(1)	Antimony	(Total)
(2)	Arsenic	(Total)
(3)	Barium	(Total)
(4)	Beryllium	(Total)
(5)	Cadmium	(Total)
(6)	Chromium	(Total)
(7)	Cobalt	(Total)
(8)	Copper	(Total)
(9)	Lead	(Total)
(10)	Nickel	(Total)
(11)	Selenium	(Total)
(12)	Silver	(Total)
(13)	Thallium	(Total)
(14)	Vanadium	(Total)
(15)	Zinc	(Total)
Organic Constituents:		
(16)	Acetone	67-64-1
(17)	Acrylonitrile	107-13-1
(18)	Benzene	71-43-2
(19)	Bromochloromethane	74-97-5
(20)	Bromodichloromethane	75-27-4

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(21)	Bromoform; Tribromomethane	75-25-2
(22)	Carbon disulfide	75-15-0
(23)	Carbon tetrachloride	56-23-5
(24)	Chlorobenzene	108-90-7
(25)	Chloroethane; Ethyl chloride	75-00-3
(26)	Chloroform; Trichloromethane	67-66-3
(27)	Dibromochloromethane; Chlorodibromomethane	124-48-1
(28)	1,2-Dibromo-3-chloropropane; DBCP	96-12-8
(29)	1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4
(30)	o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1
(31)	p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7
(32)	trans-1,4-Dichloro-2-butene	110-57-6
(33)	1,1-Dichloroethane; Ethylidene chloride	75-34-3
(34)	1,2-Dichloroethane; Ethylene dichloride	107-06-2
(35)	1,1-Dichloroethylene; 1,1- Dichloroethene; Vinylidene chloride	75-35-4
(36)	cis-1,2-Dichloroethylene; cis-1,2- Dichloroethene	156-59-2
(37)	trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	156-60-5

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(38)	1,2-Dichloropropane; Propylene dichloride	78-87-5
(39)	cis-1,3-Dichloropropene	10061-01-5
(40)	trans-1,3-Dichloropropene	10061-02-6
(41)	Ethylbenzene	100-41-4
(42)	2-Hexanone; Methyl butyl ketone	591-78-6
(43)	Methyl bromide; Bromomethane	74-83-9
(44)	Methyl chloride; Chloromethane	74-87-3
(45)	Methylene bromide; Dibromomethane	74-95-3
(46)	Methylene chloride; Dichloromethane	75-09-2
(47)	Methyl ethyl ketone; MEK; 2-Butanone	78-93-3
(48)	Methyl iodide; Iodomethane	74-88-4
(49)	4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1
(50)	Styrene	100-42-5
(51)	1,1,1,2-Tetrachloroethane	630-20-6
(52)	1,1,2,2-Tetrachloroethane	79-34-5
(53)	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4
(54)	Toluene	108-88-3
(55)	1,1,1-Trichloroethane; Methylchloroform	71-55-6

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(56)	1,1,2-Trichlolroethane	79-00-5
(57)	Trichloroethylene; Trichloroethene	79-01-6
(58)	Trichlorofluoromethane; CFC-11	75-69-4
(59)	1,2,3-Trichloropropane	96-18-4
(60)	Vinyl acetate	108-05-4
(61)	Vinyl chloride	75-01-4
(62)	Xylenes	1330-20-7

Notes:

[1] This list contains 47 volatile organics for which possible analytical procedures provided in SW-846 includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Acenaphthene	83-32-9	Acenaphthylene, 1,2- dihydro-	8100 8270	200 10
Acenaphthylene	208-96-8	Acenaphthylene	8100 8270	200 10
Acetone	67-64-1	2-Propanone	8260	100
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H- fluoren-2-yl-	8270	20
Acrolein	107-02-8	2-Propenal	8030 8260	5 100
Acrylonitrile	107-13-1	2-Propenenitrile	8030 8260	5 200

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Aldrin	309-00-22	1,4:5,8-Dimethano-naphthalene; 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexa-hydro-(1⟨,4⟨,4a®,5®,8⟨,8a®)	8080 8270	0.05 10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010 8260	5 10
4-Amino-bipheny	92-67-1	[1,1'-Biphenyl]- 4-amine	8270	20
Anathracene	120-12-7	Anthracene	8100 8270	200 10
Antimony	(Total)	Antimony	6010 7040 7041	300 2,000 30
Arsenic	(Total)	Arsenic	6010 7060 7061	500 10 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Barium	(Total)	Barium	6010 7080	20 1,000
Benzene	71-43-2	Benzene	8020 8021 8260	2 0.1 5
Benzo[a]anthracene Benzanthracene	56-55-3	Benz[a]anthracene	8100 8270	200 10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100 8270	200 10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100 8270	200 10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100 8270	200 10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100 8270	200 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Total)	Beryllium	6010 7090 7091	3 50 2
alpha-BHC	319-84-6	Cyclohexane; 1,2,3, 4,5,-hexachloro-,(1α, 2α,3β,4α,5β,6β)	8080 8270	0.05 10
beta-BHC	319-85-7	Cyclohexane; 1,2,3, 4,5,6-hexa-chloro-,(1α,2β,3α,4β,5α,6β)-	8080 8270	0.05 20
delta-BHC	319-86-8	Cyclohexane,1,2,3,4,5,6-hexachloro - (1α,2α,3α,4β, 5α,6β)-	8080 8270	0.1 20
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2, 3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)	8080 8270	0.05 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Bis(2-chloroethoxy)methane	111-91-1	Ethane; 1,1'-[methylenebis(oxy)]bis[2- chloro-	8110 8270	5 10
Bis(2-chloroethyl)ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	8110 8270	3 10
Bis(2-chloro- 1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether	108-60-1 See Note 7	Propane, 2,2'-oxybis [1-chloro-	8110 8270	10 10
Bis(2-ethyl-hexyl) phthalat	117-81-7	1,2-Benzene- dicarboxylic acid, bis(2-ethyl-hexyl) ester	8060	20
Bromochloro methane; Chloro-bromomethane	74-97-5	Methane, bromochloro-	8021 8260	0.1 5
Bromodichloro methane	75-27-4	Methane, bromodichloro-	8010 8021 8260	1 0.2 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010 8021 8260	2 15 5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8110 8270	25 10
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzene- dicarboxylic acid, butyl phenylmethyl ester	8060 8270	5 10
Cadmium	(Total)	Cadmium	6010 7130 7131	40 50 1
Carbon disulfide	75-15-0	Carbon disulfide	8260	100
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010 8021 8260	1 0.1 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Chlordane	57-74-9 See Note 8	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	8080 8270	0.1 50
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α- hydroxy-, ethyl ester	8270	10
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro- 3-methyl-	8040 8270	5 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010 8021 8260	5 1 10
Chloroform	67-66-3	Methane, trichloro-	8010 8021 8260	0.5 0.2 5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120 8270	10 10
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040 8270	5 10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8110 8270	40 10
Chloroprene	126-99-8	1,3-Butadiene, 2- chloro-	8010 8260	50 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Chromium	(Total)	Chromium	6010 7190 7191	70 500 10
Chrysene	218-01-9	Chrysene	8100 8270	200 10
Cobalt	(Total)	Cobalt	6010 7200 7201	70 500 10
Copper	(Total)	Copper	6010 7210	60 200
m-Cresol	108-39-4	Phenol, 3-methyl-	8270	10
o-Cresol	95-48-7	Phenol, 2-methyl-	8270	10
p-Cresol	106-44-5	Phenol, 4-methyl-	8270	10
Cyanide	57-12-5	Cyanide	9010	200

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
2,4-D; 2,4-Dichloro-phenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-	8150	10
4,4'-DDD	72-54-8	Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	8080 8270	0.1 10
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro-	8080 8270	0.05 10
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloro-ethylidene) bis[4-chloro-	8080 8270	0.1 10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methyl-ethyl)-, S-(2,3-dichloro-2-propenyl) ester	8270	10
Dibenz[a,h]- anthracene	53-70-3	Dibenz[a,h] anthracene	8100 8270	200 10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, diboro- chloro-	8010 8021 8260	1 0.3 5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8011 8021 8260	0.1 10 5
Di-n-butyl phthalate	84-74-2	1,2-Benzene dicarboxylic acid, dibutyl ester	8060 8270	5 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	2
			8020	5
			8021	0.5
			8120	10
			8260	5
			8270	10
m-Dichlorobenzene	541-73-1	Benzene, 1,3- dichloro-	8010	5
			8020	5
			8021	0.2
			8120	10
			8260	5
			8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.1 15 5 10
3,3'-Dichlorobenzedine	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	8270	20
trans-1,4-; Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8260	100
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-	8021 8260	0.5 5
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-	8010 8021 8260	1 0.5 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010 8021 8260	0.5 0.3 5
1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro	8010 8021 8260	1 0.5 5
cis-1,2-Dichloro-ethylene; cis-1,2-Dichloroethene	156-59-2	Ethene, 1,2-dichloro-, (Z)-	8021 8260	0.2 5
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-(E)-	8010 8021 8260	1 0.5 5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040 8270	5 10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dicholride	142-28-9	Propane, 1,3-dichloro-	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride	594-20-7	Propane, 2,2-dichloro-	8021 8260	0.5 15
1,1-Dichloropropene	563-58-6	1-Propene, 1,1-dichloro-	8021 8260	0.2 5
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-,(Z)-	8010 8260	20 10
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-,(E)-	8010 8240	5 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Dieldrin	60-57-1	2,7:3,6-Dimethano-naphth[2,3-b]oxi-rene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-,(1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	8080 8270	0.05 10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060 8270	5 10
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	8141 8270	5 20
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl-S-[2-(methylamino)-2-oxoethyl] ester	8141 8270	3 20
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
7,12-Dimethylbenz[a] anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3'-Dimethylbenzidine	119-93-7	[1,1'-Biphenyl]-4,4'- diamine, 3,3'-dimethyl-	8270	10
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-	8040	5
Dimethyl phthalate	131-11-3	1,2-Benzenedicar-boxylic acid, dimethyl ester	8060 8270	5 10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	20
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-	8040 8270	150 50
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-	8040 8270	150 50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4- dinitro-	8090 8270	0.2 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3- dinitro-	8090 8270	0.1 10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methyl-propyl)-4,6-dinitro-	8150 8270	1 20
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30 10
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	10
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S- [2-(ethylthio) ethyl]ester	8140 8141 8270	2 0.5 10
Endosulfan I	959-98-8	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a, 6,9,9a-hexahydro-, 3-oxide,(3α,5aβ,6α, 9α,9aβ)-	8080 8270	0.1 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Endosulfan II	33213-65-9	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a, 6,9,9a-hexahydro-, 3-oxide,(3α,5aα,6β, 9β,9aα)-	8080 8270	0.05 20
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexa-chloro-1,5,5a,6,9, 9a-hexahydro-,3,3- dioxide	8080 8270	0.5 10
Endrin	72-20-8	2,7:3,6-Dimethano-naphth[2,3-b]oxi-rene,3,4,5,6,9,9-hexachloro-1a,2,2a, 3,6,6a,7,7a-octa-hydro-,(1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-	8080 8270	0.1 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Endrin aldehyde	7421-93-4	1,2,4-Metheno-cyclopenta[cd]-pentalene-5-car-boxaldehyde, 2,2a,3,3,4,7-hexachlorodeca-hydro-,(1α,2β,2aβ, 4β,4aβ,5β,6aβ,6bβ, 7R*)	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8221 8260	2 0.05 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8260 8270	5 10 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	20
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethyl-amino)-sulfonyl] phenyl]-O,O-di- methyl ester	8270	20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8, 8-heptachloro-3a, 4,7,7a-tetrahydro-	8080 8270	0.05 10
Heptachlor epoxide	1024-57-3	2,5-Methano-2H- indeno [1,2-b]oxi- rene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα,1bβ,2α,5α, 5aβ,6β,6aα)	8080 8270	1 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	0.5 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8021 8120 8260 8270	0.5 5 10 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8260 8270	0.5 10 10
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10
2-Hexanone	591-78-6	2-Hexanone	8260	50
Indeno(1,2,3-cd) pyrene	193-39-5	Indeno[1,2,3-cd] pyrene	8100 8270	200 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015 8240	50 100
Isodrin	465-73-6	1,4,5,8-Dimethano-naphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α,4α,4aβ,5β,8β, 8aβ)-	8270 8260	20 10
Isophorone	78-59-1	2-Cyclohexen-1- one, 3,5,5-tri-methyl-	8090 8270	60 10
Isosafrole	120-58-1	1,3-Benaodioxole, 5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H- cylobuta-[cd] pentalen-2-one,1,1a, 3,3a,4,5,5,5a,5b,6- decachloro-octahydro-	8270	20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Lead	(Total)	Lead	6010 7420 7421	400 1,000 10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propene, nitrile 2-methyl-	8015 8260	5 100
Methapyrilene	91-80-5	1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2- thienylmethyl)-	8270	100
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2, trichloroethylidene) bis[4-methoxy-.	8080 8270	2 10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010 8021	20 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010 8021	1 0.3
3-Methylchol anthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015 8260	10 100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010 8260	40 10
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015 8260	2 30
Methyl methanesulfonate	66-27-3	methanesulfonic acid, methyl ester	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; arathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	8140 8141 8270	0.5 1 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
4-Methyl-2- pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl	8015 8260	5 100
Methylene bromide; Dibromo-methane	74-95-3	Methane, dibromo-	8010 8021 8260	15 20 10
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010 8021 8060	5 0.2 10
Naphthalene	91-20-3	Naphthalene	8021 8100 8260 8270	0.5 200 5 10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010 7520	50 400
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	8270	50
Nitrobenzene	98-95-3	Benzene, nitro-	8090 8270	40 10
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040 8270	5 10
p-Nitrophenol	100-02-7	Phenol, 4-nitro	8040 8270	10 50
N-Nitrosodi-n- butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso	8270	10
N-Nitroso- diethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso	8270	20
N-Nitroso- dimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8070	2
N-Nitroso- diphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8070	5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
N-Nitroso- dipropylamine; Di-n-propyl- nitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8070	10
N-Nitrosom-ethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	20
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	40
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2- methyl-5-nitro-	8270	10
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	8141 8270	0.5 10
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10
Pentachloro-nitrobenzene	82-68-8	Benzene, penta-chloronitro-	8270	20
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040 8270	5 50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)	8270	20
Phenanthrene	85-01-8	Phenanthrene	8100 8270	200 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Phenol	108-95-2	Phenol	8040 8270	1 10
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	10
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)-methyl] ester	8140 8141 8270	2 0.5 10
Polychlorinated biphenyls; PCBs	See Note 9	1,1'-Biphenyl, chloro derivatives	8080 8270	50 200
Pronamide	23950-58-5	Benzamide, 3,5- dichloro-N-(1,1-di-methyl-2-propynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015 8260	60 150
Pyrene	129-00-0	Pyrene	8100 8270	200 10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Selenium	(Total)	Selenium	6010 7740 7741	750 20 20
Silver	(Total)	Silver	6010 7760	70 100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichloro-phenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020 8021 8260	1 0.1 10
Sulfide	18496-25-8	Sulfide	9030	4,000
2,4,5-T; 2,4,5- Trichloro-phenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010 8021 8260	5 0.05 5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010 8021 8260	0.5 0.1 5
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010 8021 8260	0.5 0.5 5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6- tetrachloro-	8270	10
Thallium	(Total)	Thallium	6010 7840 7841	400 1,000 10
Tin	(Total)	Tin	6010	40

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Toluene	108-88-3	Benzene, methyl-	8020 8021 8260	2 0.1 5
o-Toluidine	95-53-4	Benzenamine, 2- methyl-	8270	10
Toxaphene	8001-35-2 See note 10	Toxaphene	8080	2
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro	8021 8120 8260 8270	0.3 0.5 10 10
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1- trichloro-	8010 8021 8260	0.3 0.3 5
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010 8260	0.2 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010 8021 8260	1 0.2 5
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-	8010 8021 8260	10 0.3 5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5- trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040 8270	5 10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010 8021 8260	10 5 15
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-tri-ethyl ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Vanadium	(Total)	Vanadium	6010 7910 7911	80 2,000 40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8260	50
Vinyl chloride	75-01-4	Ethene, chloro-	8010 8021 8260	2 0.4 10
Xylene (total)	1330-20-7 See Note 11	Benzene, dimethyl-	8020 8021 8260	5 0.2 5
Zinc	(Total)	Zinc	6010 7950 7951	20 50 0.5

Notes:

[1] The regulatory requirements pertain only to the list of substances; the right-hand

columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

[4] CAS index numbers are those used in the 9th Collective Index.

[5] Suggested Methods refer to analytical procedure numbers used in ~~EPA Report~~ SW-846 ~~"Test Methods for Evaluating Solid Waste," Third Edition, November 1986, as revised, December 1987~~. Analytical details can be found in SW-846 and in documentation on file at the agency.

Caution: The methods listed are representative of SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

[6] Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5-ml samples for volatile organics and 1-L samples for semivolatile organics.

Caution: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

[7] This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2-chloro- (CAS RN 39638-32-9).

[8] Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 ug/L by method 8270.

[9] Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

[10] Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-20), i.e., chlorinated camphene.

[11] Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0 ug/L by method 8020 or 8260.

Authority Note: Promulgated in accordance with R.S. 30:2001 et seq.

§3007. Appendix D

Processes to Significantly Reduce Pathogens (Class B)	
Aerobic Digestion	A process conducted by agitating sludge with air or oxygen to maintain aerobic conditions at residence times ranging from 60 days at 15°C to 40 days at 20°C, with a volatile-solids reduction of at least 38 percent.
Air Drying	A process that allows liquid sludge to drain and/or dry on under-drained sand beds or on paved or unpaved basins in which the depth of the sludge is 9 inches. A minimum of three months is needed for this process; during two of these months daily temperatures must average above 0° C.
Anaerobic Digestion	A process conducted in the absence of air during a residence time ranging from 60 days at 20°C to 15 days at 35-55°C, with a volatile-solids reduction of at least 38 percent.
Composting	A process conducted by either the within-vessel, static-aerated-pile or windrow method whereby the solid waste is maintained at minimum operating conditions of 40°C for five days. For four hours during this period, the temperature must exceed 55°C.
Lime Stabilization	A process in which sufficient lime is added to produce a pH of 12 after two hours of contact.
Other Methods	Other methods or operating conditions for significantly reducing pathogens may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§3009. Appendix E

Processes to Further Reduce Pathogens (Class A)	
Composting	A process conducted by either the within-vessel, static aerated-pile, or windrow method. If the within-vessel or static-aerated-pile method is used, the solid waste is maintained at operating conditions of 55°C or greater for three days. If the windrow method is used, the solid waste attains a temperature of 55°C or greater for at least 15 days during the composting period, and the windrow is turned at least five times during this high-temperature period.
Heat Drying	A process in which dewatered sludge cake is dried by direct or indirect contact with hot gases and moisture content is reduced to 10 percent or less. Sludge particles reach temperatures well in excess of 80° C or the wet-bulb temperature of the gas stream, in contact with the sludge at the point where it leaves the dryer, is in excess of 80° C.
Heat Treatment	A process in which liquid sludge is heated to temperatures of 180° C for 30 minutes.
Thermophilic Aerobic Digestion	A process in which liquid sludge is agitated with air or oxygen to maintain aerobic conditions at residence times of 10 days at 55-60° C, with a volatile-solids reduction of at least 38 percent.
Other Methods	Other methods or operating conditions for further reducing pathogens may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.
Any of the processes listed below, used in conjunction with the processes described above, will further reduce pathogens. The processes listed below will not, however, reduce the attraction of disease vectors if they are not used in conjunction with one of the above processes, and therefore are not sufficient alone.	
Beta-Ray Irradiation	A process in which sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (approximately 20° C).
Gamma-Ray Irradiation	A process in which sludge is irradiated with gamma rays from certain isotopes, such as ^{60}Cobalt and ^{137}Cesium, at dosages of at least 1.0 megarad at room temperature (approximately 20° C).
Pasteurization	A process in which sludge is maintained for at least 30 minutes at a minimum temperature of 70° C.
Other Methods	Other methods or operating conditions may be acceptable if pathogens are reduced to an extent equivalent to the reduction achieved by any of the above add-on methods.

§3011. Appendix F

Document to be Filed in the Parish Records Upon Final Closure of a Solid Waste Disposal Facility

(Name of permit holder) hereby notifies the public that the following described property was used for the disposal of solid waste. This site was closed on (date facility was closed) in accordance with the *Louisiana Administrative Code*, Title 33, Part VII. Inquiries regarding the contents of (the facility) may be directed to (name of person with knowledge of the contents of the facility) at (address of person with knowledge of the contents of the facility).

Property Description

(Provide the specific description of the location of the facility)

_____

Signature of Person Filing Parish Record

_____

Typed Name and Title of Person Filing
Parish Record

_____

Date

(A true copy of the document must be certified by the parish clerk of court.)

§3015. Appendix H

Examples of Agricultural Wastes that may be Managed Under Approved Best Management Practice Plans

Sugar mill bagasse ash

Bagasse

Filter press mud from sugar mills

Chicken litter

Dead poultry carcasses

Rice hulls

Rice hull ash

Shells from crawfish and shellfish processing

~~Potato~~ Vegetable peels and waste from ~~potato~~ packing and processing

Cotton gin trash

Livestock and poultry litter, bedding, and composted mortalities

Waste and wastewater from livestock, poultry and fisheries packing and processing

Chapter 14. Statewide Beautification

(Editor's note: Moved from Chapter 13)

§1401. Purpose

A. It is declared to be the purpose of these rules and regulations to:

1. control and reduce litter; and

2. create a statewide beautification program to enhance the tourist, recreational, and economic development of the state.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2521 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1403. Definitions

A. The following words, terms, and phrases, when used in conjunction with LAC 33:VII. Subpart 1, shall have the meanings ascribed to them in this Chapter, except where the context clearly indicates a different meaning.

Commission—the Louisiana Litter Reduction and Public Action Commission.

Dump—to throw, discard, place, deposit, discharge, burn, dump, drop, eject, or allow the escape of a substance.

Litter—all waste material, except as provided and defined in R.S. 30:2173(2), including but not limited to, disposable packages, containers, sand, gravel, rubbish, cans, bottles, refuse, garbage, trash, debris, dead animals, furniture or appliances, automotive parts including, but not limited to, tires and engines, trailers, boats and boating accessories, tools and equipment, and building materials, or other discarded materials of any kind and description. *Litter* shall not include agricultural products that are being transported from the harvest or collection site to a processing or market site if reasonable measures are taken to prevent the agricultural product from leaving the transporting vehicle. *Litter* shall also not include recyclable cardboard being transported in compressed bundles to processing facilities. *Agricultural product*, as used in this definition, means all crops, livestock, poultry, and forestry; and all aquacultural, floracultural, horticultural, silvicultural, and viticultural products.

Local Governing Authority—the governing authority of the parish or the

governing authority of the municipality in which the littering offense was committed.

Public or Private Property—the right-of-way of any road or highway, levee, any body of water or watercourse or the shores or beaches thereof, any park, playground, building, refuge, or conservation or recreation area, and residential or farm properties, timberland, or forests.

Section—the ~~Litter Reduction and Public Action~~ Recycling and Abatement Section located within and acting through the Office of Environmental Services of the Department of Environmental Quality.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2522 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1405. Louisiana Litter Abatement Program

A. The purpose of the Louisiana Litter Abatement Program shall be to support the community-based litter abatement programs.

B. Program Award

1. Program awards shall be made available to local governments and nonprofit organizations.

2. Funding through the program shall be subject to the availability of funds.

3. All requests for awards shall be made in writing on a form

provided by the department to the ~~Litter Reduction and Public Action~~ Recycling and Litter Abatement Section of the Office of Environmental Services.

4. The monies awarded through the award shall be used to further the administration and execution of the Keep Louisiana Beautiful Program. Allowable uses of award funding shall include, but not be limited to:

a. Keep America Beautiful fees;

b. Keep America Beautiful precertification training, education curriculums, and workshops;

c. law enforcement seminars;

d. litter surveys;

e. projects, services, activities, and operational costs of litter abatement programs;

f. materials and services for program development and training;

g. direct expenditures for materials that can facilitate litter reduction, recycling, waste reduction, reuse, and general solid waste management programs;

h. minimal advertising, public relations, and promotional materials necessary for publicity and promotion of program activities; and

i. salary of the program coordinator.

5. Each successful applicant shall supplement award funds with a 25

percent match from other sources. All matching funds must be available to the program after the date of the program award, and funds spent prior to the program award shall not be considered eligible in fulfilling the match requirement.

6. Awards shall be awarded based on a comparative basis as determined by the Recycling and Litter Abatement Section of the Office of Environmental Services.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2524 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1405. Louisiana Litter Abatement Program

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d. litter surveys;

e. projects, services, activities, and operational costs of litter abatement programs;

f. materials and services for program development and training;

g. direct expenditures for materials that can facilitate litter reduction, recycling, waste reduction, reuse, and general solid waste management programs;

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6. Awards shall be awarded based on a comparative basis as determined by the ~~Litter Reduction and Public Action~~ Recycling and Litter Abatement Section of the Office of Environmental Services.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30:2524 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:**.

Chapter 15. Solid Waste Fees

§1501. Standard Permit Application Review Fee (Editors Note: Text moved from §525)

A. Applicants for Type I, I-A, II, and II-A standard permits shall pay a $3,300 permit application review fee for each facility. The fee shall accompany each permit application submitted.

B. Applicants for Type III standard permits or beneficial-use permits shall pay a permit application review fee of $660 for each facility. The fee shall accompany each permit application submitted.

C. Permit holders providing permit modifications for Type I, I-A, II, and II-A facilities shall pay a $1,320 permit-modification review fee. The fee shall accompany each modification submitted. Permit holders providing mandatory modifications in response to these regulations shall pay a $660 permit-modification fee. The fee shall accompany each mandatory modification submitted. Permit modifications required by LAC 33:VII.~~709.E.1~~ 805.A will not be subject to a permit modification fee.

D. Permit holders providing permit modifications for Type III facilities or beneficial use facilities shall pay a $330 permit-modification review fee. The fee shall accompany each modification submitted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental

Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1503. Closure Plan Review Fee (Editor's note: from §527)

A. Applicants for Type I, I-A, II, and II-A closures shall pay a $1,320 closure-plan review fee. The fee shall accompany each closure plan submitted.

B. Applicants for Type III or beneficial-use facilities closures shall pay a $330 closure-plan review fee. The fee shall accompany each closure plan submitted.

C. Permit holders providing closure-plan modifications for Type I, I-A, II, and II-A facilities shall pay a $660 closure-plan modification review fee. The fee shall accompany each modification submitted.

D. Permit holders providing closure-plan modifications for Type III or beneficial-use facilities shall pay a $165 closure-plan modification review fee. The fee shall accompany each modification submitted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

§1505. Annual Monitoring and Maintenance Fee (Editor's note: from §529)

A. An initial fee is charged for the processing of transporter notifications.

1. The fee shall be calculated by the following formula:

Initial fee per notification + Fee based on each vehicle owned by the transporter = Notification fee

2. No fee is assessed for modifying an existing notification form. The fee shall accompany the notification form at the time of its filing. Fees are as follows:

Initial fee	$132
Fee Per Vehicle	$33

B. All holders of permits for solid waste processing and/or disposal facilities that have not completed closure, including post-closure activities, in accordance with an approved plan, shall be charged an annual monitoring and maintenance fee for each permit. This annual monitoring and maintenance fee shall be calculated by the following formula:

Base fee per permit + Fee based on tonnage = Annual monitoring and maintenance fee

1. Base fees are as follows:

a. $7,920 for Type I facilities (including facilities that handle both industrial and nonindustrial waste);

b. $1,980 for Type II facilities; and

c. $660 for Type I-A, II-A, III, and beneficial-use facilities.

2. Tonnage fees will be based on the wet-weight tonnage, as reported in the previous year's disposer annual report, and are calculated as follows:

a. for industrial wastes (Type I facilities, except surface impoundments), $0.79/ton;

b. for nonindustrial wastes (Type II facilities, except surface impoundments), $0.20/ton for amounts exceeding 75,000 tons;

c. for surface impoundments, no tonnage fee;

d. for publicly operated facilities that treat domestic sewage sludge, no tonnage fee; and

e. for Type I-A, II-A, III, and beneficial-use facilities, no tonnage fee.

3. The maximum annual monitoring and maintenance fee per facility for Type I facilities (including facilities that handle both industrial and nonindustrial solid wastes) is $105,600. The maximum fee per facility for Type II facilities is $26,400. Surface impoundments, as noted above, are assessed only the base fee.

C. The annual monitoring and maintenance period shall be from July 1 through June 30, commencing upon promulgation of these regulations and terminating upon completion of closure or post-closure activities for the facility in accordance with the permit of the administrative authority. The annual monitoring and maintenance fee for facilities during post-closure shall be 25 percent of the applicable base fee in Paragraph B.1 of this Section.

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

E. Late Payment Fee. 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.

F. 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 act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.

G. The annual fees prescribed herein shall be effective retroactive for the state fiscal year in which these fee regulations are published in the *Louisiana Register* as adopted and each state fiscal year thereafter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular R.S. 30:2154.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:**.

Chapter 30. Appendices

§3001. Appendix A

Example of a Public Notice to be Placed in the Local Newspaper for Intention to Submit a Permit Application to the Office of Environmental Services, Permits Division for Existing/Proposed Solid Waste Facilities:

PUBLIC NOTICE

OF

INTENT TO SUBMIT PERMIT APPLICATION

(NAME OF APPLICANT/FACILITY)

FACILITY (location), PARISH (location), LOUISIANA

Notice is hereby given that (name of applicant) does intend to submit to the Department of Environmental Quality, Office of Environmental Services, Permits Division, an application for a permit to operate a (type of solid waste facility) in (parish name), Range__, Township__, Section__, which is approximately (Identify the physical location of the site by direction and distance from the nearest town.).

Comments concerning the facility may be filed with the secretary of the Louisiana Department of Environmental Quality at the following address:

Louisiana Department of Environmental Quality
Office of Environmental Services
Permits Division
Post Office Box ~~82135~~4313
Baton Rouge, Louisiana ~~70884-2135~~70821-4313.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2536 (November 2000), amended by the Office of Environmental Assessment, LR 30:2027 (September 2004), LR 32:**.

§3005. Appendix C

Groundwater Sampling and Analysis Plan

i. All wells must be measured for total depth and depth to water on the same day and immediately prior to purging. Measurements must be to the nearest 0.01 foot, and the values must be recorded in the field notebook. If 10 percent of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event. Wells with dedicated sampling devices that preclude total-depth measurement must be measured annually.

ii. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The well must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Purging and sampling methods must be consistent throughout the life of the facility.

iii. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices, other than bailers, must be approved by the administrative authority prior to use in monitoring programs. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the life of the facility.

iv. Sample preservation, handling, and analysis must meet the specifications of the "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," third edition EPA Publication SW-846, 1986, as revised December, 1987 (SW-846) or an equivalent substitute as approved by the administrative authority. Parameters, containers, preservation methods, and analytical limits are listed in Tables 1 and 2.

v. Analytical methods with the equivalency to SW-846, or analytical methods for parameters not listed in SW-846, must be approved by the administrative authority prior to implementation.

vi. A chain of custody must be employed that will allow for the possession and handling of samples to be traced from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the test parameters required.

vii. At the site, an up-to-date field logbook must be kept, which documents for each sample the well identification number, total well depth, elevation of top of casing, water level, water color, well-evacuation procedures and equipment, date, time, sample identification numbers, field measurements (pH, specific conductance, etc.) and methods, name of collector, field observations, calculations of the standing-water volume in the well, and the total volume evacuated.

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(1)	Antimony	(Total)
(2)	Arsenic	(Total)
(3)	Barium	(Total)
(4)	Beryllium	(Total)
(5)	Cadmium	(Total)
(6)	Chromium	(Total)
(7)	Cobalt	(Total)
(8)	Copper	(Total)
(9)	Lead	(Total)
(10)	Nickel	(Total)
(11)	Selenium	(Total)
(12)	Silver	(Total)
(13)	Thallium	(Total)
(14)	Vanadium	(Total)
(15)	Zinc	(Total)
Organic Constituents:		
(16)	Acetone	67-64-1
(17)	Acrylonitrile	107-13-1
(18)	Benzene	71-43-2
(19)	Bromochloromethane	74-97-5
(20)	Bromodichloromethane	75-27-4
(21)	Bromoform; Tribromomethane	75-25-2

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(22)	Carbon disulfide	75-15-0
(23)	Carbon tetrachloride	56-23-5
(24)	Chlorobenzene	108-90-7
(25)	Chloroethane; Ethyl chloride	75-00-3
(26)	Chloroform; Trichloromethane	67-66-3
(27)	Dibromochloromethane; Chlorodibromomethane	124-48-1
(28)	1,2-Dibromo-3-chloropropane; DBCP	96-12-8
(29)	1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4
(30)	o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1
(31)	p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7
(32)	trans-1,4-Dichloro-2-butene	110-57-6
(33)	1,1-Dichloroethane; Ethylidene chloride	75-34-3
(34)	1,2-Dichloroethane; Ethylene dichloride	107-06-2
(35)	1,1-Dichloroethylene; 1,1- Dichloroethene; Vinylidene chloride	75-35-4
(36)	cis-1,2-Dichloroethylene; cis-1,2- Dichloroethene	156-59-2
(37)	trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	156-60-5
(38)	1,2-Dichloropropane; Propylene dichloride	78-87-5

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(39)	cis-1,3-Dichloropropene	10061-01-5
(40)	trans-1,3-Dichloropropene	10061-02-6
(41)	Ethylbenzene	100-41-4
(42)	2-Hexanone; Methyl butyl ketone	591-78-6
(43)	Methyl bromide; Bromomethane	74-83-9
(44)	Methyl chloride; Chloromethane	74-87-3
(45)	Methylene bromide; Dibromomethane	74-95-3
(46)	Methylene chloride; Dichloromethane	75-09-2
(47)	Methyl ethyl ketone; MEK; 2-Butanone	78-93-3
(48)	Methyl iodide; Iodomethane	74-88-4
(49)	4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1
(50)	Styrene	100-42-5
(51)	1,1,1,2-Tetrachloroethane	630-20-6
(52)	1,1,2,2-Tetrachloroethane	79-34-5
(53)	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4
(54)	Toluene	108-88-3
(55)	1,1,1-Trichloroethane; Methylchloroform	71-55-6
(56)	1,1,2-Trichlolroethane	79-00-5

Table 1

Detection Monitoring Parameters[1]

	Common Name[2]	CAS RN[3]
(57)	Trichloroethylene; Trichloroethene	79-01-6
(58)	Trichlorofluoromethane; CFC-11	75-69-4
(59)	1,2,3-Trichloropropane	96-18-4
(60)	Vinyl acetate	108-05-4
(61)	Vinyl chloride	75-01-4
(62)	Xylenes	1330-20-7

Notes:

[1] This list contains 47 volatile organics for which possible analytical procedures provided in SW-846 includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Acenaphthene	83-32-9	Acenaphthylene, 1,2- dihydro-	8100 8270	200 10
Acenaphthylene	208-96-8	Acenaphthylene	8100 8270	200 10
Acetone	67-64-1	2-Propanone	8260	100
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H- fluoren-2-yl-	8270	20
Acrolein	107-02-8	2-Propenal	8030 8260	5 100
Acrylonitrile	107-13-1	2-Propenenitrile	8030 8260	5 200

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Aldrin	309-00-22	1,4:5,8-Dimethano-naphthalene; 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexa-hydro-(1⟨,4⟨,4a®,5®,8⟨,8a®)	8080 8270	0.05 10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010 8260	5 10
4-Amino-bipheny	92-67-1	[1,1'-Biphenyl]- 4-amine	8270	20
Anathracene	120-12-7	Anthracene	8100 8270	200 10
Antimony	(Total)	Antimony	6010 7040 7041	300 2,000 30
Arsenic	(Total)	Arsenic	6010 7060 7061	500 10 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Barium	(Total)	Barium	6010 7080	20 1,000
Benzene	71-43-2	Benzene	8020 8021 8260	2 0.1 5
Benzo[a]anthracene Benzanthracene	56-55-3	Benz[a]anthracene	8100 8270	200 10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100 8270	200 10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100 8270	200 10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100 8270	200 10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100 8270	200 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Total)	Beryllium	6010 7090 7091	3 50 2
alpha-BHC	319-84-6	Cyclohexane; 1,2,3, 4,5,-hexachloro-,(1α, 2α,3β,4α,5β,6β)	8080 8270	0.05 10
beta-BHC	319-85-7	Cyclohexane; 1,2,3, 4,5,6-hexa-chloro-,(1α,2β,3α,4β,5α,6β)-	8080 8270	0.05 20
delta-BHC	319-86-8	Cyclohexane,1,2,3,4,5,6-hexachloro - (1α,2α,3α,4β, 5α,6β)-	8080 8270	0.1 20
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2, 3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)	8080 8270	0.05 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Bis(2-chloroethoxy)methane	111-91-1	Ethane; 1,1'-[methylenebis(oxy)]bis[2- chloro-	8110 8270	5 10
Bis(2-chloroethyl)ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	8110 8270	3 10
Bis(2-chloro- 1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether	108-60-1 See Note 7	Propane, 2,2'-oxybis [1-chloro-	8110 8270	10 10
Bis(2-ethyl-hexyl) phthalat	117-81-7	1,2-Benzene- dicarboxylic acid, bis(2-ethyl-hexyl) ester	8060	20
Bromochloro methane; Chloro-bromomethane	74-97-5	Methane, bromochloro-	8021 8260	0.1 5
Bromodichloro methane	75-27-4	Methane, bromodichloro-	8010 8021 8260	1 0.2 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010 8021 8260	2 15 5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8110 8270	25 10
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzene- dicarboxylic acid, butyl phenylmethyl ester	8060 8270	5 10
Cadmium	(Total)	Cadmium	6010 7130 7131	40 50 1
Carbon disulfide	75-15-0	Carbon disulfide	8260	100
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010 8021 8260	1 0.1 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Chlordane	57-74-9 See Note 8	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	8080 8270	0.1 50
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α- hydroxy-, ethyl ester	8270	10
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro- 3-methyl-	8040 8270	5 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010 8021 8260	5 1 10
Chloroform	67-66-3	Methane, trichloro-	8010 8021 8260	0.5 0.2 5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120 8270	10 10
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040 8270	5 10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8110 8270	40 10
Chloroprene	126-99-8	1,3-Butadiene, 2- chloro-	8010 8260	50 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Chromium	(Total)	Chromium	6010 7190 7191	70 500 10
Chrysene	218-01-9	Chrysene	8100 8270	200 10
Cobalt	(Total)	Cobalt	6010 7200 7201	70 500 10
Copper	(Total)	Copper	6010 7210	60 200
m-Cresol	108-39-4	Phenol, 3-methyl-	8270	10
o-Cresol	95-48-7	Phenol, 2-methyl-	8270	10
p-Cresol	106-44-5	Phenol, 4-methyl-	8270	10
Cyanide	57-12-5	Cyanide	9010	200

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
2,4-D; 2,4-Dichloro-phenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-	8150	10
4,4'-DDD	72-54-8	Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	8080 8270	0.1 10
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro-	8080 8270	0.05 10
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloro-ethylidene) bis[4-chloro-	8080 8270	0.1 10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methyl-ethyl)-, S-(2,3-dichloro-2-propenyl) ester	8270	10
Dibenz[a,h]- anthracene	53-70-3	Dibenz[a,h] anthracene	8100 8270	200 10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, diboro- chloro-	8010 8021 8260	1 0.3 5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8011 8021 8260	0.1 10 5
Di-n-butyl phthalate	84-74-2	1,2-Benzene dicarboxylic acid, dibutyl ester	8060 8270	5 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	2
			8020	5
			8021	0.5
			8120	10
			8260	5
			8270	10
m-Dichlorobenzene	541-73-1	Benzene, 1,3- dichloro-	8010	5
			8020	5
			8021	0.2
			8120	10
			8260	5
			8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.1 15 5 10
3,3'-Dichlorobenzedine	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	8270	20
trans-1,4-; Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8260	100
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-	8021 8260	0.5 5
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-	8010 8021 8260	1 0.5 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010 8021 8260	0.5 0.3 5
1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro	8010 8021 8260	1 0.5 5
cis-1,2-Dichloro-ethylene; cis-1,2-Dichloroethene	156-59-2	Ethene, 1,2-dichloro-, (Z)-	8021 8260	0.2 5
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-(E)-	8010 8021 8260	1 0.5 5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040 8270	5 10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dicholride	142-28-9	Propane, 1,3-dichloro-	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride	594-20-7	Propane, 2,2-dichloro-	8021 8260	0.5 15
1,1-Dichloropropene	563-58-6	1-Propene, 1,1-dichloro-	8021 8260	0.2 5
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-,(Z)-	8010 8260	20 10
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-,(E)-	8010 8240	5 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Dieldrin	60-57-1	2,7:3,6-Dimethano-naphth[2,3-b]oxi-rene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-,(1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	8080 8270	0.05 10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060 8270	5 10
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	8141 8270	5 20
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl-S-[2-(methylamino)-2-oxoethyl] ester	8141 8270	3 20
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
7,12-Dimethylbenz[a] anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3'-Dimethylbenzidine	119-93-7	[1,1'-Biphenyl]-4,4'- diamine, 3,3'-dimethyl-	8270	10
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-	8040	5
Dimethyl phthalate	131-11-3	1,2-Benzenedicar-boxylic acid, dimethyl ester	8060 8270	5 10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	20
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-	8040 8270	150 50
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-	8040 8270	150 50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4- dinitro-	8090 8270	0.2 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3- dinitro-	8090 8270	0.1 10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methyl-propyl)-4,6-dinitro-	8150 8270	1 20
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30 10
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	10
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S- [2-(ethylthio) ethyl]ester	8140 8141 8270	2 0.5 10
Endosulfan I	959-98-8	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a, 6,9,9a-hexahydro-, 3-oxide,(3α,5aβ,6α, 9α,9aβ)-	8080 8270	0.1 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Endosulfan II	33213-65-9	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a, 6,9,9a-hexahydro-, 3-oxide,(3α,5aα,6β, 9β,9aα)-	8080 8270	0.05 20
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexa-chloro-1,5,5a,6,9, 9a-hexahydro-,3,3- dioxide	8080 8270	0.5 10
Endrin	72-20-8	2,7:3,6-Dimethano-naphth[2,3-b]oxi-rene,3,4,5,6,9,9-hexachloro-1a,2,2a, 3,6,6a,7,7a-octa-hydro-,(1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-	8080 8270	0.1 20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Endrin aldehyde	7421-93-4	1,2,4-Metheno-cyclopenta[cd]-pentalene-5-car-boxaldehyde, 2,2a,3,3,4,7-hexachlorodeca-hydro-,(1α,2β,2aβ, 4β,4aβ,5β,6aβ,6bβ, 7R*)	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8221 8260	2 0.05 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8260 8270	5 10 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	20
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethyl-amino)-sulfonyl] phenyl]-O,O-di- methyl ester	8270	20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8, 8-heptachloro-3a, 4,7,7a-tetrahydro-	8080 8270	0.05 10
Heptachlor epoxide	1024-57-3	2,5-Methano-2H- indeno [1,2-b]oxi- rene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα,1bβ,2α,5α, 5aβ,6β,6aα)	8080 8270	1 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	0.5 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8021 8120 8260 8270	0.5 5 10 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8260 8270	0.5 10 10
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10
2-Hexanone	591-78-6	2-Hexanone	8260	50
Indeno(1,2,3-cd) pyrene	193-39-5	Indeno[1,2,3-cd] pyrene	8100 8270	200 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015 8240	50 100
Isodrin	465-73-6	1,4,5,8-Dimethano-naphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α,4α,4aβ,5β,8β, 8aβ)-	8270 8260	20 10
Isophorone	78-59-1	2-Cyclohexen-1- one, 3,5,5-tri-methyl-	8090 8270	60 10
Isosafrole	120-58-1	1,3-Benaodioxole, 5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H- cylobuta-[cd] pentalen-2-one,1,1a, 3,3a,4,5,5,5a,5b,6- decachloro-octahydro-	8270	20

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Lead	(Total)	Lead	6010 7420 7421	400 1,000 10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propene, nitrile 2-methyl-	8015 8260	5 100
Methapyrilene	91-80-5	1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2- thienylmethyl)-	8270	100
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2, trichloroethylidene) bis[4-methoxy-.	8080 8270	2 10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010 8021	20 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010 8021	1 0.3
3-Methylchol anthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015 8260	10 100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010 8260	40 10
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015 8260	2 30
Methyl methanesulfonate	66-27-3	methanesulfonic acid, methyl ester	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; arathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	8140 8141 8270	0.5 1 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
4-Methyl-2- pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl	8015 8260	5 100
Methylene bromide; Dibromo-methane	74-95-3	Methane, dibromo-	8010 8021 8260	15 20 10
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010 8021 8060	5 0.2 10
Naphthalene	91-20-3	Naphthalene	8021 8100 8260 8270	0.5 200 5 10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010 7520	50 400
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	8270	50
Nitrobenzene	98-95-3	Benzene, nitro-	8090 8270	40 10
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040 8270	5 10
p-Nitrophenol	100-02-7	Phenol, 4-nitro	8040 8270	10 50
N-Nitrosodi-n- butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso	8270	10
N-Nitroso- diethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso	8270	20
N-Nitroso- dimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8070	2
N-Nitroso- diphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8070	5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
N-Nitroso- dipropylamine; Di-n-propyl- nitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8070	10
N-Nitrosom-ethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	20
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	40
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2- methyl-5-nitro-	8270	10
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	8141 8270	0.5 10
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10
Pentachloro-nitrobenzene	82-68-8	Benzene, penta-chloronitro-	8270	20
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040 8270	5 50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)	8270	20
Phenanthrene	85-01-8	Phenanthrene	8100 8270	200 10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Phenol	108-95-2	Phenol	8040 8270	1 10
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	10
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)-methyl] ester	8140 8141 8270	2 0.5 10
Polychlorinated biphenyls; PCBs	See Note 9	1,1'-Biphenyl, chloro derivatives	8080 8270	50 200
Pronamide	23950-58-5	Benzamide, 3,5- dichloro-N-(1,1-di-methyl-2-propynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015 8260	60 150
Pyrene	129-00-0	Pyrene	8100 8270	200 10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Selenium	(Total)	Selenium	6010 7740 7741	750 20 20
Silver	(Total)	Silver	6010 7760	70 100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichloro-phenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020 8021 8260	1 0.1 10
Sulfide	18496-25-8	Sulfide	9030	4,000
2,4,5-T; 2,4,5- Trichloro-phenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010 8021 8260	5 0.05 5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010 8021 8260	0.5 0.1 5
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010 8021 8260	0.5 0.5 5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6- tetrachloro-	8270	10
Thallium	(Total)	Thallium	6010 7840 7841	400 1,000 10
Tin	(Total)	Tin	6010	40

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Toluene	108-88-3	Benzene, methyl-	8020 8021 8260	2 0.1 5
o-Toluidine	95-53-4	Benzenamine, 2- methyl-	8270	10
Toxaphene	8001-35-2 See note 10	Toxaphene	8080	2
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro	8021 8120 8260 8270	0.3 0.5 10 10
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1- trichloro-	8010 8021 8260	0.3 0.3 5
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010 8260	0.2 5

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010 8021 8260	1 0.2 5
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-	8010 8021 8260	10 0.3 5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5- trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040 8270	5 10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010 8021 8260	10 5 15
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-tri-ethyl ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro	8270	10

Table 2

Assessment Monitoring Parameters[1]

Common Name[2]	CAS RN[3]	Chemical Abstracts Service Index Name[4]	Suggested Methods[5]	PQL (µg/L) 6[6]
Vanadium	(Total)	Vanadium	6010 7910 7911	80 2,000 40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8260	50
Vinyl chloride	75-01-4	Ethene, chloro-	8010 8021 8260	2 0.4 10
Xylene (total)	1330-20-7 See Note 11	Benzene, dimethyl-	8020 8021 8260	5 0.2 5
Zinc	(Total)	Zinc	6010 7950 7951	20 50 0.5

Notes:

[1] The regulatory requirements pertain only to the list of substances; the right-hand

columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

[4] CAS index numbers are those used in the 9th Collective Index.

[5] Suggested Methods refer to analytical procedure numbers used in ~~EPA Report~~ SW-846 ~~"Test Methods for Evaluating Solid Waste," Third Edition, November 1986, as revised, December 1987~~. Analytical details can be found in SW-846 and in documentation on file at the agency.

Caution: The methods listed are representative of SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

[6] Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5-ml samples for volatile organics and 1-L samples for semivolatile organics.

Caution: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

[7] This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2-chloro- (CAS RN 39638-32-9).

[8] Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 ug/L by method 8270.

[9] Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 1109

7-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

[10] Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-20), i.e., chlorinated camphene.

[11] Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0 ug/L by method 8020 or 8260.

Authority Note: Promulgated in accordance with R.S. 30:2001 et seq.

§3007. Appendix D

Processes to Significantly Reduce Pathogens (Class B)	
Aerobic Digestion	A process conducted by agitating sludge with air or oxygen to maintain aerobic conditions at residence times ranging from 60 days at 15°C to 40 days at 20°C, with a volatile-solids reduction of at least 38 percent.
Air Drying	A process that allows liquid sludge to drain and/or dry on under-drained sand beds or on paved or unpaved basins in which the depth of the sludge is 9 inches. A minimum of three months is needed for this process; during two of these months daily temperatures must average above 0° C.
Anaerobic Digestion	A process conducted in the absence of air during a residence time ranging from 60 days at 20°C to 15 days at 35-55°C, with a volatile-solids reduction of at least 38 percent.
Composting	A process conducted by either the within-vessel, static-aerated-pile or windrow method whereby the solid waste is maintained at minimum operating conditions of 40°C for five days. For four hours during this period, the temperature must exceed 55°C.
Lime Stabilization	A process in which sufficient lime is added to produce a pH of 12 after two hours of contact.
Other Methods	Other methods or operating conditions for significantly reducing pathogens may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

§3009. Appendix E

Processes to Further Reduce Pathogens (Class A)	
Composting	A process conducted by either the within-vessel, static aerated-pile, or windrow method. If the within-vessel or static-aerated-pile method is used, the solid waste is maintained at operating conditions of 55°C or greater for three days. If the windrow method is used, the solid waste attains a temperature of 55°C or greater for at least 15 days during the composting period, and the windrow is turned at least five times during this high-temperature period.
Heat Drying	A process in which dewatered sludge cake is dried by direct or indirect contact with hot gases and moisture content is reduced to 10 percent or less. Sludge particles reach temperatures well in excess of 80° C or the wet-bulb temperature of the gas stream, in contact with the sludge at the point where it leaves the dryer, is in excess of 80° C.
Heat Treatment	A process in which liquid sludge is heated to temperatures of 180° C for 30 minutes.
Thermophilic Aerobic Digestion	A process in which liquid sludge is agitated with air or oxygen to maintain aerobic conditions at residence times of 10 days at 55-60° C, with a volatile-solids reduction of at least 38 percent.
Other Methods	Other methods or operating conditions for further reducing pathogens may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.
Any of the processes listed below, used in conjunction with the processes described above, will further reduce pathogens. The processes listed below will not, however, reduce the attraction of disease vectors if they are not used in conjunction with one of the above processes, and therefore are not sufficient alone.	
Beta-Ray Irradiation	A process in which sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (approximately 20° C).
Gamma-Ray Irradiation	A process in which sludge is irradiated with gamma rays from certain isotopes, such as ^{60}Cobalt and ^{137}Cesium, at dosages of at least 1.0 megarad at room temperature (approximately 20° C).
Pasteurization	A process in which sludge is maintained for at least 30 minutes at a minimum temperature of 70° C.
Other Methods	Other methods or operating conditions may be acceptable if pathogens are reduced to an extent equivalent to the reduction achieved by any of the above add-on methods.

§3011. Appendix F

Document to be Filed in the Parish Records Upon Final Closure of a Solid Waste Disposal Facility

(Name of permit holder) hereby notifies the public that the following described property was used for the disposal of solid waste. This site was closed on (date facility was closed) in accordance with the *Louisiana Administrative Code*, Title 33, Part VII. Inquiries regarding the contents of (the facility) may be directed to (name of person with knowledge of the contents of the facility) at (address of person with knowledge of the contents of the facility).

Property Description

(Provide the specific description of the location of the facility)

_____

Signature of Person Filing Parish Record

_____

Typed Name and Title of Person Filing Parish Record

_____

Date

(A true copy of the document must be certified by the parish clerk of court.)

§3015. Appendix H

Examples of Agricultural Wastes that may be Managed Under Approved Best Management Practice Plans

Sugar mill bagasse ash

Bagasse

Filter press mud from sugar mills

Chicken litter

Dead poultry carcasses

Rice hulls

Rice hull ash

Shells from crawfish and shellfish processing

~~Potato~~ Vegetable peels and waste from ~~potato~~ packing and processing

Cotton gin trash

Livestock and poultry litter, bedding, and composted mortalities

Waste and wastewater from livestock, poultry and fisheries packing and processing